S. HRG. 110–628

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2009

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

ON

S. 3182

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF COMMERCE AND JUSTICE, SCIENCE, AND RELATED AGENCIES FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2009, AND FOR OTHER PURPOSES

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Department of Justice
National Aeronautics and Space Administration
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COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2009

THURSDAY, MARCH 6, 2008

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:07 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Reed, Shelby, Stevens, and Brownback.

DEPARTMENT OF COMMERCE

SECRETARY OF COMMERCE

STATEMENT OF HON. CARLOS M. GUTIERREZ, SECRETARY

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. The Subcommittee on Commerce, Justice, and Science will come to order. Today we are going to review the appropriations request at the Department of Commerce.

There will only be a single witness, it will be Secretary Gutierrez. And we want to note that this is Secretary Gutierrez's fourth appearance before the subcommittee, and this Chairperson wants to really say that we've had a very productive relationship with him and his team. It has been characterized by content-rich conversations, by candor, by civility—we think it's been a model of the way people, if we work together, we can get the job done.

So, we look forward to hearing your testimony. This is our first hearing of this subcommittee for this year, and I want to thank, once again, Senator Shelby and his staff for their ongoing, bipartisan cooperation.

Last year was kind of a difficult year, particularly at the end, but Senator Shelby—you and your team were just great.

As we look at this year's appropriation, we note that we are in a year of transition. This time next year, we will have a new President, and—a new administration. What we are very clear about on this subcommittee is that this appropriation that we do this year will be the operating budget for the first year of the first term of the new President.

So, we've got to get it right. Because regardless of who America chooses, they will have the 2009 appropriations as their first year of operation. So, in the areas for which we have responsibility, we want to have everything as very clear and well-established to continue our national priorities. And we will be working together on a bipartisan basis.

What we want to do at this hearing is to hear from the Secretary about the appropriations, we want to hear particularly about how he relates it to the mission of the agency, and also where we are on issues like the America's Competes Act.

The other is that we will also focus on what we call red zone issues, which are areas where there are significant challenges within agencies at the Department of Commerce. We're concerned about the 2010 census, that we're able to do it right, and we understand there's some technological and managerial challenges there.

The other that we continue to be concerned about is the cost overruns of the National Oceanic and Atmospheric Administration (NOAA) satellite program and then the perpetual backlog at the Patent Office. All three of those have dramatic consequences—not only on the Appropriations Committee, but on, essentially, the running of America.

The census must be done, it deals with how we will apportion politically, and other information. The NOAA satellites stand sentry, giving us crucial weather information that saves lives, and it's the Patent Office that helps us do innovation—we take innovation and by turning it into a patent, we then, essentially, help our private sector be able to protect against those who would steal our intellectual property, around the world.

As we look at this year's appropriation, we know the request is over $8 billion—it's $1.3 billion over 2008, which we appreciate, but what we're concerned about is that it also eliminates two programs that help our economy—the economic development assistance grants, which is a stand-alone agency, and the manufacturing extension partnership, which is over at the National Institute of Standards and Technology (NIST).

The budget also falls short, we believe, in other areas of innovation. At NIST we applaud that the laboratory program request is $535 million, almost $100 million over the omnibus, but it is offset by the termination of important grant programs, which were authorized in the America Competes Act.

At NOAA, the request is for $4 billion—almost one-half of the total Commerce Department's appropriation request. And when one looks at it, you see it's $200 million over 2008. And, we could say, "Wow, we're going to really get serious about weather and oceans and global warming, and science education," but really where the money is, is in the satellite program, and if we excluded the growth in the satellite budget, the rest of NOAA would be flat.

Ocean and atmospheric research is cut 4 percent, and education is cut 51 percent at NOAA. We'll talk more about NOAA.

In the area of accountability, I'm going to get right to what I call the red zone issues—census. In terms of management challenges, we've got to take a look at the 2010 census. The budget for the Census Bureau grows by 112 percent, to $2.6 billion—it's $1 billion more than the omnibus level, but we're concerned that with these handheld technologies, where there seems to be challenges in their workability. We're concerned that billion could go to boondoggle, rather than achieving the census.

Two years ago, laptop computers got lost, there are privacy and security issues, and now these handheld computers. So, we think Census has some significant management challenges.

Then we come to our favorite NOAA satellite program, satellites are critical to warning about the weather, and observing the changes in the Earth's climate. In other words, satellites help save lives and save the planet.

Senator Shelby worked with me to include a provision in the 2008 omnibus to give us early warning about satellite costs. We want to know how the Department, then, is doing that, to be sure we implement the Nunn-McCurdy framework.

And last and not at all least, is the Patent Office. We continue to be concerned about the backlog and the waiting times, which continue to worsen. It now takes over 27 months for the Patents Office to issue a patent. And the backlog now is over 1 million.

This is unacceptable. We've made progress, we've worked very tirelessly on management reform, we've increased the budget, it's 27 percent more than what it was in 2005, but we continue to have a backlog. More needs to be done to reverse this, and we look forward to your ideas.

Mr. Secretary, we look forward to hearing you, and I now turn to Senator Shelby.

STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. We have worked extremely well during our tenure here, sharing many of the same goals and expectations of the agencies that we oversee, including the Department of Commerce.

I'm pleased to serve beside her, and once again, doing what is shaping up to be another tight fiscal year.

I look forward to learning about how the 2009 budget request will improve the Department of Commerce's mission. Overall, the Department's budget request for 2009 is $8.18 billion, an increase of $1.32 billion from the funding level providing into 2008 omnibus appropriations bill.

The Nation relies heavily on the Department of Commerce to maintain America's competitiveness within markets around the world.

The Department works hard to provide avenues to promote the products and services of U.S. businesses, and then helps to level the playing field through expanding, strengthening, and enforcing our international trade agreements.

Through the Department of Commerce programs, our country is able to maintain high technical standards, as well as staying on the cutting edge of scientific research, all of which are fundamental to our Nation's leadership in the global market.

I'm pleased to see that the American Competitiveness Initiative, or ACI, continues to receive support from the administration, through the National Institute of Standards and Technology's budget request. The ACI will maintain the competitive edge that our Nation expects in the world economy through research and innovation, focusing on the ingenuity of our people, and tying our capabilities to policies that would keep us at the forefront of scientific and technical advancement for generations to come.

The strength of America's economy rests on our ability to innovate, and use the latest technology to solve the problems of today, and preserve our economic and scientific leadership in the future. With the recent downturn in the economy, it's more important than ever that we do all we can to push the envelope in innovation and science to maintain our competitive edge in the world.

I believe that Chairwoman Mikulski and I will work together to do all we can to ensure that science and technology are funded at the highest levels in our bill.

If we can not train more engineers and doctoral students, America will fall behind the rest of the world. If we don't make a relatively small investment now, make no mistake about it—playing catch-up with the rest of the world will cost us fiscally and strategically.

The operations of both NIST and the National Oceanic and Atmospheric Administration, or NOAA, function to keep the Nation competitive, and inspire the next generation of scientists and researchers. We must find better ways to use NOAA's education programs to capture the imagination of our children, to encourage them to pursue careers in science and research.

Secretary, as we work to evaluate the number of scientists and engineers, I believe we also need to have the high-tech jobs of the future ready for them through our investment in transformative research in our Nation's businesses. The Technology Innovation Program at NIST will work to create the high-paying, technical jobs that drive our economy now, and are essential to our future.

The $4.1 billion budget request for NOAA—a 5 percent increased over 2008 enacted level—is a pleasant surprise. However, none of the significant increases included in this request are directed at the Gulf of Mexico.

The gulf coast still lacks the infrastructure, research and support from NOAA that other regions of the country have perpetually received. Since the recent rash of devastating hurricanes, nearly all infrastructure improvements for fish, severe weather forecasting, and research in the gulf, have been borne solely by the members of this subcommittee, with little or no assistance from NOAA headquarters.

While I have been a big proponent of NOAA and worked with the Chairwoman to protect them from significant cuts that other agencies were forced to absorb in last year's conference negotiations, I can no longer turn a blind eye toward the continual lack of commitment by NOAA to the gulf coast. Therefore, I may not be able to protect NOAA at the expense of other agencies and programs this year.

Mr. Secretary, I'm troubled by the large number of expensive technology procurement failures at the Department. I understand that the Geostationary Operational Environmental Satellite Program is back on track, but I'm disappointed that a $6.2 billion program, originally intended for four satellites has ballooned into a $7 billion program for only two satellites.

I understand their importance for weather and research, but I have trouble understanding the benefits, when the taxpayer is stuck paying $800 million more than the original estimate for one-half the product, and a delivery date 3 years later.

Further, the national polar orbiting operational environmental satellite system (NPOESS) has mushroomed from a $6 billion estimate to more than a $12 billion, with less functionality, and a delivery date 4 years later. I believe this is inexcusable.

Since 1790, and every 10 years thereafter, this country undertakes a constitutionally mandated effort to count its population. Planning for the next decennial census begins almost immediately after the previous one has been completed. So far, it's taken 8 years and counting, merely to implement a plan to re-engineer the 2010 census.

The Census Bureau's new technology initiative—acquiring and using handheld data collection devices—has been promising to bring the census into the 21st century, with improved accuracy, and reduced cost. It has been brought to my attention, at the committee level, that as the census is about to enter a crucial point in this technological transition, the Department has grave concerns about the Census' ability to manage and to deploy the handheld devices, and associated data collection necessary to carry out a successful 2010 census.

I'm troubled that when my staff met with senior officials late last year, they were told that the $600 million contract for the handheld devices was on schedule and that there were no major concerns.

A few weeks later, the Census submitted more than 400 necessary changes to the handheld device contractor—400. In 2005, the inspector general reported that the Census had insufficiently defined requirements for the data collection and handheld devices. The inability to define the requirements, combined with the 400 last minute changes, means that no one knew what they were asking the contractor to build to begin with, and yet a contract for more—yes, more—than $500 million was signed by the Commerce Department.

The inspector general was right in his take on the Census Bureau, I regret it took 3 years to come to the realization, they have a problem. While I have been assured that you have a plan to bring this situation under control, Mr. Secretary, I have to wonder if any of the managers who told subcommittee staff the handheld contracts were still on track, are still involved in this program today. How much more of the taxpayers' money will be squandered before someone is held accountable for what is supposed to be a less expensive and more efficient Census? While I understand and support the importance of technology to assist the components of the Department, I cannot support unlimited, and unchecked resources.

I believe it's imperative that you, as the Secretary of Commerce, proceed with caution to ensure that the Department does not make the same, blatant mistakes again. We expect results, and working with Senator Mikulski, we will do everything that we can to ensure success.

Thank you for appearing with us today.

Senator MIKULSKI. Colleagues, I'm now going to turn to Secretary Gutierrez. There's a vote at 10:55 a.m. What I offer as a way of proceeding is the Secretary presents his testimony, then I'll be the wrap up questioner. Because if we have votes, I'll be more than willing to come back. I know—and I'll turn to you two first. Does this sound like a good way to go?

Senator STEVENS. Well, I'd just ask unanimous consent that my opening statement be put in the record, and my questions be submitted.

Senator MIKULSKI. Absolutely, yes.

Senator STEVENS. I'm managing one of the bills on the floor, so I really can't—I'm just here to pay my respects to the Secretary.

Senator MIKULSKI. Absolutely.

Senator STEVENS. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF SENATOR TED STEVENS

Secretary Gutierrez, we welcome you before the subcommittee to discuss the fiscal year 2009 budget for the U.S. Department of Commerce. I commend the Department's efforts in the past year to enhance our nation's competitiveness, support our public and private sectors with reliable data, better understand our planet's weather and climate, and manage and protect our marine resources.

We look forward to working with you to address the important issues that face us in the coming year.

The work of your Department continues to be critical to the economic, social, and environmental health of my State.

Your commitment to Arctic science is of great importance to Alaska, where the impacts of climate change will occur first and be the most pronounced. The sustainability of our fisheries depends on NOAA research and management efforts. Given our inclement weather, vast coastline, commercial fishing activities, and dependence on aviation, Alaskans rely heavily on NOAA for weather forecasting and storm warnings. EDA grants stimulate economic growth in distressed Alaskan communities. Those are just a few examples.

Mr. Secretary, we look forward to hearing today about your priorities in the current budget request.

Senator MIKULSKI. And if there is a question you would like to ask orally, if your staff will give it to us, we'll be sure to ensure that.

Okay, Secretary Gutierrez?

OPENING STATEMENT OF CARLOS M. GUTIERREZ

Secretary GUTIERREZ. Thank you, Madam Chairman, Senator Shelby, and members of the subcommittee. I'm very pleased to present the—President Bush's 2009 budget request for the Department of Commerce, and with your permission, I'd like to make a brief oral statement and submit my written testimony for the record.

The Department of Commerce is charged with promoting economic growth, competitiveness and opportunity for the American people. This request for $8.2 billion is a careful, and fiscally responsible budget that reflect the commitment to fulfilling the charge, and to maintaining U.S. leadership in today's global economy.

I'd like to highlight some of the key items in the budget. For the National Oceanic and Atmospheric Administration, $4.1 billion is requested, that includes $1.2 billion to provide timely access to global environmental data from satellites and other sources, $931 million to provide critical weather observations, forecasts and warnings to American communities and families, and $759 million for stewardship of living marine resources and habitats, including a $32 million increase to directly support implementation of the Magnuson-Stevens Act reauthorization.

The funding requests for Economics and Statistics Administration (ESA) headquarters and the Bureau of Economic Analysis which produces the Gross Domestic Product and other vital economic data is $91 million.

For the International Trade Administration (ITA) which supports U.S. commercial interests at home and abroad, the request is $420 million. U.S. exports totaled a record $1.6 trillion in 2007, and free trade agreements are leveling the playing field, and helping American exporters access new markets.

Free trade agreements with Colombia, Panama, and South Korea are now pending in Congress. Colombia is priority, it's a democracy and staunch ally of the United States, and we need to stand by Colombia in the cause of freedom, while at the same time creating new opportunities for U.S. exporters.

The ITA budget request includes a $3.8 million increase for enforcement and countervailing duty law with respect to China and other non-market economies.

The National Institute of Standards and Technology request of $638 million will keep America on the leading edge of scientific and technological advances. It puts us back on track to double the funding for NIST basic research in the core physical sciences by 2016, a major goal of the President's American competitiveness initiative.

As you know, the National Telecommunications and Information Administration is administering the digital television transition and public safety fund, including the TV converter box coupon program.

As with any budget, tough decisions were made. The Economic Development Administration (EDA) budget request for 2009 is $133 million. For the Census Bureau, which is part of the Economics and Statistics Administration, $2.6 billion is requested. This includes a program increase of $1.3 billion, to fund the 2010 decennial census, and continue the American community survey.

Yesterday I testified before the Senate Homeland Security and Government Affairs Committee on how the Department is working to address some of the challenges currently facing the 2010 census.

The 2010 census is one of the highest priorities and most important responsibilities of the Commerce Department, however, I should say the field data collection automation, which we also know as FDCA, is experiencing significant schedule, performance, and cost issues. This is unacceptable, as I know it's unacceptable to the subcommittee.

Concerns about the FDCA program grew over time, and we're taking several steps to address the situation. Following his confirmation in January, new Census Director Murdock began a top to bottom review of all components of the 2010 census. On February 6, he launched a 2010 census FDCA risk reduction task force, which is headed by Bill Barron, a former Deputy Director and Acting Director of the U.S. Census Bureau.

As a result of the ongoing work of the task force, we are exploring four options. Option one is to continue with the Harris Corporation's original project plan, simultaneously evaluating the development of a paper-based backup plan. So, option one, essentially, is to continue with the baseline option.

Option two is to shift everything but address canvassing back to Census Bureau, including the operational control system, and field infrastructure. Non-response follow up would then be paper based under that option.

Option three would move non-response follow up and field operations infrastructure to Census with Harris developing the operational control system and the address canvassing.

Option four would shift non-response follow up back to Census as paper based, while Harris would handle the operational control system, and field operations infrastructure, as well as address canvassing.

So, each option, essentially, has a variance on how much Harris handles, and how much we send back to the Census Bureau, to be able to achieve the census.

Yesterday, I announced that I am forming a panel of outside experts to review these actions, and other potentially serious problems with certain aspects of the 2010 census, and to provide recommendations to assure a fully successful census. The panel will augment the ongoing Census Bureau review of the overall 2010 census operations, regarding field data collection automation, or FDCA, especially the private contractors technological infrastructure support of the FDCA contract, and management practices.

I am personally very involved in bringing key issues to the surface, and developing a way forward. The American people expect and deserve a timely and accurate decennial census, and the Department and I will not rest until they have it. So, it is our goal, not only to have a good census, but we'd like to shoot for having the best census.

Madam Chairman, the President's fiscal year 2009 budget for the Department of Commerce will enable the Department to continue to provide vital statistics, strengthen the stewardship of living marine resources, support the innovative and entrepreneurial spirit of America, and increase our competitiveness in the global marketplace.

This is the last time it will be my privilege to present to the Senate Appropriations subcommittee President Bush's budget proposal for the Department of Commerce, I want to thank the members for your consideration, for your courtesy over the last several years. I want to thank you for your support of vital Commerce programs that have served the Nation, the business community, the people of this great country, and while this is my last hearing, I hope to continue working with you over the next year.

PREPARED STATEMENT

So, thank you very much, and I'd be glad to take questions or comments.

[The statement follows:]

PREPARED STATEMENT OF CARLOS M. GUTIERREZ

Madam Chairman and Members of the Subcommittee, I am pleased to appear before you today to present the President's budget request for the Department of Commerce. Our request of $8.2 billion in discretionary funds reflects a balance between the Administration's commitment to the Department's mission to promote and sustain economic growth, and the need to restrain discretionary Federal spending. Enactment of this budget will enable the Department to continue to support the innovative and entrepreneurial spirit of America and increase our competitiveness in the international marketplace.

The President's fiscal year 2009 budget request of $4.1 billion for the National Oceanic and Atmospheric Administration (NOAA) reflects the Administration's commitment to environmental stewardship. It represents an increase of $214 million above the fiscal year 2008 enacted level. NOAA encompasses the National Weather Service, which provides critical observations, forecasts and warnings; the National Environmental Satellite, Data and Information Service, which provides timely global environmental satellite data; the National Marine Fisheries Service, which provides stewardship of the Nation's living marine resources and their habitat; the National Ocean Service, which measures and predicts coastal and ocean phenomena; the Office of Oceanic and Atmospheric Research, which provides research for understanding weather, climate, and ocean and coastal resources; and the Office of Marine and Aviation Operations, which operates a variety of aircraft and ships providing specialized support for NOAA's environmental and scientific missions.

The request continues support for development and acquisition of the next-generation Geostationary Operational Environmental Satellite (GOES–R), with an increase of $242 million as we enter the main procurement phase for the spacecraft and the ground control system. There is also a $32 million increase to continue improving fishery management under the Magnuson-Stevens Act that was reauthorized in 2006, and a $40 million increase to continue construction of the Pacific Region Center in Honolulu, Hawaii. The budget includes new requests of $74 million to restore climate sensors that were demanifested during the Nunn-McCurdy review of the tri-agency National Polar-orbiting Operational Environmental Satellite System (NPOESS) Program, and $12 million to replace the Satellite Command and Data Acquisition station in Fairbanks, Alaska.

The Economics and Statistics Administration (ESA) promotes the understanding of the U.S. economy and its competitive position. ESA's Census Bureau is the leading source of quality data regarding the Nation's population and economy, and the President's fiscal year 2009 budget requests $2.6 billion in discretionary funds for the Census Bureau. This includes a program increase of $8.1 million to provide policymakers, business leaders, and the American public with comprehensive and timely data on the service economy, which now accounts for 55 percent of economic activity.

The largest increase requested, for both the Census Bureau and the Department, is $1.3 billion for the 2010 Decennial Census to fund critical operations and preparations for 2010, improve accuracy of map features, and continue the American Community Survey on an ongoing basis. As you are aware, the Census Bureau is currently experiencing significant challenges in the management of the Field Data Collection Automation (FDCA) project for the 2010 Census. I can assure you that not only the Census Bureau but the Office of the Secretary is devoting all of the resources at our disposal to resolve the IT management issues with FDCA and develop a successful way forward. We will keep you informed of our progress.

ESA's Bureau of Economic Analysis (BEA) promotes understanding of the Nation's economic condition by providing policy makers, business leaders, households, and individuals with essential economic data. This data includes the Gross Domestic Product (GDP) as well as other regional, national, international, and industry-specific information. The President's fiscal year 2009 budget requests $91 million for ESA Headquarters and BEA. This request includes an increase of $5.7 million to improve measurement of the health care sector and to incorporate the impact of research & development investments into the GDP.

The International Trade Administration (ITA) supports U.S. commercial interests at home and abroad by promoting trade and investment, ensuring fair trade and compliance with domestic and international trade laws and agreements and strengthening the competitiveness of American industries and workers. The President's fiscal year 2009 budget requests $420 million for ITA. This request includes an increase of $3.8 million for enforcement of the Countervailing Duty Law with China and other non-market economies, as well as a decrease of $3.0 million to reflect streamlining of Trade Promotion and domestic U.S. & Foreign Commercial Service offices. In the future, as in the past, our long-term economic growth will also be enhanced by supporting international trade, by opening world markets to U.S. goods and services and by keeping our markets open. Congress can help create jobs and economic opportunity by passing the pending Free Trade Agreements with Colombia, Panama and South Korea.

The Economic Development Administration (EDA) assists states, regions, and communities in promoting a favorable business environment through capacity building, planning, infrastructure investments, research grants, and strategic initiatives. The President's fiscal year 2009 budget requests $133 million for EDA. The request reduces funding for the Economic Development Assistance Programs (EDAP) by $149 million in order to support other Administration priorities.

The Bureau of Industry and Security (BIS) regulates the export of sensitive goods and technologies to protect the security of the United States. The President's fiscal year 2009 budget requests $84 million to enable BIS to effectively carry out this mission. The request includes $2.4 million in program increases to upgrade export enforcement and to ensure compliance through validating end-users in foreign countries.

The Minority Business Development Agency (MBDA) focuses on accelerating the competitiveness and growth of minority-owned businesses by assisting with economic opportunities and capital access. The President's fiscal year 2009 budget requests $29 million to enable MBDA to continue its activities to increase access to the marketplace and financing for Minority Business Enterprises.

The President's fiscal year 2009 budget request of $638 million for the National Institute of Standards and Technology (NIST) will advance measurement science, standards, and technology. The request includes increases of $71 million for research initiatives at NIST Laboratories and National Research Facilities, and $62 million for Construction and Major Renovations as part of the President's 10-year American Competitiveness Initiative (ACI). This will put us back on track to double the funding for NIST basic research in the core physical sciences and engineering by 2016, to ensure continued U.S. leadership in this area, a major goal of ACI.

The request includes $4 million to transition Hollings Manufacturing Extension Partnership centers to a self-supporting basis, and does not include new funding for the Technology Innovation Program (successor to the Advanced Technology Program).

The National Technical Information Service (NTIS) collects and preserves scientific, technical, engineering and other business-related information from Federal and international sources and disseminates it to the American business and industrial research community. NTIS operates a revolving fund for the payment of all expenses incurred and does not receive appropriated funds.

The National Telecommunications and Information Administration (NTIA) develops telecommunications and information policy, manages the Federal radio spectrum, and performs telecommunications research, engineering, and planning. A key responsibility for NTIA is administration of the Digital Television Transition and Public Safety Fund (DTTPSF). During fiscal year 2009, NTIA estimates obligating $592 million from the DTTPSF to support several one-time programs created by the Deficit Reduction Act of 2005, most notably $472 million for the Digital-to-Analog Television Converter Box Program. The other $120 million in DTTPSF obligations includes $50 million to implement a national tsunami warning system and $60 million to assist low power television stations in upgrading their signals from analog to digital formats. In addition, NTIA will continue working with the Department of Homeland Security to implement the Public Safety Interoperable Communications grant program. The President's fiscal year 2009 budget request of $19 million in discretionary budget authority for NTIA includes a reduction of $18 million to terminate further grants for Public Telecommunications Facilities, Planning, and Construction.

Furthering the mission to promote the research, development, and application of new technologies by protecting inventors' rights to their intellectual property through the issuance of patents and trademarks, the President's fiscal year 2009 budget requests $2.1 billion in spending authority for the U.S. Patent and Trademark Office (USPTO). The USPTO will use these funds to reduce application processing time and increase the quality of its products and services. Consistent with prior years, the Administration proposes to fund the USPTO budget exclusively through offsetting fee collections. Fee collections for fiscal year 2009 are projected to cover the proposed increases.

Departmental Management (DM) funds the Offices of the Secretary, Deputy Secretary, and their support staff. Staffs in these offices develop and implement policy, administer internal operations, and serve as primary liaison to other executive branch agencies, Congress, and private sector entities. The President's fiscal year 2009 budget requests $20.8 million in discretionary appropriations for DM, which includes a $48.6 million rescission from the Emergency Steel Guaranteed Loan Program. Proposed increases include $7.1 million to upgrade IT security and ensure mission essential communications, and $3.6 million for blast mitigation windows and other renovations to the 76-year-old Herbert C. Hoover Building.

The Office of the Inspector General (OIG) strives to promote economy and efficiency, and detect and prevent fraud, waste, and abuse in Departmental programs and operations. The President's fiscal year 2009 budget requests $24.8 million to enable the OIG to continue to effectively meet these mandates. Also, the budget requests $1 million to improve the OIG's ability to evaluate and improve the security for the Department's information technology assets.

The Department of Commerce is a diverse group of agencies, with varied expertise and differing needs, all engaged in a common commitment to keep the United States at the global forefront of competitiveness and innovation. The President's fiscal year 2009 budget effectively meets those needs, while exercising the fiscal restraint necessary to sustain our economic prosperity. I look forward to working with the Committee to keep our Nation's economy growing and strong, and to promote technological advancement and environmental stewardship.

Senator MIKULSKI. Mr. Secretary, thank you for a very crisp testimony. We want to acknowledge that Senator Jack Reed of Rhode Island has come.

What we're going to do, Senator Reed—because there is a vote—we're going to let Senator Brownback go first, we'll come to you, Shelby and I—Senator Shelby and I will be the wrap up.

So, we can keep it crisp?

TRADE DISPUTE WITH EADS AIRBUS

Senator BROWNBACK. We'll try to keep it crisp.

Secretary, thank you for being here, I appreciate that. And in the notion of crispness, then I want to focus you on the trade dispute we have with Airbus in the case that's supposed to be reported out, I understand, a ruling on it in April.

Just to—and you know this case very well, it's been our ongoing subsidy fight with EADS Airbus, that's—I was in Bush One in the trade field, and we were fighting with Airbus then. And we're still fighting with them.

But, as you know, European governments have subsidized EADS Airbus, we contend—our government, U.S. Government—$15 billion in launch aid, financing—including $5 billion on the A–330, 340 program, which is $5 billion on launch aid, just for that particular program.

The A–330, 340 program is the largest recipient of European government support, support from French, German, Spanish, British. We initiated a trade dispute against them, and I understand that is potentially going to report out in April.

If we win that, we will be entitled to retaliatory measures against Airbus, is that correct, Secretary?

Secretary GUTIERREZ. I believe that's one of the options, depending on—hopefully, that we will win that. We're working with the United States Trade Representative (USTR), and USTR, of course, is the lead on this, but we hope to be able to prove that there are launch subsidies, something that has worried us for a long, long time, but I can't be specific as to what we will be able to get back if we win.

Senator BROWNBACK. Is it the U.S. Government's position that the A–330, 340 program has received $5 billion in launch aid from the European governments?

Secretary GUTIERREZ. I'm not sure about the exact amount, but we have always stated and alleged that they receive launch subsidies for their new products, as well as their new, large-body plane, and that is essentially what we are taking forward.

Senator BROWNBACK. And that's the U.S. Government position?

Secretary GUTIERREZ. Yes.

Senator BROWNBACK. Do you believe that European subsidies have created an unfair playing field for U.S. companies, competing against EADS Airbus?

Secretary GUTIERREZ. I believe that they have made Airbus able to compete with lower prices versus Boeing, because of these government subsidies that they have had.

Senator BROWNBACK. I'm sorry, go ahead.

Secretary GUTIERREZ. I just think it says a lot about Boeing that Boeing has been able to compete and win and gain market share, in spite of competing with these subsidies.

Senator BROWNBACK. You're concerned about the rapid increase in the European share of the U.S. commercial aviation market over the past two, three decades?

Secretary GUTIERREZ. Yes. And to the extent that these are achieved, because of the benefit of subsidies, then absolutely. We want to be able to compete on a fair playing field, and we believe they do have the benefit of these subsidies.

Senator BROWNBACK. And you believe the current playing field is not fair for U.S. commercial aviation?

Secretary GUTIERREZ. If we can prove that these subsidies are what we say they are, then it is not. Because they are receiving launch subsidies from their government, they're not projecting the total cost of the plane when they have to price to sell that plane.

Senator BROWNBACK. Are there other obstacles as well that U.S. companies face in competition with the subsidized European firm of EADS, that owns 80 percent of Airbus, in addition to the direct subsidy of the—what we suggest is $5 billion in launch aid, just for the A–330, and then $15 billion overall in launch aid in financing for their whole fleet of planes?

Secretary GUTIERREZ. Our major concern has been launch subsidies. Aside from that, we know that it's a very competitive firm, and we have some very competitive firms, and we're constantly competing for major contracts—which we don't mind—but we just want our company to be playing on a level playing field. And if they are receiving this level of launch subsidy for these large planes, then they are not reflecting the full cost in their price, which gives them an artificial advantage.

Senator BROWNBACK. And you're aware that the current contract that was just let for the Northrop Grumman uses the A–330 base plane, which we are contending is a heavily subsidized plane that's in its start?

Secretary GUTIERREZ. Yes.

RETALIATORY MEASURES AGAINST EADS AIRBUS

Senator BROWNBACK. What retaliatory measures might we use, if we win this case against EADS Airbus? What's possible?

Secretary GUTIERREZ. I'd like to be able to get back to you on that, Senator Brownback. These are, obviously, legal questions. I don't want to preempt anything that USTR may want to state, but if you'd like, I'd be glad to go back, look at the different options we have, assuming we win, and get those to you. And I don't think there would be a problem in that, I don't think USTR would have a problem with that, but I do want to respect their lead role in this case.

[The information follows:]

RETALIATORY MEASURES FOLLOWING RULING IN EADS AIRBUS CASE

The WTO has not yet made its ruling in this dispute, so it would be premature to speculate on possible retaliation. However, if the WTO rules in favor of the U.S. complaint, we would hope that the EC would comply with that ruling or reach a mutually acceptable agreement. Should we not reach an acceptable outcome and assuming that the WTO dispute settlement body authorizes retaliation, there remain U.S. statutory procedures that require consultation and public notice and comment as to the particular retaliatory countermeasures to be adopted. Only after such consultations could we have a sense of what measures might be taken.

Senator BROWNBACK. Thank you.

Thank you, Madam Chairman.

Secretary GUTIERREZ. Thank you, Senator.

Senator MIKULSKI. You were crisp.

Senator BROWNBACK. Trying to.

Senator MIKULSKI. You raised excellent points.

Senator Reed.

ECONOMIC DEVELOPMENT ADMINISTRATION

Senator REED. Thank you very much, Madam Chairman and Senator Shelby.

Thank you, Mr. Secretary, for joining us today. I, in my experience over 18 years now, have found the Economic Development Administration (EDA) to be an incredibly effective and efficient source of support for local communities. I could list a number of items of support for my State.

The most recent one, the one I am concerned about is support to the city of Woonsocket, Rhode Island. They had a levee system that, after Katrina, was declared substandard. We have taken steps to transfer the authority to the Corps of Engineers and the Corps will assume the authority, but the city still has the obligation for ongoing repairs and upgrades until the transfer is complete.

EDA has stepped in with a lot of technical assistance, and the city has a grant proposal at the agency now. I personally want to thank, and show my appreciation of Tyrone Beach of your Philadelphia office and Dennis Alvord of your Washington office, for their assistance and their hard, hard work.

This is an important issue, and certainly any consideration you could give would be appropriate, because literally, the city would have been bankrupted if they were forced to make these repairs and shoulder this responsibility ongoing.

So, all of that is a long prelude to the question of—given the need we have for projects like this across the country, in fact the American Society of Civil Engineers have rated our infrastructure "D"—why are we cutting roughly $170 million from the budget of an agency that is effective, efficient, responds to the needs of local communities in a very thoughtful and businesslike way, when the demands are way beyond the capacity of the existing budget?

Secretary GUTIERREZ. Senator, I understand your point. We had to make, obviously, some decisions to reallocate some of our funds, we wanted to make sure that we got the long-term basic research right in NIST and we are a little bit behind our plan on that, so we had a 22 percent increase in NIST. Of course, we had the satellites, we have the census.

The only thing I can say about EDA is that because these are grants, this is not a permanent cut. We have the flexibility to increase it and lower it, without having to commit to something that is long term. So, it is a 1-year cut, that's the way we're thinking about it, and again, it comes down to the tough role of having to allocate within a limited budget.

Senator REED. I appreciate the difficulties of prioritizing these programs, given the current budget situation, but I think this is one that would require a little more reflection.

And I would also just finally point out, because I want to stay within my time, that it's sort of the curse, the baseline. Once you reduce EDA at this level, next year when you talk about increasing it, even a robust increase probably does not get it up to where it was. And I think that has to be considered long term.

So, even though you see it as a 1-year cut, if this is cut this much, it will very difficult to replace that funding and get it to the level I believe it should be.

But, thank you for your consideration, Mr. Secretary.

Secretary GUTIERREZ. Senator, the city you mentioned, I just want to make sure I get that right—Woosakah?

Senator REED. That's the way you say it, if you have a terrible Rhode Island accent, like I have, but it's actually Woonsocket, W-O-O-N-S-O-C-K-E-T.

Secretary GUTIERREZ. Okay, thank you.

Senator REED. Thank you, Mr. Secretary.

Senator MIKULSKI. Senator Shelby.

TANKER CONTRACT TO EADS AIRBUS

Senator SHELBY. Mr. Secretary, I just want to pick up on a point made by Senator Brownback, a little bit. You know, trade is important, fair trade is very important to all of us. But when the Air Force selects a plane, and this is at the Pentagon, and chooses an airframe that's made in Europe, but the plane will be assembled in my State of Alabama, and thousands and thousands of new U.S. jobs—maybe not Boeing jobs—will be created, I think the Air Force's top criteria is what's best for the warfighter.

In this case we—have regular order, we have a process that Boeing will have to go through, and should go through, to protest this award. The Air Force concluded that the Northrop Grumman proposal was superior in five main categories, over the Boeing plane. And I think that what we need to do is buy the best thing for the warfighter. You know, this is not going to be used in commerce, it's going to be used in national security.

There is a process to go through, Senator Brownback knows that. Assuming there is a protest, GAO will review the awarding of the contract to Northrop Grumman/EADS, over Boeing. I believe they will uphold the award, but I don't know that. Because I don't know, and I don't believe Congress, including the Senator from Kansas, the Senator from Alabama, or Senator Mikulski, should get into the procurement business. Senator Warner spoke very strongly on that the other day as others have, too. Whether it's made in Kansas, or Alabama, or Maryland we better leave procurement up to the Pentagon, and not to us.

I have several questions, and I have some for the record dealing with the Department of Commerce.

MANAGEMENT OF DECENNIAL CENSUS

Given where we are today, Mr. Secretary, would you rate the Census Bureau's management of the decennial census, as moderately effective? Poor, or what?

Secretary GUTIERREZ. Based on where we are today, I would have to be very convincing to say moderately effective.

Senator SHELBY. Well, you couldn't convince me to that, now.

Secretary GUTIERREZ. I know. I'm not going to try, Senator Shelby. I'm disappointed.

Senator SHELBY. You've got good standing, you don't want to ruin that standing.

Secretary GUTIERREZ. Yes.

We're in the situation today, and I will know so much more in 3 weeks when the task force gets back, but we are probably facing an overrun, and I'll know more about that. We're looking at different options, we may not be able to use all of the technology that we had hoped for.

So, given that, and given the amount of time that it took the communication to work itself up the ladder, I would say I'm disappointed. I'm very much part of it, and I'm not separating myself from it, but it's been very disappointing.

Senator SHELBY. Indeed. People over at Census which came up with this—the handheld device, which makes sense, to some extent—did they know, really know, what they were doing when they're coming up with 400 additional changes? I mean, one or two, three or four—but 400? Plus the cost. That bothers us, as appropriators, and it should, and it should bother you, as the Secretary.

Secretary GUTIERREZ. Yes, sir.

Well, I think that part of the problem has been the lack of experience in working with an outside contractor that would come in and do a lot of the work that Census once did. And then once that happens, the level of intensity of management has to increase and I don't think that happened. I don't think that happened early on.

So, Harris would have a certain date of delivery, Census would have another date—it just says that people——

Senator SHELBY. Why? Why? Why?

Secretary GUTIERREZ [continuing]. People weren't talking. They hadn't set up the management processes to ensure that an outsider can come in and do what Census had always done.

So, I think this is, while it comes down to a technology issue, I think that's a symptom. And from my standpoint, Senator, what we have is a management issue, and a cultural issue.

Senator SHELBY. What about a software problem?

Secretary GUTIERREZ. Well, we had some software problems in our address canvassing, which we've done. We did our dress rehearsal, and those, I understand are fixable. We have work to do with the software, but those are fixable, but as you say with the 400 changes that were identified, some of those are software. It can be done, it's just a matter of the level of confidence of having to do that when we're 2½ years away from the Decennial Census.

Senator SHELBY. Are the same people at Census that came up with this idea to begin with, and assured the subcommittee that everything was rosy—are they still over there, running this program?

Secretary GUTIERREZ. We have a new Director.

Senator SHELBY. Okay.

Secretary GUTIERREZ. Who's been on board for 1 month. And we have a fairly new Deputy Director who has been in that role for almost 1 year. So there were some changes that took place.

Senator SHELBY. Okay.

Secretary GUTIERREZ. Last year.

Senator SHELBY. Secretary, can we—this Committee of Appropriations—dealing with Commerce, and your money—can we anticipate a supplemental request from you, your Department, to accommodate the difficult position that the Census finds itself in?

Secretary GUTIERREZ. That's the question I will have answered Senator Shelby. I should have the amount of money, but also if it falls into 2009 and 2010. We believe that a lot of it will fall in 2010, and we're also going to try to find the money internally before we do anything. So, I wish I could be more specific, but I'd like to wait before responding on the money and the timing. And then, I'll be back to this subcommittee with the full plan.

COLOMBIA AND PANAMA SHRIMP EXPORTS

Senator SHELBY. It's a lot of money.

Mr. Secretary, going over to NOAA, free trade and shrimp?

Secretary GUTIERREZ. Yes.

Senator SHELBY. If I can talk about that a minute. Has your Department examined Colombia and Panama's shrimp export activities, prior to these recent trade discussions? And, if so, what were your findings? If you don't know, will you get it?

Senator MIKULSKI. Shift gears on that one.

Senator SHELBY. Yeah.

Secretary GUTIERREZ. I will get back to you on that. I know that we—a lot of our shrimp activities are with Vietnam and Asia, but I will look back at Panama and Colombia.

Senator SHELBY. This would be dealing with Colombia and Panama's shrimp activities.

I have a number of other questions, Madam Chairman, but I will submit them for the record and ask them in the timeframe we have.

[The information follows:]

COLOMBIA AND PANAMA—SHRIMP ACTIVITIES

U.S. Shrimp Trade with Colombia and Panama

The Department of Commerce's International Trade Administration reports no anti-dumping case work on shrimp with Panama or Colombia, nor any outstanding or longstanding shrimp-related issues within the purview of the National Oceanic and Atmospheric Administration (NOAA).

Colombia

In 2007, Colombia exported 2,221,646 kg of shrimp (of various product types) to the United States at a value of $12,877,685. That year, U.S. shrimp exports to Colombia amounted to 125,551 kg with a value of $909,424.

Panama

Panama exported 4,453,686 kg of various products of shrimp to the United States in 2007, valued at $36,644,581. In 2007, U.S. shrimp exports to Panama amounted to 28,474 kg, valued at $231,805.

Free Trade Agreement (FTA) Provisions

The Office of the United States Trade Representative (USTR) reports no shrimp-related trade issues with Panama or Colombia—not before, during, or after the FTA negotiations with these countries.

Market Access

U.S. fish and fish product exports, including shrimp, will benefit from the pending FTAs with Colombia and Panama. Colombia's tariffs on high-priority U.S. fish exports such as shrimp, salmon, and sardines will be eliminated immediately upon entry into force of the United States-Colombia FTA. Currently, Colombian tariffs on U.S. fish exports range between 5 and 20 percent with an average of 18.9 percent. Similarly, Panama's tariffs on U.S. shrimp exports will be eliminated immediately upon entry into force of the United States-Panama FTA. Panama's tariffs on U.S. fish exports currently range between zero and 15 percent with an average of 12.7 percent.

For years prior to the launch of FTA talks with Colombia and Panama, the U.S. market was open to fish imports from these countries. The U.S. tariffs on fish and fish products average only 2 percent. Under the United States-Colombia FTA, most U.S. fish imports from Colombia will continue to receive duty-free treatment upon entry into force of the Agreement. Similarly, under the United States-Panama FTA, 100 percent of U.S. fish imports from Panama will receive duty-free treatment immediately upon entry into force of the FTA. It is important to note these products, including shrimp, currently enter the U.S. market with little or no tariffs.

Turtle Excluder Devices (TED) Certification

The chief component of the U.S. sea turtle conservation program is a requirement that commercial shrimp boats use sea turtle excluder devices (TEDs) to prevent the accidental drowning of sea turtles in shrimp trawls. On May 1, 2007, the Department of State certified 40 nations and one economy as meeting the requirements set by Section 609 of Public Law 101–162 for continued importation of shrimp into the United States. Section 609 prohibits importation of shrimp and products of shrimp harvested in a manner that may adversely affect sea turtle species. Colombia and Panama were among the countries certified.

FDCA TECHNOLOGY

Senator MIKULSKI. Thank you very much.

I'd like to pick up on Senator Shelby's line of questioning on the Census. Two points—number one, we've talked about the management issues, and you're a skilled manager, and we have a new Director of the Census in Mr. Murdock, so management is one thing.

But, let's go to the technology. In this year's appropriation in the President's request, he's asking for, through you, $1 billion more. We have to make sure that $1 billion gives us value at the end of the day. So, could you tell the subcommittee—what is the technological problem? What—I know that there are 400 changes, et cetera, but what doesn't work? If—think of someone knocking on the door, "Hi, I'm from Census," and they have this technology in their hand and then they're asking their questions—at what point does this break down?

Secretary GUTIERREZ. Yes, there are two big problems. One is that it takes a longer amount of time to capture the information for one interview than what was assumed. The other problem is that the number of interviews that a handheld can absorb in a given day is a lot less than what we expected. So, if you go into one of these apartment buildings with a lot of tenants, now all of a sudden we can't do that with one enumerator, we'd have to do that with more than one.

Senator MIKULSKI. But what is it about—the technology that is broken—again, pardon me, but who cares if it lasts longer? Is it a consequence to the battery, what, what?

Secretary GUTIERREZ. I believe it's a design of the software. I don't think it's a capacity problem, I think it's just the way that the requirements were communicated. And part of the problem is how the requirements were communicated to the contractor—this is what we need, this is the capacity we need, this is what an enumerator does every day—there are also some productivity assumptions that were not valid that were put into the program, so that also impacts.

Senator MIKULSKI. So, the handheld can't absorb what we had hoped that it could absorb. So, it could mean, then, if you don't fix the handheld, you will need more people, because it takes more time.

Secretary GUTIERREZ. Yes.

Senator MIKULSKI. Okay. Then, is the handheld able to send it to the mother ship? I mean, is there a mother ship that absorbs all of this?

Secretary GUTIERREZ. That's the plan. The whole idea was that the handheld would help us determine every single address in the country. We're also using global positioning satellite (GPS) technology this time. We'd send the questionnaires to those addresses, and then those households that did not respond, we would go back with the handheld, and all of that information would go back to what we call an operational control system, that would essentially get back to the enumerator with their tasks.

Senator MIKULSKI. Pardon me, I'm a very plain-spoken and plain-thinking person. And knowing the way a census goes, there has to be—there will be someone who will knock on a door——

Secretary GUTIERREZ. Yes.

Senator MIKULSKI [continuing]. Presuming someone's at home and friendly and willing to answer. That in and of itself is an assumption—a big assumption. Because if they don't respond, there's usually a reason—they're old, they're poor, they could be hiding, they could have 15 people living in a house, some documented, some not.

I mean, we've done censuses for 200 years—this is not a special ops operation, where we are doing a new secret thing in a foreign territory. It's in our country, we've been doing it for 200 years, and it's all been based on some form of interview.

So, this is not to lay that on you, but the fact that they didn't understand what the hell they were being asked to do, I find shocking. If we are that dumb, we've got a problem in our country, let alone with technology. This, is again, not secret, not special ops.

So, but here—they've gotten, you know, income under $50,000, et cetera. Then do they push a button, and it goes to a central facility?

Secretary GUTIERREZ. Yes.

Senator MIKULSKI. And is that part working?

Secretary GUTIERREZ. That is one of the options we have, is to take that control system away from Harris, and put it into——

Senator MIKULSKI. That's your option, but is it working now with the Harris contract?

Secretary GUTIERREZ. I'll be able to answer that in 3 weeks.

Senator MIKULSKI. Okay.

Secretary GUTIERREZ. The experts are looking at it to see if it's capable of——

Senator MIKULSKI. And the enumerators talk to the computer, and that's going to take longer, and a computer isn't ready to work as hard as the enumerator. Then the handheld talks to the mother ship—we're not sure it can talk the same language. Then, having done that, the question is, can the mother ship process that information?

You're shaking your head—who are you?

Mr. WIENECKE. I work for the Secretary.

Senator MIKULSKI. So, can the mother ship process it? Okay.

Mr. WIENECKE. That's what we're working through right now.

Senator MIKULSKI. Do you know the answer if the mother ship can process the information?

Mr. WIENECKE. We're testing that.

Senator MIKULSKI. Okay. Now, let's presume that's happened, then they have to tell the enumerator the next day what they're to do.

Secretary GUTIERREZ. That's right.

Senator MIKULSKI. Do they talk back?

Secretary GUTIERREZ. They essentially give the enumerator their schedule and tasks, and where they have to go for the next day.

Senator MIKULSKI. Okay.

Secretary GUTIERREZ. They also calculate productivity, they also calculate wages.

Senator MIKULSKI. So, what you're saying, though, this could be really a collapse.

And colleagues, this is really serious. Again, this is the United States of America. We hold ourselves out to be technological innovators, and we can't develop technology to take a census where we know the process, and we've known it for 200 years.

So, now, let's get to the money. If we have to do handheld, I mean, if we go to paper—if the United States of America has to do a paper census, it borders on a scandal. It really does.

Senator SHELBY. Madam Chairman, could I just interject one thing, just follow up?

Senator MIKULSKI. Yes, because I want to get to the money punch line.

Senator SHELBY. Okay. I just——

Senator MIKULSKI. Because we're heading to something that's—do you realize if we have to pay for a paper census——

Senator SHELBY. I know.

Senator MIKULSKI [continuing]. Yes, go ahead, Senator.

Senator SHELBY. Just, I was just thinking of the software, here, and I'm a long way from being a software engineer. But, a census—the questions you ask during the census—I've talked to some software people, they said, "That's so simple," you know, to program. I mean, because you're asking—let's assume you have the form, and you have to knock on the door, you know, and you had to fill it out, which we've done—that's not difficult. Is it laborious? Is it labor-intensive? It could be. And the software, or the handheld computer was to save money, be more efficient, and everything else. But, I don't think you're asking—whether it's Harris or whoever's doing it, the Commerce Department—you're not asking for a difficult software program.

Senator MIKULSKI. Right.

Senator SHELBY. And I think the chairman's right. Thank you for letting me interrupt——

POSSIBLE SUPPLEMENTAL APPROPRIATION

Senator MIKULSKI. Let's get to the—so, you're going to have answers. But, here's where we are. Senator Shelby asked—as he does, such excellent focused and targeted questions—as he said, are you prepared to ask for money in a supplemental? And, as I understand your response is, "Oh, we will turn to the Department first."

Secretary GUTIERREZ. Yes, I think I should say that——

Senator MIKULSKI. Can I just give you a head's up?

Secretary GUTIERREZ. Yes.

Senator MIKULSKI. The supplemental appropriations will be before the Senate in mid-April. So, when you have your answers, we can't wait to know—we only get one crack at the supplemental. And this Appropriations Committee cannot absorb the fix, even if we get a robust allocation, because of all of our other compelling needs and very important agencies across—remember, we not only have Commerce, we have Justice, where local law enforcement has been drastically cut, we're concerned—we could go on. So, we have to, if there—if you—I don't know where you're going to get the money. Because what we passed for the omnibus, was pretty lean. We scrubbed this pretty well.

So, what we're saying, Mr. Secretary is, that whatever is the fix that is required, we would respectfully recommend that it be in the President's supplemental. I mean, we really do need a plan by, I would say, April 10. Because we'll be on the floor.

Secretary GUTIERREZ. And we should have a plan, and numbers before that time, late March—and I will bring it to you as soon as we have it.

Senator MIKULSKI. Fine, but we need, not only a plan, but we need a method——

Secretary GUTIERREZ. Yes.

Senator MIKULSKI [continuing]. For paying for the plan.

But, we have a lot of confidence in your management ability.

NPOESS SATELLITE PROGRAM

Let's go, then, to NOAA satellites. As I understand it, in terms of the famous NPOESS program, which is polar satellites, which are so important to giving us information about weather and climate, that there's—in addition to the cost overruns, that there is also another technological problem that could exacerbate the overruns.

We understand that there is a main sensor, known as VIIRS, that's supposed to take a picture of the ocean color—now, why is that important? The ocean color tells us the temperature, which then gives us important information on climate change and weather. But that—what it's going to take a picture of is now blurry.

You know, I went through that—the Hubble telescope over 20 years ago, Senator Shelby was very aware of that—you know, we can't put a satellite up and then have it need a contact—its sensor needs a contact lens.

So, our question is, oh my God, do we have to then fix the sensor, while we're already in cost overruns?

Secretary GUTIERREZ. We——

Senator MIKULSKI. Are you aware of this problem?

Secretary GUTIERREZ. Yes. The assumption at this point, is that sensor will delay that part of the project by 8 months. We have not added 8 months to the end completion date. So, the VIIRS is 8 months off schedule, but the assumption is that we will be able to get back on schedule for the full NPOESS. So, we're still saying NPOESS will be launched in 2013. But that VIIRS sensor is 8 months behind schedule.

Senator MIKULSKI. But, even on schedule, will it be able to see and do the job that it's supposed to do? Or is that another technological fix that requires, again, more money?

Secretary GUTIERREZ. I don't know that, and I have not heard that. I have not heard that there will be another overrun on that part of it.

Senator MIKULSKI. Well, Mr. Secretary, what Senator Shelby and I would like to do is submit our concerns about this in writing, because after we get it on track, and they deliver it, if we have a sensor with a blurry vision, and the whole point of it is that it's looking from the sky at our oceans, which gives us very important predictability, and like, his questions about shrimp, I'm asking about rockets——

Secretary GUTIERREZ. The quality should be a constant, and——

Senator MIKULSKI. Yeah, it should be.

Secretary GUTIERREZ [continuing]. At this point, is——

Senator MIKULSKI. Well, right now, we hear it's blurry. We hear it's blurry.

GOES–R SATELLITE PROGRAM

Let's ask—let me go to GOES–R, and—which is another satellite program. Our question will be—what assurances can we give the subcommittee that we're not going to run into the same cost overruns with GOES–R as we did with NPOESS?

Secretary GUTIERREZ. Well, and I'll be very up front here, we've gone from $6.9 billion to $7.6 billion and I believe you brought that up a little while ago. We are, today, $500 million away from having to trigger a Nunn-McCurdy-like process. I have been told that doesn't look like it's in the cards—one of the reasons that we have this $800 million increase is because we have mitigation plans, we have been very conservative, we have ensured that we're looking at the downside risk, but I just want the subcommittee to know that we've got to track this very closely, because we are $500 million away from hitting that 20 percent mark. So GOES–R is clearly the big priority right now.

Senator MIKULSKI. Well, that really gives us pause, because—first of all, there seems to be a consistent pattern of cost overruns in the NOAA satellite program. That's number one.

Number two, that along with the cost overruns is then once we pay for it, do we get value for the dollar? The so-called, blurry-eyed sensor?

Secretary GUTIERREZ. Right.

Senator MIKULSKI. I have a real problem with our satellite programs across our Government. Whether it's in the classified area, or in others—we just don't seem to be able to get our satellites up on time, on budget, and then meeting what the expectations and criteria.

So, here's where we are. What I would like—right now, the census is a crisis. We've got to get it solved, and we've got to get the payment for it within the supplemental. We ask you to please focus on that.

MANAGEMENT REFORMS FOR SATELLITE PROGRAMS

But we ask you to take a look now, also, at the NOAA satellite program, and give us a path forward, in terms of what you think will be the management reforms necessary in the—in this. One, so we can keep it on track for this year's appropriations, but at the same time, what this will mean for the incoming NOAA Administrator. Because we can't just be left holding the bag, and America will lose interest. People with scientists have their self on the line.

Secretary GUTIERREZ. I'd be glad to do that, Madam Chairman.

[The information follows:]

MANAGEMENT REFORMS IN NOAA SATELLITE PROGRAM

Within the Department of Commerce, the National Oceanic and Atmospheric Administration operates and manages two major environmental satellite programs: the Geostationary Operational Environmental Satellites (GOES) in geosynchronous orbit above the equator, and the Polar-orbiting Operational Environmental Satellites (POES) which provide global coverage in a low earth orbit.

Following the Nunn-McCurdy certification of NOAA's next-generation polar-orbiting system—the National Polar-orbiting Operational Environmental Satellite System (NPOESS)—the Department and NOAA have strengthened the management, oversight, and systems engineering processes of its satellite systems acquisitions. These changes will ensure that NOAA does not repeat the NPOESS mistakes in the development of the next generation Geostationary Operational Environmental Satellite series (GOES–R). These changes include:

—Robust Risk Reduction in instrument acquisition processes. Risk reduction in these processes requires careful management and engineering attention. Both GOES–R and NPOESS are aggressively managing instrument acquisition to mitigate the risk to the entire program.

—Technical Teaming with NASA to implement proven NASA space acquisition processes in Department of Commerce and NOAA acquisition strategies. For GOES–R, this approach is documented in a GOES–R Management Control Plan (MCP) which allows the GOES–R program access to the expertise and experience of both NOAA and NASA, their support contractors, and of the best of each agency's acquisition processes to ensure active and in-depth oversight of the development contractors. For NPOESS, NOAA has teamed with the Air Force and NASA with activities guided by a Memorandum of Agreement among the Department of Commerce, Department of Defense, and NASA which is implemented by a series of management, acquisition, and funding arrangements.

—Regular Management Oversight and Reporting by the satellite programs to senior management officials. The GOES–R program reports to the Department of Commerce and NOAA executive management, and NASA engineering teams through NASA and NOAA Program Management Councils (PMC). The NPOESS programs reports to the NPOESS Executive Committee (EXCOM) which is comprised of senior representatives from NOAA, NASA, and the Air Force that provides programmatic and management oversight and guidance. The NPOESS program also reports monthly to the NOAA PMC.

—Realistic Cost Estimating and Budgeting that vets the Government cost estimates by independent experts to ensure that adequate resources are applied to areas of high risk. This means budget requests will more likely cover expected costs without requiring additional budget allocations to deal with unforeseen issues.

—Program Control and Congressional Oversight is ongoing with annual program reports for both the GOES–R and NPOESS and quarterly reporting of program status to Congress.
—Management of Contractors using Incentive Fee Structure to ensure the Government utilizes a full range of incentive and performance management approaches to facilitate contractor management.
—Independent Reviews by Experienced Space Acquisition Experts such as the Independent Review Team (IRT) to provide NOAA and the Department of Commerce with unvarnished opinions of the program's readiness at key decision points.
—Recruitment of Experienced Program Managers and Program Executives to implement internal controls, to improve insight into emerging cost, schedule, and technical issues and exercise stronger management control on the release of management reserve and changes to the estimate at completion. For the GOES–R and NPOESS programs, seasoned and experienced Senior Executives have been placed in lead management positions. For the NPOESS Program, in addition to the System Program Director who is involved in day-to-day activities of managing the system acquisition, a Program Executive Officer position was established to provide high level monitoring of the program and contractor performance.

Senator MIKULSKI. We note that the vote has started, has the second bell occurred?

Senator BROWNBACK. Madam Chairwoman, could I ask one other question——

Senator MIKULSKI. On what topic?

Senator BROWNBACK. On the——

Senator MIKULSKI. I have questions related to the Patent—is it on the satellites?

Senator BROWNBACK. No, it's on the subsidization, but I just wanted to ask——

PATENT BACKLOG

Senator MIKULSKI. I'd like to finish my patent question.

Senator BROWNBACK. Okay.

Senator MIKULSKI. We have over a 1 million case backlog. There is a persistent pattern in our Patent Office with these issues. We have given them more money, we have given them more flexibility, but at the end of the day, our innovators and our inventors—be they big companies or those start-up companies that make America great, feel they're standing in line. Could you share with us, where you think we should be going forward? Is it a money problem? Are we doing our part? What is the problem, here?

Secretary GUTIERREZ. Where we are today, essentially, Madam Chairman, it is like, we are on a treadmill and we're trying to catch up. The number of applications is increasing, and each application is more complex than it was 10 or 20 years ago. So, we're adding 1,200 people every year, and our initial pendancy, the first time we get back to people, is up to 25 months. Our final pendancy, when we finally get back with a patent, is over 30 months. So, the number of people we're adding is not enough to keep up with the applications and the complexity.

I think we need to come up with different process solutions, other than just adding more people. One day we're going to have 500,000 people, and we're still not going to be caught up.

So, one of those things we're looking at, and this is where we'd like to go to the patent bill, we need some help on this, is we'd like to be able to offer applicants that, if they do more of the work themselves, that we will guarantee we will get back to them in 12 months. But that will essentially take some of the work that we're doing—having to do quality reviews and sending the application back, and asking for more information—if they do the work themselves, we would guarantee a speedier response. That's a big solution.

We're also looking at some workplace methods, flexible workplace, working from home. We're also looking at the flexibility of having quotas on a quarterly basis, instead of on a daily basis, so that people can be more empowered to manage their time and their priorities.

So, I think we need to look at the process and a different way of thinking about this than simply adding more people every year. By 2013, we would have added 8,000 more people.

Senator MIKULSKI. Well, this is really—again, we're almost at a breaking point, here. With 1 million patents pending. And at this breaking point, we've added more money—I won't repeat myself—the part you've said we have to look at the patent bill, that's beyond the scope of this subcommittee.

But, in terms of the personnel reforms, that's not beyond the scope of this subcommittee, and I think we need to look at how do we retain the people we recruit, because of just the knowledge factor—they walk out, go to the private sector, et cetera, it's a big loss. And it takes at least 2 years for them to really know how to get—do the job in the way they do. Because experience counts.

We really need from you, this year, what we're going to do here, whether it's flexibility on work hours, or all of these other creative things, because we're really frustrated, the Judiciary Committee is really frustrated, but America—the private sector is.

I'll just stop here, because in the report on our innovation, from the National Academy of Science, "Rising Above the Gathering Storm, Where We're Falling Behind", they said one of the key things in an innovation-friendly Government is the Patent Office, which enables us to, not only take our brilliant inventions that are being done, but to really make sure that we protect them against our intellectual property being robbed.

So, this is really, I mean, these are really three big issues we've laid out here—the census, which is a crisis, the satellites, which are bordering on a crisis, and then this whole other issue with patents, that I believe stifles our ability to turn our innovations into products that could be sold around the world.

Secretary GUTIERREZ. We're also looking at sharing work with some other Patent Offices in international countries where it makes some sense.

Madam Chairman, on the satellites, I offered up this notion that we are $500 million away—I've asked that question internally, I was told that we won't see that, because we've had mitigation costs, and we've been very careful about this increase to $7.7 billion. But, I just want you to know what I know——

Senator MIKULSKI. Well, we've been told things before. We were told, from the Census, "Oh, don't worry about it." We've been told, "Oh, gee, the satellites," there's three different agencies, you know, we've been told a lot of things, and we're now acting like Missouri, "Show us."

So, Mr. Secretary, we think you're doing a great job, but these three things are really—have now come to the Cabinet level, and we look forward to working with you.

Secretary GUTIERREZ. Thank you.

Senator MIKULSKI. There's only about 3 minutes left in the vote—Senator Brownback, did you want to have a round of questions?

SUBSIDATION OF EADS AIRBUS AIRCRAFT

Senator BROWNBACK. Yes, and I won't take long on this, but this is just a—this is a big deal, it's been going on for a long time. Just to complete that area, because I tried to stay within my time on that 5 minutes, and—but we believe, the U.S. Government, that every EADS Airbus plane receives launch aid in its development, believes in our proposal that each is given help in the development costs, is that correct, in the U.S. Government's position?

Secretary GUTIERREZ. I'll have to check if every single plane—I know that we have alleged that the new planes that have come out, that there have been launch aids given by the Government.

Senator BROWNBACK. And that, for the A–330, includes the A–330 airplane?

Secretary GUTIERREZ. I believe so.

Senator BROWNBACK. My point to you is simply that wherever the plane is put together, it's the U.S. Government's position that that plane has received somewhere between 33 percent to 100 percent of its development cost from European governments, and that's in our claim, that's in our proposal. And that that applies in pulling down the cost of each of those planes, and that's why they can be more competitive against a Boeing plane, is in our base proposal.

And that's, I just—I wanted to draw that attention to you, and to my colleagues, because if we win this case and we're successful on it, there's going to be, then, what are we going to do in response to this, toward EADS and Airbus? And it's going to affect a lot of things that are being discussed, and the Secretary is going to be involved in these retaliatory measures, substantially, because of the development cost was for the whole plane. And then that is spread about over all planes that are sold.

So, I—I appreciate Madam Chairman——

CLOSING REMARKS

Senator MIKULSKI. Colleagues, I'm going to have to close out the hearing. I'm going to invite Senator Shelby to have whatever he wishes to say. But I want to announce that this hearing, after the conclusion of his remarks, will come to an end. The subcommittee, we can submit questions and so on for 30 days, we will stand in recess until March 13, when we'll hear from NOAA and NSF.

Senator SHELBY. Madam Chairman, I just want to answer that, the best I can. We have this ongoing dispute of subsidies, and that's got to be settled there, but what we have here, though, is an award of a tanker by the Air Force that's going to be built in the United States with the air frame which comes from EADS, which the Air Force has selected in five major categories as superior, and we're talking about the warfighter, what's best for the warfighter.

Boeing, in a lot of people's estimates, submitted an old plane, old technology, and they lost, fair and square. And now they're trying to come in different ways. I don't believe it's going to work. I think the decision by the Air Force will either be upheld or changed by the Government Accountability Office and that's regular procedure, that's not before us today.

Thank you.

ADDITIONAL COMMITTEE QUESTIONS

Senator MIKULSKI. If there are no further questions this morning, Senators may submit additional questions for the subcommittee's official hearing record. We request the Department's response within 30 days.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

CENSUS—2008 DRESS REHEARSAL AND HANDHELDS

Question. I understand that the handheld computers were tested in last year's dress rehearsal of address canvassing. How did they perform? What problems were identified? What is the status of fixing those problems?

Answer. We completed the Dress Rehearsal Address Canvassing on schedule using the handheld computers supplied by the FDCA contractor. Although we experienced some software, help desk, and training problems with this first-ever deployment of the contractor's solution, many of the problems were resolved quickly. We continue to examine the results to determine what needs to be done to make improvements for the 2010 Census Address Canvassing operation, which will begin a year from now.

During the Dress Rehearsal Address Canvassing operations, where census enumerators verify and update our Master Address File, the devices proved to be reliable, with a hardware failure rate of less than 1 percent—much better than industry standards. The devices were also secure—they required a fingerprint and password to operate, and the data were fully encrypted in the device and during transmission. We successfully collected precise Global Positioning System (GPS) coordinates for housing units and map features; data we collected were transmitted effectively via both landline and wireless transmissions; and our workers were generally comfortable working with the device. We were also able to identify software problems and apply solutions simultaneously and uniformly to all devices via electronic transmission to each device daily upon start-up.

Following the Dress Rehearsal Address Canvassing operation, Census Bureau and contractor staff identified problems and analyzed their causes to learn from this operation. Teams conducted more detailed analyses of the transmission component of the design and performance during Address Canvassing. These analyses included data on average transmission time, the average size of transmissions, the type of data being transmitted, and the number of transmissions. The contractor also analyzed the end-to-end transmission workflow, problems documented in help desk tickets, and assignment area size. These analyses led to a number of corrective measures that are now being taken to improve performance of the handheld computer and of the transmission process. For example:

—The initial handheld computer software design inhibited efficient transmission to and from the handheld computer, resulting in enumerator downtime. We resolved this by making improvements to the database design and implementing hardware and software upgrades.

—The handheld computers did not function well if the data files were too large. They worked most efficiently with assignment areas of up to 720 addresses. However, approximately 3 percent of the assignment areas had more than that. We are addressing this issue for the nationwide 2010 Census Address Canvassing operation by limiting the size of the assignment areas and the amount of data that must be downloaded and processed on the handheld computer.

—The contractor's operations support ("help desk") solution was insufficient to meet the type and amount of support needs for our field staff. We are addressing this by improving operational readiness (more testing, increased knowledge base development, and additional support personnel training) and by jointly developing a more robust support system.

FDCA TECHNICAL REQUIREMENTS

Question. The Field Data Collection Automation contract was awarded on April 4, 2006. Obviously, at the time Census and Harris figured all the work associated with the contract could be accomplished on time and within the $600 million budget.

Given the complexity of the system why were Census' assumptions regarding time required for the handheld contract so far off?

Answer. Early in the decade, we believed our experienced Census Bureau staff could develop and deploy the handheld computers for use in the 2010 Census. These staff did produce the solutions we tested in both the 2004 Census Test and 2006 Census Test. Although we were able to develop and use them well enough to determine that we could conduct field data collection on such devices, by 2004 we had concluded that we did not have sufficient expert resources in house to do this for the 2010 Census, so we decided to contract this effort to the private sector. At the time we prepared the RFP, our strategy was to supply high-level functional requirements to the contractor on award, and then to determine final detailed requirements based on what we learned from the 2004 and 2006 Census Tests, and the 2008 Census Dress Rehearsal.

Thus, at the time of contract award in April 2006, both the Census Bureau and the contractor were fully aware this strategy would mean a tight schedule for requirements development, system design, system development, and deployment. The initial requirements strategy at that point was to develop remaining requirements in a two-step process. First, based on results from the 2004 and 2006 Census Tests, we would provide detailed Dress Rehearsal requirements for our major operations. Then, based on lessons learned from the Dress Rehearsal, we would make adjustments to those detailed requirements for 2010 Census operations, as well as develop the detailed requirements for those operations that could not be included in Dress Rehearsal (e.g., enumeration in Puerto Rico; enumeration in remote areas).

The contract was awarded in April 2006—less than one year before the first major application was needed for the Dress Rehearsal Address Canvassing operation. We knew this was a very aggressive schedule, and to mitigate some of this risk, all of the final vendors for the contract were required to develop a prototype of the Address Canvassing device so that, upon award, they would already have initial development underway. However, after contract award, it became clear that the contractor's funding needs by fiscal year differed from what the Census Bureau had assumed in its lifecycle cost estimate for the contract. In particular, the contractor stated they needed more of the overall contract funding earlier in the cycle, including fiscal year 2006. Because the Congress had already appropriated funds for fiscal year 2006, and the President had already made his request to the Congress for fiscal year 2007, the Census Bureau had limited flexibility to address these funding issues directly. In response, the Census Bureau reprogrammed some funding to the FDCA contract, and a re-plan was developed which, among other things, delayed and extended software development into seven increments. Thus, this re-plan added additional risk to the overall development plan and strategy, though at the time the Census Bureau thought the added risk was manageable.

Question. Last month, nearly 21 months after awarding the contract Census finally provided the contractor with a final set of technical requirements. Why did it take so long to finalize the requirements?

Answer. As mentioned above, at the time of contract award in March 2006, both the Census Bureau and the contractor were fully aware this strategy would mean a tight schedule for requirements development, system design, system development, and deployment. The initial requirements strategy at that point was to develop remaining requirements in a two-step process. First, based on results from the 2004 and 2006 Census Tests, we would provide detailed Dress Rehearsal requirements for our major operations. Then, based on lessons learned from the Dress Rehearsal, we would make adjustments to those detailed requirements for 2010 Census operations, as well as develop the detailed requirements for those operations that could not be included in Dress Rehearsal (e.g., enumeration in Puerto Rico; enumeration in remote areas).

We were moving on that path when, in October 2007, we had to de-scope many paper-based dress rehearsal activities in order to have sufficient funds to keep this contract (and our data capture systems contract) on schedule in developing critical applications and interfaces planned for the Dress Rehearsal. Until that point, we still were planning to use our Dress Rehearsal experiences with various operations to help finalize detailed requirements for the FDCA contractor. However, because most of those operations had to be cancelled, in mid-November 2007, the contractor requested, and we agreed, to move forward immediately to deliver a final set of all detailed requirements. This effort was completed, and we delivered them to the contractor on January 16, 2008.

HARRIS CONTRACT AWARDS

Question. I understand that this was a "cost-plus contract", as such bonuses were awarded based on performance. Harris was awarded two bonuses on grades of 91 and 93 for this program.

What criteria were used to determine that Harris was exceeding expectations and deserved these bonuses?

Answer. No bonuses have been awarded for this contract. The only opportunity for the contractor to earn any profit (over and above costs) is through the award fee process. For this contract, there are four evaluation categories for the award fee determination: Business Management; Technical Management; Project Integration; and FDCA/DRIS Integration.

The criteria used in assessing performance are: Quality, efficiency, ingenuity, responsiveness, thoroughness, timeliness, resourcefulness, accuracy, safety/health/environmental compliance, communication, autonomy, and contract management.

FDCA award fees are determined by an Award Fee Determination Board consisting of a Chairperson, eight voting members and three non-voting members and an Award Fee Determining Official, in accordance with procedures outlined below:

—1. Government Technical Monitors (TMs) prepare/submit monthly Technical Monitors Reports (TMRs) documenting aspects of Contractor performance.

—2. Government Principal Technical Monitor (PTM) prepares/submits monthly report summarizing TMRs.

—3. Together with final monthly TMR in the Award Fee Period (AFP), TMs also prepare/submit a summary report of observations over the entire AFP; the PTM prepares a similar overall summary.

—4. FDCA Project Management Office (PMO) distributes timetable of activities called for by the FDCA Award Fee Determination Plan and schedules necessary meetings/briefings.

—5. FDCA PMO distributes TMRs/PTMRs, any Individual Event Reports, and related information to Award Fee Board members.

—6. Contractor submits (and briefs to the Award Fee Determination Board) its Self-Evaluation Report for the AFP in question.

—7. Award Fee Determination Board members review documentation referenced in previous steps, and other documentation deemed relevant by individual Board members (e.g., field observation reports).

—8. Award Fee Determination Board meets to arrive at consensus score.

—9. FDCA PMO documents Board's findings and conclusions and briefs Award Fee Determining Official.

—10. Award Fee Determining Official makes final fee determination.

—11. Government Contracting Officer reviews determination for contract compliance and submits invoice authorization letter to Contractor.

—12. FDCA PMO debriefs Contractor on final award fee determination.

Step 4 takes place shortly before the end of a given Award Fee Period. Steps 5 through 12 are scheduled so as to conclude no later than 60 calendar days after the end of the Award Fee Period.

EFFECT OF FDCA ALTERNATIVE

Question. One of the options being looked at is to de-scope the contract and bring work back in-house at Census.

What other programs will suffer as a result of Census reprioritizing staff to work on this program? Will additional contractors be needed? If additional contractors are used, aren't we back where we started?

Answer. We do not believe this decision will have any significant impact on other programs. We likely will have to hire additional staff or contract support personnel to accomplish this work. These contractors will be used to supplement and support Census Bureau staff leading the work. This will not involve another solutions-based contract like FDCA.

MANAGEMENT REFORM

Question. What management reforms have you put in place in order to avoid problems from now until the conclusion of the 2010 census?

Answer. We have a new Acting Associate Director for Decennial Census, Arnold Jackson. Other moves are under consideration. We are taking a series of steps to strengthen management, including:

—Instituting a new management approach that will strengthen planning and oversight relative to risk management, issue identification, product testing, communications, and budget/cost management.
—Increasing the intensity and pace of senior management involvement, including daily status assessments and problem resolution sessions chaired by the Associate Director, weekly status assessment meetings with the Director and Deputy Director, periodic but unannounced reviews by MITRE and Department of Commerce specialists in IT, project management, and contracting.

We also are developing a comprehensive plan that consolidates the recommendations from several studies and reviews, including MITRE, GAO, our own Blue team, the FDCA Risk Reduction Task Force, and the Secretary's expert panel. Some of the action items we are committing to are:

—Comprehensive risk management such that the higher impact risks are known as early as possible and elevated to proper levels for timely resolution.
—Strengthened leadership in the Decennial Program so that stakeholders, contractors, staff, and management are unified and focused on the issues that drive a successful census.
—Transitioning from a planning phase of the Decennial cycle to an action-oriented operational phase by shortening decision cycles, cutting internal redtape, and pushing more problem resolution responsibility down to our managers.
—Adhering to a structured plan of action to see that the things we have not done well do get better as rapidly as we can.

The FDCA PMO and the Software Assessment Team have agreed to a plan to strengthen oversight of the contractor, and the plan is known as our "Insight Plan". The PMO launched implementation of the Insight Plan a few weeks ago, and some of the key steps of that plan are:

—A much closer review of the contractor's software earlier in the development and test cycle.
—Permanent Census staff at the contractor's Largo facility and staff embedded with the contractor at key points in the development cycle from requirements clarification to product release for final field hands on testing.
—Improving the contractor's test cases by including more realistic census events and operationally characteristic data.
—Involving census users of the information collected by the handheld system in the process of review and approval of contractor products before they are final. This will greatly increase stakeholder participation and bring about rapid feedback needed for problem correction.

Question. After the problems with NPOESS we brought in a person with a proven track record to rescue the program and get thing moving in the right direction. Who is your General Mashiko for the Handheld contract?

Answer. We recognize the need for better program oversight, program integration, and acquisition management. We are in the process of finalizing leadership and management improvements that address these needs and expect to announce these in the near future.

OTHER 2010 DECENNIAL CONTRACTS

Question. The handheld computer contract is just one of many large contracts supporting the reengineering of 2010 operations. Given the problems with FDCA have you begun a top to bottom review of these programs? What assurances can you give the Subcommittee that there are no other problems lurking out there?

Answer. One of our major, multiyear contracts for the 2010 Census recently was completed on time and within budget. Only one minor task and contract closeout remain. The Harris Corporation successfully completed its tasks in support of this MAF/TIGER Accuracy Improvement Program, which now has brought our geographic databases into GPS alignment for the entire country.

For our two other major IT contracts, we are working with the same vendors who supplied similar solutions for Census 2000. For the Data Response Integration System (DRIS) contract, we selected Lockheed Martin, who was the contractor for the Census 2000 data capture system. For the Data Access and Dissemination System (DADS) II contract, we selected IBM, who also was the contractor for our existing DADS system. While previous experience with the same contractors on similar tasks is no guarantee of a problem-free process, we are much more confident these contracts will be completed on time and within budget.

Although not an IT contract, we do have some initial concerns about the Communications contract and have reduced their initial award fee for the first evaluation period. Our primary concern is that their initial draft plan was not as fully detailed or analytically robust as we required in our statement of work. They can recover this fee reduction in the second evaluation period, and we are hopeful their performance will improve so that they do so.

SATELLITE OVERSIGHT DURING ADMINISTRATION TRANSITION

Question. What management reforms have you instituted within your office to ensure adequate oversight of NOAA and its satellite programs as we transition into a new Administration?

Answer. With regards to the GOES–R program, on December 21, 2007, the Department delegated Key Decision Point Authority for the GOES–R program to the Under Secretary for Oceans and Atmosphere. With that delegation, the Department laid out a series of expectations for the program:

—The GOES–R program will adhere to the Department's standard review board processes.

—NOAA and the GOES–R program will make available all information necessary for budget oversight and legal advice.

—NOAA and the GOES–R program will provide the Department will all briefings and information packages for all Key Decision Point Reviews and will provide the Chief Financial Officer and Assistant Secretary for Administration quarterly briefings.

—The Department established cost and schedule thresholds for reporting variances.

The Department fully expects that these requirements will survive the transition into a new administration. In addition, the NOAA Deputy Under Secretary, a career NOAA executive, will continue to provide senior oversight of NOAA's satellite acquisition programs. The Assistant Administrator for Satellite and Information Services and Deputy Assistant Administrator for Systems have multiple years of experience acquiring satellite systems and will continue to provide day-to-day supervision of the System Program Directors of the Geostationary Operational Environmental Satellite N Series (GOES–N), GOES–R Series, Polar-orbiting Operational Environmental Satellites (POES), and the National Polar-orbiting Operational Environmental Satellite System (NPOESS) programs.

NOAA has also established a Program Management Council (PMC) that meets monthly to review and provide oversight to the major acquisition programs. The PMC will continue its reviews of all NOAA satellite acquisition programs during the transition period.

VIIRS AND OCEAN COLOR REQUIREMENTS

Question. The latest problem with NPOESS is its main sensor, know as VIIIRS, will not meet all of the requirements for "ocean color" in time for the NPP launch. However, we have been told that this problem will be corrected in time for the first NPOESS launch.

Answer. This is correct. In 2007, problems were noted during testing of the VIIRS instrument that were traced to the Integrated Filter Assembly (IFA), which allowed some light to cross into the wrong detectors, and caused degraded performance of ocean color sensing.

The NPOESS Executive Committee (EXCOM) directed the NPOESS Integrated Program Office (IPO) to: (1) fly the first sensor on NPP with the existing IFA, accepting the existing performance degradation for that mission; and (2) resolve the VIIRS IFA problems before flying it on NPOESS C1.

The agreed to path forward is to remanufacture the IFA to achieve an acceptable Ocean Color/Chlorophyll (OC/C) capability for NPOESS C1. The remanufactured IFA was delivered ahead of the scheduled June 2008 plan. Performance results are expected from IFA testing this year.

Question. By placing a VIIRS on NPP with less than 20/20 vision will we still get useable science when it comes to ocean color?

Answer. The expectation for Visible/Infrared Imager/Radiometer Suite (VIIRS) on NPP is expected to exceed existing operational earth observation capabilities in space. VIIRS is expected to meet 20 of 21 Environmental Data Records, including the Imagery and Sea Surface Temperature Key Performance Parameters (KPP). These data records are the main scientific data required of the NPP. Only Ocean Color/Chlorophyll (OC/C) products and Aerosol will be degraded.

Although these Ocean Color/Chlorophyll products and Aerosol will be degraded from original levels of performance, aerosol measurements will still be at specification.

Question. What assurances can you give us that the ocean color problem will be correct on VIIRS in time for the first launch of NPOESS?

Answer. The remanufactured Integrated Filter Assembly (IFA) incorporates a different coating technology which is expected to significantly reduce the amount of degradation. Testing later this year will verify performance against the VIIRS specification requirements.

GOES–R CONTRACTS

Question. Will the contract for GOES–R be a "firm-fixed price" or a "cost-plus" contract?

Answer. The contracts for the GOES–R Ground and the Flight Segments will be Cost Plus Award Fee (CPAF) contracts.

Question. Will the GOES–R contract include cost overrun penalties to ensure contractors don't get away with another boon-doggle?

Answer. The GOES–R Program will structure the contract management mechanisms for the Ground and Flight Segment contracts to ensure adequate safeguards to prevent contract overruns.

For the GOES–R Ground and Flight Segment contracts, overall cost performance will be evaluated on how well the total cumulative actual costs were controlled as compared to the negotiated baseline estimated costs. Per the award fee structure, the contractors should not earn a satisfactory rating for cost control when there is a significant cost overrun within its control. The Government will consider the reasons for any overrun and assess the extent and effectiveness of the contractor's efforts to control or mitigate the overrun.

GOES–R "COST-PLUS" CONTRACT OPTION

Question. Given all the problems associated with the Department of Commerce's other "cost-plus" contracts, namely the Handheld computers at Census and NOAA's own NPOESS, would it not be a better decision to not do a "cost-plus" contract?

Answer. A cost plus type contract is suitable for the GOES–R Ground and Flight Segment contracts as there are too many uncertainties involved in contract performance that do not permit costs to be estimated with sufficient accuracy to use a fixed-price contract. Because of the high degree of uncertainty in developing this new observing system and the volume of data produced by these new sensors that the ground system will have to process, contractor proposals for a fixed-price contract would contain an extremely large amount of risk/contingency funding which would eliminate any degree of potential savings with a fixed-price contract. In addition, cost pressure on a contractor in such a contract can drive them towards cost cutting efforts that threaten mission success. For programs such as these, NOAA prefers to maintain risk dollars outside of the contract in order to have close government control of cost/schedule and technical trades throughout the development cycle.

GOES–R TOTAL PROGRAM COST

Question. If the decision is made to build the 2 option satellites then what will the total program cost be?

Answer. The estimated cost for the additional two satellites is estimated between $2.5 and $3 billion above the current $7.672 billion cost for the two satellite program. This includes four satellites, instruments for each, ground facility support, and operations and sustainment (O&S) funding for the lifetime of all four satellites. The last satellite (GOES–U) is expected to cease operations in 2036.

UNITED STATES PATENT AND TRADEMARK OFFICE

Question. At last year's hearing we talked about my concerns with PTO. I appreciate that you took my request for a remediation plan seriously. Unfortunately we need to do more. For example the GAO has recommended that patent examiner's work production quotas need to be revised. Do you agree with this recommendation?

Answer. In September 2007, the GAO recommended that the USPTO undertake a comprehensive evaluation of the assumptions that the agency uses to establish its production goals. In September 2004, the Commerce OIG also recommended that the USPTO reevaluate current patent examiner goals and assess the merits of revising them to reflect efficiencies in and changes to work processes resulting from automation and other enhancements. I agree that a comprehensive evaluation of the assumptions that the agency uses to establish its production goals is appropriate.

Question. Will you charge the PTO to immediately begin a comprehensive revision of these work production quotas?

Answer. I support the USPTO's ongoing efforts to conduct a strategic level assessment of its patent examiner production process in comparison to best practices similar to other large-scale federal agencies and commercial organizations.

To that end, the USPTO is selecting a contractor with expertise in assessing practices in large-scale production environments to conduct an independent analysis.

Another significant component of these ongoing efforts includes evaluation of the Flat Goal Pilot Program, initiated by the USPTO in April of 2007. The "Flat Goal" pilot tests a new concept of how patent examiner production is measured.

Specifically, the 173 patent examiners who volunteered for the one-year pilot (April 2007-April 2008) are given flexibility in choosing when and how to do their work, and may earn larger, quarterly bonuses for every application examined above a particular target goal rather than earning bonuses on an annual basis.

Examiners who participate are assigned a production goal at the beginning of each quarter rather than tracking their use of examining time throughout the quarters of the fiscal year. The results of the flat goal pilot may help the USPTO reassess some of the assumptions underlying the examiner production goals.

Question. Since we met last year patent waiting times have continued to increase due to the increasing dual challenges of rising workloads and more complex challenges. What efforts has PTO made to provide continuing education to its examiners so that they can review these ever more complex technologies?

Answer. Effective training and continuing review and education are priority issues for the USPTO because the agency recognizes that the expertise of its examining corps is the primary factor influencing patent quality.

Tech Fairs

Our Technology Centers (TCs) regularly hold on-campus "tech fairs" where industry speakers share state-of-the-art information with our patent examiners. In April 2008, the USPTO held a Design Day for its design examiners (TC 2900), where USPTO specialists shared information on the Hague Agreement and its implementation and how design patents impact the economy.

On May 5, the USPTO has planned a Tech Fair for the biotechnology area (TC 1600). Dr. John Rossi from Beckman Research Center of City of Hope will speak about the state of the art in Dicer-substrates and Oligonucleotides and Dr. Kevin D'Amour from Novocell will speak about human embryonic stem cells. On May 14 and 15, a Tech Fair is scheduled for the semiconductor area (TC 2800). Thomas Gallagher from IBM will speak about magnetic random access memory; Santokh Badesha from Xerox will give an overview of electrophotography; and Michael Nelson from NanoInk will speak about "Nanotechnology Applications and Micro Electromechanical (MEM) Devices."

On June 4 and 5, the USPTO has planned a Tech Fair for the mechanical area (TCs 3600 and 3700). Dr. Ned Allen from Lockheed Martin will speak about the F–35 Joint Strike Fighter; John Boller from Mizuno will speak about golf equipment; and William Bachand from Taser International will speak about the "Taser Gun."

We are happy to invite you and your staff to participate in any of USPTO's tech fairs so you can see for yourself the sort of cross-pollination training provided for examiners.

Expanded Technical Training Program

The USPTO has expanded the range of eligible non-duty training courses available for examiners to enhance their technical skills and abilities. A similar "After Work Education" (AWE) program is currently being implemented for technical support personnel.

While the USPTO has provided paid non-duty training in the past to patent examiners to enable them to take technical classes, it was determined that the previous program was too restrictive. In response to an explicit need expressed by the examiners, amendments were made to broaden the program to provide examiners with one year of experience at the USPTO the opportunity to take classes in arts outside their immediate docket. The classes, however, must still be related to a recognized technology that is examined at the USPTO.

This program will assist in developing and maintaining a highly skilled workforce by enhancing the employees' knowledge, skills and abilities through formal education. Currently, the patent examiner can receive up to $5,000 per year, and the agency has proposed to raise that opportunity to $10,000 per year.

University-style Training

USPTO's recently established university-style training program leads to new-hire examiners with the ability, skills and confidence to work with reduced oversight.

The training program consists of classes of approximately 130 students, which are broken down further into small "labs" of approximately 16 examiners who will work in a similar area of technology. The training program is conducted over a period of 8 months in a location outside of the Technology Centers.

The program courses are taught through a combination of large lectures and small group sessions within the individual labs. The curriculum is kept current by a committee, with representation from every Technology Center, that writes and reviews the substance of the curriculum.

Lectures are followed by practical application and testing. The results of ongoing testing, administered electronically, indicate to examiners how well they grasp a particular topic and provide the trainer with information as to whether segments of the topic need additional review. Examiners write Office actions that are reviewed and evaluated by the trainer who provides appropriate feedback. A proficiency test is administered at the end of the 8-month program. The intent of the program is to deliver, to the examining corps, new hires who are capable of writing complete Office actions for supervisory review.

Examiner Certification and Recertification

The USPTO has implemented a thorough certification process for any patent examiner seeking to be promoted from the GS–12 level to the GS–13 level. This process includes a review of the work product of the examiner and a certification exam modeled upon the patent bar exam that patent attorneys and agents must pass.

Examiners are provided with legal education on fundamental concepts involving patent laws and procedures to assist them in the preparation of taking the certification exam. Patent law and evidence courses, coaching lectures and on-line Study Tool for Examination Preparation (STEP) are offered to the examiners as training preparation tools.

An in-depth review of the work of primary examiners is conducted after three years to ensure that primary examiners maintain the knowledge, skills and abilities necessary to perform high quality examinations.

Patent Reviews

USPTO's Office of Patent Quality Assurance (OPQA) has implemented targeted reviews of examination processes or functions that are perceived to potentially be problematic trends. These reviews provide a means to validate the accuracy and magnitude of the most significant examination process complaints, to establish a baseline of current performance in the targeted area as well as a basis to establish performance targets for improvement plans.

The reviews are conducted on a sample designed to provide statistically valid data and yield an assessment of the current level of performance and the supporting review data with respect to the identified examination process or function. Based on input on potential areas for consideration obtained through customer satisfaction survey data and other input from applicants and practitioners, the areas of final rejection practice, Request for Continued Examination (RCE) practice, search quality and restriction practice were identified for review during fiscal year 2007. Fiscal year review findings are summarized at the Corps and Tech Center levels and OPQA consults with the Technology Centers to develop and/or implement improvement plans, as appropriate.

In October 2006, OPQA instituted an in-depth analysis of the search quality in applications selected from specific Art Units within each Technology Center in order to positively identify root-cause problems related to search quality and to identify and share best practices. Art Units subject to review were selected by the Technology Centers on the basis of perceived need, taking into account the findings of quality assurance programs in place within the Technology Centers and the OPQA.

Based upon the review findings, training tailored to the specific needs and technical subject matter of the individual Art Units is developed and delivered to the unit in an interactive format. Training is a collaborative effort between OPQA, Technology Center managers and search experts from the Scientific and Technical Information Center and covers topics including search strategy, claim interpretation, search tools and effective search techniques.

Question. The remediation plan you presented to the Subcommittee discussed a number of initiatives devoted to improving retention rates of staff. What progress has PTO made in instituting these initiatives and when will we begin to see measurable progress in improving retention rates of examiners?

The USPTO has already achieved notable successes in patent examiner retention efforts; during fiscal year 2007 our targeted strategies focusing on first-year attrition were very successful. First-year attrition is the highest attrition year for nearly all businesses and has historically averaged 20 percent at the USPTO. In 2007, the

USPTO reduced the overall first-year attrition rate to 15 percent. Further, in some hard-to-hire areas where we targeted recruitment bonuses, the first-year attrition rate was cut in half—to 10 percent.

Additional relevant retention facts include the following:

—The USPTO's overall, organizational attrition rate (8.5 percent) is lower than the average attrition rate for Federal workers (11.2 percent).

—The average attrition rate for USPTO patent examiners with 0–3 years experience is 15.5 percent. The average attrition rate for USPTO patent examiners with 3–30 years experience is 3.95 percent.

—The attrition rate of patent examiners with 0–3 years experience, though measurably higher than the rest of the patent corps, appears to be well below the attrition rate experienced by similarly situated entities hiring more than 1,000 engineers in a year.

—Examiners with the highest production requirements have the lowest attrition rates, and the examiners with the lowest production requirements have the highest attrition rates. In fact, 70 percent of all work in fiscal year 2007 was done by examiners with 3 or more years of experience who exceeded their production goals by an average of 8 percent and had an average attrition rate of 3.95 percent.

—60 percent of all patent examiners exceeded their production requirements by at least 10 percent in fiscal year 2006.

Question. PTO's management continually states that examiners are leaving for better opportunities, when in fact the GAO's survey revealed that 67 percent of examiners who left cited the workload and production quotas as their primary reason for leaving. Why is PTO management in a state of denial over the reasons examiners are leaving?

Answer. The GAO's data was based on its survey of current employees, and asked these current employees to speculate (from a preset list of possible answers) regarding the primary reason they would consider leaving were they do leave. Under these parameters, those surveyed identified production goals as among the primary reasons they would leave the USPTO if they did leave.

As you can see, the approach used in the GAO survey is not the same as asking people who actually chose to leave why they are leaving (or have left).

The USPTO conducts actual exit interviews—as opposed to speculative interviews—with employees who do choose to leave. Based on the information provided to us by employees who are actually leaving the agency, we have enhanced our hiring and recruitment process.

In 2006, the USPTO started a focused effort on exit interviews, to help better determine why employees who actually leave the USPTO decide to do so. The exit interviews are voluntary, but the data indicate that—even though attrition is relatively low after the first three years—room for improvement remains. Senior employees most frequently cited personal reasons and management issues when asked for the primary reason they were leaving. The USPTO has held off-site management conferences for two consecutive years to enhance communication and leadership skill sets.

The GAO report draws attention to issues that are of paramount importance and the USPTO recognizes that attrition of patent examiners can impair the effectiveness of its hiring efforts. However, we do not observe a direct link between production requirements and attrition. For example, examiners with the highest production requirements have the lowest attrition rates, and the examiners with the lowest production requirements have the highest attrition rates. Also, 70 percent of all work in fiscal year 2007 was done by examiners with 3 or more years of experience who exceeded their production goals by an average of 8 percent and had an average attrition rate of 3.95 percent.

ECONOMIC DEVELOPMENT

Question. What data did you use to determine that $8.7 million would meet the nation's needs for rural economic development?

Answer. From 2001–2007, EDA invested approximately $1 billion or 62 percent of its total investments in rural communities. Although EDA does not have a program specifically targeted for rural communities, rural areas typically receive 50 percent or more of the agency's total investments annually. We do not anticipate a substantial change in fiscal year 2009.

Question. Given the proposed cut to public works grants it would seem logical that there should be a corresponding cut to EDA's salaries and expense account. Why were salaries not cut or is this just an indication that this request should not be taken seriously?

Answer. The increase in the Salaries and Expenses (S&E) account is necessary for EDA to maintain its full staffing level of 170 full time equivalents (FTE). EDA's staff performs multiple duties across its programs, not just evaluating and processing new grants. Therefore, maintaining EDA's current staff level is necessary to provide assistance to communities and maintain current programmatic functions.

Since 2001, EDA's S&E account has remained virtually flat. Meanwhile, EDA's non-personnel operating costs—many of which, like computer security expenses, are inflexible—have increased by 45 percent. EDA also faces annual personnel cost increases in its efforts to maintain an effective workforce. The lack of necessary funding increases in the S&E account to offset increases in non-personnel operating costs, has represented an effective $1.5 million annual cut in EDA's operating budget. Without the increase in S&E proposed in the fiscal year 2009 request, EDA may have to reduce staff.

While EDA programs are flexible and scalable—we can "ramp up" operations, as well as "ramp down" based on available funds—the agency nonetheless needs an appropriate level of funding to maintain its existing organizational structure as directed by Congress.

Question. Your testimony states that the proposed reduction for economic development assistance is done in order to support other priorities. What are those other priorities?

Answer. In a difficult budget environment, the Administration has made tough choices to rein in spending to eventually balance the budget. Areas such as homeland security and the 2010 Decennial Census exhibit pressing needs that necessitate these difficult choices.

ELIMINATION OF MEP FEDERAL FUNDING

Question. The Administration again proposes devastating cuts to the one federal program specifically designed to assists manufacturers.

Can you explain the rationale for the cut to the MEP?

Answer. Elimination of federal funds to MEP centers could be compensated through a combination of increased fees derived from the benefits accrued by individual companies and cost-savings in the operations of the centers. This would move the centers to a self-sustaining basis. The fiscal year 2009 President's budget request focuses on NIST's core measurement science and standards activities in our laboratories that impact entire industries or entire sectors of the economy—and where Federal dollars can make the biggest impact on innovation and competitiveness. The focus of the fiscal year 2009 budget supports this principle by increasing NIST Core activities, which increases by $115 million (+22 percent) over fiscal year 2008.

Question. Your testimony states that the request "includes $4 million to transition the center to a self supporting basis".

Since this is a partnership with the states have you engaged MEP state partners on this decision?

Answer. NIST shared the fiscal year 2009 President's budget for MEP with all MEP centers.

Question. Can you share the analysis that went into the determination that the network will survive without federal cost share?

Answer. With sufficient support from local resources along with increased fees from the manufacturing customers, the centers could remain operational.

DIGITAL TRANSITION

Question. I have received constituent letters requesting information about the coupon program. The letters indicate confusion among average citizens regarding the transition to digital and where to request a coupon for a converter box.

What is Commerce doing to educate consumers? With a limited budget for education and outreach what efforts are you undertaking to leverage your efforts? Should we provide additional funding in the supplemental to enhance education and outreach efforts?

Answer. NTIA's consumer education campaign—coupled with the over $1 billion commitment from industry—is working. According to a recent survey by the Consumer Electronics Association, public awareness of the DTV transition grew 80 percent between August 2006 and January 2008, from 41 percent to 74 percent. Given consumer education activities have intensified since the beginning of 2008, we would expect consumer awareness to continue to increase. In addition, robust demand for converter box coupons, including demand from over-the-air reliant households, is a strong indication that consumers are learning about their options and taking the necessary action to ensure their TV sets continue to operate after the digital transition.

Members of the industries most directly affected by the transition—television broadcasters, cable system operators, and consumer electronics retailers—are investing heavily to ensure that their viewers, subscribers and customers are made aware of the transition. Their efforts, targeted at the general population, have been very successful in raising consumer awareness and have enabled NTIA to focus its resources, funding, and activities on reaching particular groups that are likely to rely more heavily on over-the-air television than others. These include seniors, minorities, rural residents, people with disabilities, and economically disadvantaged households.

NTIA's strategy for its consumer education campaign is simple and straightforward: use earned media and leverage trusted partners that possess pre-existing relationships with members of our target groups to deliver tailored messages about the transition and the Coupon Program. NTIA has instituted a proactive campaign to educate consumers about the role of the Coupon Program in the DTV transition, leveraging relationships with consumer groups, community organizations, federal agencies, and members of affected industries to inform consumers of their options. NTIA is collaborating with more than 200 partner organizations, including social service and community organizations with ties to seniors, rural residents, minorities, and disabled communities, as well as a variety of federal agencies that communicate directly with these constituent groups. As of March 31, 2008, broadcast and print coverage of the Coupon Program has reached over 200 million media. This is coupled with the National Association of Broadcasters' campaign which aims to generate 30 billion audience impressions of the broader digital television transition before February 17, 2009.

Additionally, the Federal Communications Commission has received $2.5 million in fiscal year 2008 and requested an additional $20 million for fiscal year 2009 specifically for consumer education about the DTV transition. Based upon multiple surveys that reveal a steep increase in consumer awareness about the transition and the sheer number of households that have ordered coupons to date (as of April 25, 2008, 6.2 million households have ordered 11.9 million coupons), these combined consumer education efforts are working. NTIA is confident that these public and private sector investments in DTV consumer education will be sufficient to educate all consumers about the DTV transition and the TV Converter Box Coupon Program.

Questions Submitted by Senator Richard C. Shelby

2010 DECENNIAL EFFECTIVENESS RATING

Question. I have serious concerns about how the Administration and the Department have been monitoring the progress of the 2010 Census. The Performance and Accountability Report for the Department submitted November 15, 2007, gave the Decennial Census a moderately effective score of 83 percent. It also says that the Census Bureau is ensuring oversight of critical information technology services.

Given where we are today, Mr. Secretary, would you rate the Census Bureau's management of the Decennial Census as moderately effective?

Answer. Both Secretary Gutierrez and Dr. Murdock have testified that the Census Bureau's failure to effectively communicate its expectations to the contractor has been a major contributor to the current situation.

Given these concerns, both the Census Bureau and the Department of Commerce have made substantial management changes to address the challenges facing the 2010 Census. We are working to ensure that there is clear accountability and that we have set specific leadership expectations. This includes better integration between Census and Harris personnel; rapid decisionmaking; real-time problem solving; and improved transparency, oversight, and communication.

We are taking this very seriously and hope these changes and others reflect our concern and ultimately our resolve to better serve the American people. Secretary Gutierrez is personally engaged in this matter and will continue to devote time to this issue until he can be assured that we have established a sustainable and achievable path forward to a successful 2010 Census.

MANAGEMENT REFORM

Question. What are you doing to ensure that the Census Bureau has leadership capable of solving the problems with field automation and conducting a successful 2010 census?

Answer. We have a new Acting Associate Director for Decennial Census, Arnold Jackson. Other moves are under consideration. We are taking a series of steps to strengthen management, including:

—Instituting a new management approach that will strengthen planning and oversight relative to risk management, issue identification, product testing, communications, and budget/cost management.

—Increasing the intensity and pace of senior management involvement, including daily status assessments and problem resolution sessions chaired by the Associate Director, weekly status assessment meetings with the Director and Deputy Director, periodic but unscheduled reviews by MITRE and Department of Commerce specialists in IT, project management, and contracting.

We also are developing a comprehensive plan that consolidates the recommendations from several studies and reviews, including MITRE, GAO, our own Blue team, the Barron Task Force, and the Secretary's expert panel. Some of the action items we are committing to are:

—Comprehensive risk management such that the higher impact risks are known as early as possible and elevated to proper levels for timely resolution.

—Strengthened leadership in the Decennial Census Program so that stakeholders, contractors, staff, and management are unified and focused on the issues that drive a successful census.

—Transitioning from a planning phase of the Decennial cycle to an action-oriented operational phase by shortening decision cycles, cutting internal redtape, and pushing more problem resolution responsibility down to our managers.

—Adhering to a structured plan of action to see that the things we have not done well do get better as rapidly as we can.

The FDCA PMO and the Software Assessment Team have agreed to a plan to strengthen oversight of the contractor, and the plan is known as our "Insight Plan". The PMO launched implementation of the Insight Plan a few weeks ago, and some of the key steps of that plan are:

—A much closer review of the contractor's software earlier in the development and test cycle.

—Permanent Census staff at the contractor's Largo facility and staff embedded with the contractor at key points in the development cycle from requirements clarification to product release for final field hands on testing.

—Improving the contractor's test cases by including more realistic census events and operationally characteristic data.

—Involving census users of the information collected by the handheld system in the process of review and approval of contractor products before they are final. This will greatly increase stakeholder participation and bring about rapid feedback needed for problem correction.

MITRE REVIEW JUNE 2007

Question. In June of last year, MITRE produced a report recommending that Census immediately stabilize the requirements for data management and to co-locate Census and contractor staff. This report is in stark contrast to the information senior Census officials provided in December when they reported that this procurement was moving forward as expected. These same Census officials then submitted over 400 changes to the contractor less than a month after assuring this Committee that they had this procurement under control.

Do you believe the Census now understands the requirements necessary to acquire the handhelds that they contracted for in 2006?

Answer. Although we have decided to drop plans for using the handheld computers for nonresponse follow-up in 2010, we still will use them for the Address Canvassing operation that will begin one year from now in May 2009. We tested the use of the contractor's Address Canvassing solution last year, and while we experienced some problems, we believe the contractor now has a full set of final detailed requirements in place to ensure success for this operation next year. We continue to work with the contractor regarding new or revised requirements resulting from the shift to paper-based NRFU, and the other contract scope changes that were part of the recent decision announced by Secretary Gutierrez.

At the time of contract award in March 2006, both the Census Bureau and the contractor were fully aware this strategy would mean a tight schedule for requirements development, system design, system development, and deployment. The initial requirements strategy at that point was to develop remaining requirements in a two-step process. First, based on results from the 2004 and 2006 Census Tests, we would provide detailed Dress Rehearsal requirements for our major operations. Then, based on lessons learned from the Dress Rehearsal, we would make adjustments to those detailed requirements for 2010 Census operations, as well as develop the detailed requirements for those operations that could not be included in Dress Rehearsal (e.g., enumeration in Puerto Rico; enumeration in remote areas).

We were moving on that path when, in October 2007, we had to de-scope many paper-based dress rehearsal activities in order to have sufficient funds to keep this contract (and our data capture systems contract) on schedule in developing critical applications and interfaces planned for the Dress Rehearsal. Until that point, we still were planning to use our Dress Rehearsal experiences with various operations to help finalize detailed requirements for the FDCA contractor. However, because most of those operations had to be cancelled, in mid-November 2007, the contractor requested, and we agreed, to move forward immediately to deliver a final set of all detailed requirements. This effort was completed, and we delivered them to the contractor on January 16, 2008. It was not until the contractor delivered their cost estimate (to complete all these requirements) at the end of January that the full scope of our problem came into focus.

Question. Mr. Secretary, can you provide this Committee, in writing, a timeline that shows on which dates actions were taken by the Census to address the issues identified in the June MITRE report?

Answer. After reviewing the June 2007 MITRE report the Census Bureau:

—Established a temporary FDCA requirements "SWAT Team" to streamline, integrate and finalize all Dress Rehearsal requirements for FDCA, including better integration of the contractor's and Census Bureau's schedules.

—Expanded the FDCA Strategy Group to include all division chiefs critical to the FDCA program. This group began meeting on a weekly basis to discuss and resolve FDCA issues and establish priorities.

—With MITRE's assistance, redefined the process for finalizing 2010 requirements to ensure a more structured, systematic, and integrated approach.

—Clarified roles between the FDCA Project Management Office (responsible for contract management) and the Decennial Management Division (responsible for managing the entire 2010 Census program).

—Redefined the FDCA contract Change Management Process with the goal of ensuring additional control of requirements changes.

—Established monthly Executive Management meetings in addition to the monthly Program Management Reviews. These meetings consisted of executives and key managers from both the FDCA contractor and the Census Bureau to discuss and resolve critical issues.

—With MITRE's assistance, redefined and began implementation of a more structured Risk Management Process.

In late November 2007, the Deputy Director of the Census Bureau initiated a comprehensive assessment to determine the status of the program and to better understand any issues or concerns as the program approached key 2010 Census milestones. This assessment included a series of wide-ranging meetings with Census Bureau staff directly involved in the FDCA program. The Deputy Director also met with Harris Corporation, the company developing the FDCA system, and MITRE Corporation, an information technology firm under contract with the Census Bureau. MITRE's role was to provide an internal, independent assessment of the information technology systems in the decennial programs and also IT systems in the Census Bureau. The Census Bureau also established an Integrated Project Team (IPT) made up of key, high ranking 2010 Census managers. The IPT was tasked with producing the final set of FDCA program requirements by mid-January 2008.

This effort was completed, and the requirements delivered on January 16, 2008. At the end of January, the contractor provided feedback on these requirements, including their initial, high-level estimate of the additional costs that would be needed to meet all of the 2010 Census requirements.

At this point, the full scope of our problem came into focus. New Census Bureau Director Steve Murdock then established a FDCA Task Force, chaired by former Deputy Director William Barron, and made up of some of the Census Bureau's and the Department's senior technical and management officials, as well as representatives from MITRE, to help develop a strategy to address these problems. The Task Force outlined four options for moving forward. All of these options called for using the handheld computers for Address Canvassing, and all but one (the baseline) assumed we would revert to a paper-based NRFU operation. For the other major components of FDCA, each of the options considered a combination of responsibilities between the contractor and the Census Bureau in terms of capabilities, expertise, staffing, timing, and costs.

The work of the task force was then turned over to the Expert Panel established by the Secretary and made up of two former Census Bureau Directors, a former Associate Director of the Census Bureau, two information technology experts, and a former Member of Congress. After deliberating with this panel, the Secretary recommended the plan that he described in his testimony.

As to management steps now being taken, we have a new acting Associate Director for Decennial Census, Arnold Jackson. Other moves are under consideration. We are taking a series of steps to strengthen management, including:

—Instituting a new management approach that will strengthen planning and oversight relative to risk management, issue identification, product testing, communications, and budget/cost management.

—Increasing the intensity and pace of senior management involvement, including daily status assessments and problem resolution sessions chaired by the Associate Director, weekly status assessment meetings with the Director and Deputy Director, periodic but unscheduled reviews by MITRE and Department of Commerce specialists in IT, project management, and contracting.

We also are developing a comprehensive plan that consolidates the recommendations from several studies and reviews, including MITRE, GAO, an internal expert software assessment team, the Barron Task Force, and the Secretary's expert panel. Some of the action items we are committing to are:

—Comprehensive risk management such that the higher impact risks are known as early as possible and elevated to proper levels for timely resolution.

—Strengthened leadership in the Decennial Program so that stakeholders, contractors, staff, and management are unified and focused on the issues that drive a successful census.

—Transitioning from a planning phase of the Decennial cycle to an action-oriented operational phase by shortening decision cycles, cutting internal redtape, and pushing more problem resolution responsibility down to our managers.

—Adhering to a structured plan of action to see that the things we have not done well do get better as rapidly as we can.

These management activities are described in our "Program Management Plan" to be finalized in early May.

The FDCA PMO and the Software Assessment Team have agreed to a plan to strengthen oversight of the contractor, and the plan is known as our "Insight Plan". The PMO launched implementation of the Insight Plan a few weeks ago, and some of the key steps of that plan are:

—A much closer review of the contractor's software earlier in the development and test cycle.

—Permanent Census staff at the contractor's Largo facility and staff embedded with the contractor at key points in the development cycle from requirements clarification to product release for final field hands on testing.

—Improving the contractor's test cases by including more realistic census events and operationally characteristic data.

—Involving census users of the information collected by the handheld system in the process of review and approval of contractor products before they are final. This will greatly increase stakeholder participation and bring about rapid feedback needed for problem correction.

USE OF HANDHELDS

Question. The primary innovation that was going to create significant savings and efficiencies for the 2010 Census revolves around the handheld computers and moving away from a paper based system. I would like to know what your plans are for dealing with the problems of the handheld computers and getting the 2010 census back on track.

Will the handhelds still be used? When is the latest date you can make this decision?

Answer. On April 3, 2008, Secretary Gutierrez testified before the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies that he had decided to discontinue plans for using handheld computers for the 2010 Census nonresponse follow-up operation, and revert to the paper-based approach used in previous censuses. He also testified that we still plan to use these devices to conduct the nationwide Address Canvassing operation next year.

Question. When will the Department determine if the handheld computers will be used for any portion of the 2010 Census?

Answer. Please see previous response.

PAPER NON-RESPONSE FOLLOW UP

Question. Will the Census have to go back to paper for non-response follow up? When will this decision have to be made?

Answer. On April 3, 2008, Secretary Gutierrez testified before the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies that he had decided to discontinue plans for using handheld computers for the 2010 Census nonresponse follow up operation, and revert to the paper-based approach used in previous censuses.

ADDITIONAL COSTS FOR CENSUS

Question. This Committee has been supportive of the Bureau of the Census and its plans for the 2010 Census. However, it is obvious that more funds than anticipated will be required to conduct what is currently the most expensive census in our nation's history. GAO has estimated that the increase will be between $600 million and $1.2 billion. Can we anticipate a supplemental request from the Department for fiscal year 2008 to accommodate the difficult position the Census finds itself in today?

Answer. No, the Department will not be submitting a supplemental request to cover the funding shortfall in fiscal year 2008 related to the 210 Census. The Administration believes that the fiscally responsible action to address this difficult position is to work within existing resources at the Department. To that end, I have proposed transfers from other Commerce bureaus to provide the necessary resources for the Census Bureau. While this was a difficult decision, I believe that avoiding mission failure of a constitutionally-mandated operation at the Census Bureau warranted lesser impacts among our other bureaus.

Question. Will there be a need for a budget amendment for fiscal year 2009 for the 2010 Census?

Answer. Yes, addressing the issues within the 2010 Census will require a budget amendment for fiscal year 2009, as funding requirements for that year have grown beyond the requested level in the fiscal year 2009 President's budget submission.

NPOESS—VIIRS ISSUES

Question. Last year we discussed the failures of the National Polar-orbiting Operational Environmental Satellite System (NPOESS) which was scrutinized for its mismanagement and lack of oversight. Since that time NPOESS was restructured, but problems have occurred on a critical instrument the Visible Infrared Imager (VIIRS).

Can you elaborate more on the problems that exist?

Answer. The NPOESS Executive Committee, working with the NPOESS Program Executive Officer, has implemented a number of steps to address the management of the program. The key NPOESS sensors are currently in ambient testing, when several test anomalies are expected to be uncovered and addressed.

One of the anomalies uncovered is the likelihood of performance degradation to ocean color/chlorophyll and aerosol measurements on the first VIIRS instrument due to issues with the Integrated Filter Assembly (IFA). Using the current IFA, aerosol will be degraded from original levels of performance measurements but will still be at requirement specification, so ocean color will be the only measurement greatly impacted. Because of this limited degradation of capabilities and the risk reduction nature of the NPP mission, the NPOESS Executive Committee (EXCOM) directed the NPOESS Integrated Program Office (IPO) to: Fly the first sensor on NPP with the existing IFA, accepting the existing performance degradation for that mission; and resolve VIIRS IFA problems before flying it on NPOESS C1.

NPOESS LAUNCH DATE

Question. What is your degree of confidence that the first NPOESS launch date will be met and if your confidence is high, why?

Answer. There is a high degree of confidence that the NPOESS 2013 launch date will be met. The confidence is derived from program metrics which at this time show all program segments remain on schedule.

NPOESS—VIIRS CONTINGENCY PLANNING

Question. What are the contingencies if VIIRS continues to have problems?

Answer. The Integrated Program Office (IPO) has developed a plan, with the prime contractor, which established an achievable delivery schedule in advance of the April 2009 commitment with margin to that date. The IPO monitors that margin daily. In addition, the PEO holds bi-weekly executive reviews of the Visible/Infrared Imager/Radiometer Suite (VIIRS) status with the contractors and government leadership to ensure appropriate focus is placed on this critical sensor program. We believe these steps will allow the IPO to contend with future issues regarding VIIRS.

NPOESS—CROSS TRACK INFRARED SOUNDER ISSUES

Question. What is the status of the other critical instrument, the Cross Track Infrared Sounder, that was having problems?

Answer. Following the frame failure in 2006, the frame was redesigned and all Cross-track Infrared Sensor (CrIS) components were inspected and fixed, as needed. The CrIS unit has passed its vibration testing and is in its final thermal vacuum tests. At this time, the instrument is expected to be delivered in mid-June 2008, well in advance of its August 2008 need date for spacecraft integration.

NPOESS—COST AND SCHEDULE GOALS

Question. Can we reasonably expect the program to stay within the new cost and schedule goals?

Answer. Although the NPOESS program is undertaking the most complex operational environmental satellite system ever built by the United States; the program expects to deliver within its restructured budget and schedule goals. The cost estimate provided at the time of the June 2006 Nunn-McCurdy certification used to establish the restructured budget reflected the results of an intense independent review of the Program's technical requirements and associated costs. The Integrated Program Office (IPO) has based the restructured NPOESS program budget and contract on the independent cost estimate developed by the Department of Defense Cost Analysis Improvement Group (CAIG). The CAIG estimate takes into account the technical, schedule, and cost risk remaining on the program to ensure adequate resources are available to fully respond to the "unknown unknowns" that are continuous challenges to any major development.

NOAA IN THE GULF OF MEXICO

Question. Although NOAA's 2009 budget request boasts a $213 million increase, it yet again continues to short-change the Gulf of Mexico. I am disappointed that NOAA has continually underfunded weather infrastructure, research, and fish and habitat growth in the Southeast. The Gulf Coast has severe weather events, we have fishing disasters, we have underutilized research capabilities just like everyone else, yet I see no money in this budget to help the people of the Gulf receive any improvement in the dedication of services from NOAA.

What will it take for NOAA to make the Gulf of Mexico and the southeast a priority?

Answer. NOAA has a diverse mission ranging from managing fisheries to predicting severe weather. The Administration's request provides for a balanced set of priorities that sustains core mission services while also addressing our highest priority program needs. As part of that mission, NOAA's fiscal year 2009 budget request continues to fund many ongoing efforts in the Gulf of Mexico and southeast region. For example, the request includes $74.2 million in support of fisheries research and management, habitat conservation and restoration, and fisheries enforcement; $5 million to support the Gulf of Mexico Alliance for increased regional collaboration to enhance the environmental and economic health of the Gulf of Mexico; and $7.4 million for continued operations of the three National Marine Sanctuaries in the region. In addition, the fiscal year 2009 request includes $19.5 million in new increases across NOAA for hurricane modeling improvements, research, and operations, which contributes to NOAA's overall spending of over $300 million a year for hurricane warning and forecast efforts throughout the southeast.

WEATHER INFRASTRUCTURE IN THE SOUTHEAST

Question. When will the Southeast receive state of the art NEXRAD radars and Advanced Weather Interactive Systems that are in other parts of the country?

Answer. NEXRAD radars were installed at the Weather Forecast Offices (WFO) in the Southeast United States during the mid-1990s. As with the rest of the United States, the NEXRAD radars in the Southeast are all part of the same service configuration; they all go through the same technology refreshes every several years. Since 1996, AWIPS has been utilized not only in the Southeast but at all of the WFOs across the United States. As with the NEXRAD program, all AWIPS are part of the same service configuration and are on the same technology refresh cycle. NWS appreciates the support it has received from members of Congress with these programs and because of this support we have been able to keep these programs state of the art.

FREE TRADE AND SHRIMP IMPORTS

Question. Recently, the Administration has called for expanding free trade agreements with Latin America, particularly with Colombia and Panama. In fact, last week you led a delegation to Colombia to discuss a U.S.-Colombia Trade Promotion Agreement. The expanded agreements would eliminate tariffs on American exports and provide duty-free access for American agricultural commodities. However, many people along the Gulf Coast are still concerned about Latin America's agricultural exports, particularly that of farmed shrimp. Shrimp imports from Latin American countries continue to rise despite confirmed antidumping activities that your Department investigated.

Has your department examined Colombia and Panama's shrimp export activities prior to these recent trade discussions, and if so what were your findings?

What protections are in place for the U.S. industry?

Answer. The Office of the United States Trade Representative reports no shrimp-related trade issues with Panama or Colombia—not before, during, or after the FTA negotiations with these countries. In 2007, Colombia exported shrimp (of various product types) to the United States at a value of $12.9 million. During the same year, Panama exported shrimp (of various product types) to the United States at a value of $36.7 million.

Brazil and Ecuador are the countries in Latin America in which the Department issued antidumping (AD) orders on frozen warmwater shrimp imports to the United States. In order to comply with the WTO panel decision regarding the Department's "zeroing" methodology, the AD order on frozen warmwater shrimp imports from Ecuador was revoked on August 15, 2007. According to U.S. import data, Brazil did not export any warmwater shrimp in 2007 that would be subject to the AD order. We reviewed the harmonized tariff code and found that no tariffs or quotas exist for shrimp imported from Colombia or Panama except for food preparations that include shrimp as an ingredient. As a result, the Free Trade Agreement extension to Colombia or Panama would have no visible effect on the U.S. Gulf of Mexico shrimp fishery.

INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS

Question. The Internet Corporation for Assigned Names and Numbers, "ICANN", is responsible for making policy concerning the Internet's global address system. While I support the idea of the Internet being managed by a non-government entity, I have become aware that ICANN has been pushing very hard to sever its ties completely from the Department. I have also heard from industry officials who have raised concerns that while ICANN makes decisions that have the potential to affect billions of dollars in commercial transactions, the organization lacks an effective mechanism for redress by companies affected by those decisions.

Do you think it is wise to allow ICANN to sever all of its ties to the Department?

Answer. The Joint Project Agreement (JPA) between the Department of Commerce and ICANN will not be terminated before its September 2009 expiration as was suggested in ICANN's submission to the Notice of Inquiry (NOI) issued by the National Telecommunications and Information Administration (NTIA). The JPA required the Department of Commerce to conduct a mid-term review of progress achieved on each ICANN activity and responsibility contained in the JPA. NTIA, on behalf of the Department, conducted this mid-term review which included a solicitation of public comments through the NOI and a public meeting. NTIA received 171 comments, the majority of which did not support early termination of the JPA. All comments to NTIA's NOI can be found at the following link: http://www.ntia.doc.gov/ntiahome/domainname/jpamidtermreview.html.

Question. Do you think ICANN is a mature enough organization to handle this enormous responsibility on its own?

Answer. On April 2, 2008, NTIA issued a statement on the mid-term review summarizing that the record demonstrates general consensus that: (1) ICANN is the appropriate technical coordinator of the domain name and addressing system (DNS) and has made significant progress in several key areas; and (2) important work remains to increase institutional confidence through implementing effective processes that will enable long-term stability, accountability, responsiveness, continued private sector leadership, stakeholder participation, increased contract compliance, and enhanced competition.

As previously stated in the "U.S. Principles on the Internet's Domain Name and Addressing System," the Department of Commerce remains committed to taking no action that would have the potential to adversely impact the effective and efficient operation of the DNS.

NTIA's statement on the JPA can be found at the following link: http://www.ntia.doc.gov/ntiahome/domainname/ICANN_JPA_080402.pdf.

Question. Do you think it would be wise to release ICANN from its contractual obligations before redress mechanisms are in place?

Answer. As noted above, important work remains for ICANN in order to increase institutional confidence through implementing effective processes that will enable long-term stability, accountability, responsiveness, continued private sector leadership, stakeholder participation, increased contract compliance, and enhanced competition. The Department of Commerce strongly encourages all stakeholders to work with ICANN to address these issues and others that may be of concern, including redress mechanisms.

GOES–R OVERSIGHT

Question. Not only are there serious issues with NPOESS, there are serious failures of the Geostationary Operational Environmental Satellites Program (GOES–R). While this program has been restructured and finally seems to have some management controls in place, I am disappointed with the revised program plan. When I compare the new goals with the program's original prospects, I see that the plan has lost 2 of the 4 planned satellites, has added 2 years to the development cycle, and has a cost increase of $800 million.

Answer. There have been no identified failures with respect to the GOES–R program. GOES–R has recently completed Program Definition and Risk Reduction (PDRR), a phase where requirements are traded against design concepts, cost and schedule in order to formulate appropriate scope, cost and schedule prior to major procurements.

At completion of the program's work, independent reviews of cost estimates, program business organization and technical structures were performed successfully. Only at the completion of program work and independent validation does NOAA consider a program ready for initial baseline which occurs at Key Decision Point (KDP). The GOES–R Program passed KDP in January 2008 when the Secretary of Commerce delegated the authority to proceed to the Under Secretary of Commerce for Oceans and Atmosphere.

Satellite acquisitions cannot be accurately baselined until after the developing contractor is formally onboard. NOAA uses the Preliminary Design Review (PDR) as the formal milestone since it contains all necessary factors to accurately establish a cost and schedule baseline.

Question. How are responsibilities for this program divided between NOAA and the Department?

Answer. The Department of Commerce retains ultimate authority for the GOES–R program. On December 21, 2007, the Department delegated Milestone Decision Authority for GOES–R to the Under Secretary for Oceans and Atmosphere (the NOAA Administrator). With this delegation, however, the Department set forth a number of requirements that ensures its ability to conduct appropriate oversight of the program. The Department has responsibility and approval authority over the ground segment acquisition strategy and complete authority over the budget through the annual budget formulation process. The Program also reports ongoing progress on a quarterly basis to the Department of Commerce Assistant Secretary for Administration/Chief Financial Officer. The Program has also begun providing the Deputy Secretary a bi-weekly status. There is also a Department of Commerce Attorney on site at the GOES–R Program Office as the Program Legal Counsel. NOAA's Program Management Council (PMC) is NOAA's primary oversight body for the GOES–R program. At monthly program reviews, the program provides an update of its status and provides detailed explanations of technical and budget issues and risks. The Department also has insight into the PMC activities and routinely sends representatives to observe PMC meetings. The PMC is chaired by the Deputy Under Secretary for Oceans and Atmosphere.

GOES–R KEY DECISION POINT

Question. How did you ensure that the recent GOES–R Key Decision Point to proceed was based on complete and accurate information?

Answer. A number of independent bodies reviewed the program before the Key Decision Point (KDP) decision was made. An Independent Review Team (IRT) of senior satellite acquisition experts (with over 250 years of combined satellite acquisition experience) reviewed the program starting in 2006. The IRT's November 2007 assessment determined the program, with its contracts divided into flight and ground segments, was technically and programmatically ready to proceed into the next acquisition phase. An Independent Cost Estimate (ICE) review was deemed sufficiently close to the Program Office Estimate to validate the probable cost of the program. These were independent bodies. Within the Department of Commerce and NOAA, numerous reviews were conducted leading up to the KDP decision and all decision makers were satisfied that the program had provided complete and accurate information and that the program was indeed ready to proceed.

GOES–R COST AND SCHEDULE GOALS

Question. Can we reasonably expect the program to stay within the cost and schedule goals identified in the President's fiscal year 2009 budget request?

Answer. For a two satellite program, we are confident the program can be executed within the requested funding and schedule profile, assuming the planned budget profile in the President's fiscal year 2009 budget request.

FISH PROTECTION PRIORITIES

Question. The NOAA budget proposes to spend $10 million on 79 Atlantic salmon. That is $130,000 per fish and a 92.3 percent increase for this program. While I support programs that assist fish populations, and I want to support this program, I am at a loss why there is not a similar program to assist the Gulf of Mexico and its large variety of fish, shrimp and oyster populations that are stressed and need assistance. Looking at your budget request, I see no new money or resources that are dedicated to gulf coast fisheries or to gulf coast research.

How much do we spend on any one species of fish in the Gulf?

Answer. The Annual Report of the U.S. Atlantic Salmon Assessment Committee reports that 1,480 adult salmon returned to U.S. rivers in 2006. Of this total, 79 adults were counted as returns to the Gulf of Maine distinct population segment (DPS) and 1,044 adults were counted on the Penobscot River. The Gulf of Maine DPS was listed as endangered in 2000 and is composed of small coastal rivers in Maine. The 2006 Status Review recommends that the Gulf of Maine DPS be expanded to include the large rivers in Maine (Penobscot, Kennebec and Androscoggin). It is important to note that these are adult counts only and are not population assessments. A full population assessment with totals for all life stages (adults, fry, parr, smolts, post smolts) is not available at this time.

Because of the sheer number of fish, it is not feasible to estimate NMFS' spending on a per fish basis for any one species of fish in the Gulf. However, the budget does provide $74.2 million specifically for Gulf of Mexico fishery activities—a 6 percent increase over the fiscal year 2008 enacted level.

Question. How much do we spend per fish on Pacific Coast Salmon?

Answer. NMFS does not prioritize funding on a per fish basis. The funds requested are not to save the existing fish, generally, the fewer the fish the more critical the need. Requested funding is an investment in the future to ensure that the number of Pacific Coast Salmon will increase—and that we will eventually be able recover ESA listed Pacific Coast Salmon to a sustainable level, and delist them. Section 4(f) of the Endangered Species Act requires NOAA to develop and implement recovery plans for the conservation and survival of all endangered or threatened species. These plans lay out activities necessary to recover the species and provide an estimated cost to accomplish these recovery tasks.

Question. What is the justification for a 92.3 percent increase for this program?

Answer. The fiscal year 2009 funding amount will allow NOAA to focus conservation and recovery actions on supporting listed Atlantic salmon populations as required under the Atlantic Salmon recovery plan and re-establishing extirpated populations by addressing habitat needs in key watersheds historically used by Atlantic salmon that span five New England States. NOAA will use the additional Atlantic salmon funds to restore connectivity to fragmented habitats to enhance recovery of Atlantic salmon on an ecosystem basis. Priority will be given to projects that support listed populations to restore connectivity and recovery of ecosystem functions for the benefit of Atlantic salmon and all diadromous species in New England. Collaborative efforts will also be used to prioritize projects funded with the increase. Projects will likely include dam removals, fish passage, stream restoration, and reduction in sedimentation to salmon spawning areas. This increase will allow NOAA to fund 25 additional projects each year, which will open approximately 230 stream miles annually for use by Atlantic Salmon.

DATA SECURITY

Question. In September 2006, in response to media and Congressional requests for information on laptops lost or stolen during the previous 5 years, the Department reported the loss or theft of 214 Census Bureau laptop computers. The Commerce

Inspector General reported that the missing laptops contained sensitive information that could be recovered with tools easily available on the Internet.

How will the Census Bureau ensure that the systems involved in the decennial census, including the handhelds or even a paper census, provide adequate protection of the sensitive data collected?

Answer. The Census Bureau understands the great responsibility it has to ensure the public that the information it provides is protected to the greatest extent possible. As an outgrowth of the DOC Inspector General's report in 2006 the Bureau has looked at security controls implemented in all of its systems to ensure that they meet Federal IT security requirements and afford the level of protection to which the public should expect.

Specifically for the Decennial 2010 Census, the Census Bureau has worked to ensure that its mobile computing devices afford the best protection possible while still allowing for flexibility and ease of use. We have also begun to prepare processes and procedures to better track and account for paper forms that will be used during the Decennial operations.

All laptops used during the Decennial Census will have full disk encryption installed. This will render the information on the laptop virtually useless to unauthorized individuals in the event a laptop is lost or stolen. In addition to the full disk encryption, users will be required to enter a unique user name and password to access the laptop. The laptop will have anti-virus software installed to prevent infection and possible spread of malicious code.

The Hand Held Computing devices (HHC) will also employ technical security controls to ensure the data collected is protected in accordance with Federal IT security requirements. These devices will be protected with similar controls as implemented on the laptop with some specific differences based on the device and intended use. These additional controls include the use of biometrics (fingerprints) that must be scanned in order for the user to gain access to the device and the applications. In addition, the HHC is run using a specific mode (Windows Mobile 5.0—Kiosk Mode) which provides the ability for the program to control the applications and the user interface. This prevents the device from executing unnecessary or vulnerable operations. The HHC has had a number of capabilities which could introduce vulnerabilities either removed or blocked at the factory. The application monitors processes running on the HHC as well as critical registry settings; with this control, processes that are not authorized are unable to run. If critical system-level settings are found to be changed, they are automatically reset to the proper value.

Data collected is stored on a removable SD (sometimes called a Flash) drive. The data is encrypted using a NIST-approved encryption product which ensures that the data could not be read on another device if the SD card is lost or stolen.

All communications containing sensitive information between the Field, Decennial Offices and the Data Processing Centers (DPC) are across secure communications paths that use NIST-authorized encryption.

Paper presents a more difficult problem by its nature and the sheer volume which it will be present in the Decennial Census. The Census Bureau is responding to this challenge by increasing its awareness and training at the Field level as well as implementing checks with each shipment of paper to track its progress from start to finish. Careful records of paper shipments will be kept to make sure that in the event a package or set of paper forms is lost or misplaced, there is an accurate record of exactly what was lost, the circumstances surrounding the loss, and actions taken once the loss is discovered.

DATA SECURITY

Question. The 2010 Census will require the hiring of thousands of temporary employees. Can you offer this Committee your assurance that the background checks for these employees will be fully completed before they are invited into homes of millions of Americans?

Answer. In the 1990 and 2000 decennial censuses, the Census Bureau used Federal Bureau of Investigation (FBI) name checks to determine the suitability of all applicants for temporary Census jobs (most work for 8 weeks or less). There was virtually no criminal activity by temporary Census workers in 1990 or 2000. Accordingly, as part of the cost estimates prepared for the 2010 Census, we again assumed we would use this method to conduct background checks on all temporary workers. Although Executive Order 8914 requires that all newly hired federal government be fingerprinted within 14 days of beginning work, this Order also specifically authorizes fingerprint exemptions for temporary workers. The Census Bureau continues to study various operational approaches for conducting background checks, including risks and cost implications.

HANDHELD TECHNICAL REQUIREMENTS

Question. After several discussions with the Census, it has become clear that the Census entered into the contract for 2010 Census data collection before the Census was actually certain of what the requirements for such a system would be. It is rare that when given an unknown, that the costs come in below the estimates.

Did the Census Bureau enter into a data collection contract knowing that it would cost more than expected?

Answer. We did not enter into this contract knowing that costs would be higher than expected. The final bids of all vendors for the contract were similar, and all were relatively close to the independent government cost estimate prepared by the MITRE Corp.

Regarding the level of requirements known at contract award, early in the decade we believed our experienced Census Bureau staff could develop and deploy the handheld computers for use in the 2010 Census. These staff did produce the solutions we tested in both the 2004 Census Test and 2006 Census Test. Although we were able to develop and use the devices well enough to determine that we could conduct field data collection on them, by 2004 we had concluded that we did not have sufficient expert resources in house to do this for the 2010 Census, so we decided to contract this effort to the private sector. At the time we prepared the RFP for the FDCA contract, our strategy was to supply high-level functional requirements to the contractor on award, and then to determine final detailed requirements based on what we learned from the 2004 and 2006 Census Tests, and the 2008 Census Dress Rehearsal.

Thus, at the time of contract award in March 2006, both the Census Bureau and the contractor were fully aware this strategy would mean a tight schedule for requirements development, system design, system development, and deployment. The initial requirements strategy at that point was to develop remaining requirements in a two-step process. First, based on results from the 2004 and 2006 Census Tests, we would provide detailed Dress Rehearsal requirements for our major operations. Then, based on lessons learned from the Dress Rehearsal, we would make adjustments to those detailed requirements for 2010 Census operations, as well as develop the detailed requirements for those operations that could not be included in Dress Rehearsal (e.g., enumeration in Puerto Rico; enumeration in remote areas).

The contract was awarded in April 2006—less than one year before the first major application was needed for the Dress Rehearsal Address Canvassing operation. We knew this was a very aggressive schedule, and to mitigate some of this risk, all of the final vendors for the contract were required to develop a prototype of the Address Canvassing device so that, upon award, they would already have initial development underway. However, after contract award, it became clear that the contractor's funding needs by fiscal year differed from what the Census Bureau had assumed in its lifecycle cost estimate for the contract. In particular, the contractor stated they needed more of the overall contract funding earlier in the cycle, including fiscal year 2006. Because the Congress had already appropriated funds for fiscal year 2006, and the President had already made his request to the Congress for fiscal year 2007, the Census Bureau had limited flexibility to address these funding issues directly. In response, the Census Bureau reprogrammed some funding to the FDCA contract, and a re-plan was developed which, among other things, delayed and extended software development into seven increments. Thus, this re-plan added additional risk to the overall development plan and strategy that the Census Bureau thought was manageable.

HANDHELD TECHNICAL REQUIREMENTS

Question. When did the contractor ask for a finalized set of requirements?

Answer. At the time of contract award in March 2006, both the Census Bureau and the contractor were fully aware the initial requirements development strategy would mean a tight schedule for software development, system design, system development, and deployment. The initial requirements strategy at that point was to develop remaining requirements in a two-step process. First, based on results from the 2004 and 2006 Census Tests, we would provide detailed Dress Rehearsal requirements for our major operations. Then, based on lessons learned from the Dress Rehearsal, we would make adjustments to those detailed requirements for 2010 Census operations, as well as develop the detailed requirements for those operations that could not be included in Dress Rehearsal (e.g., enumeration in Puerto Rico; enumeration in remote areas).

In mid-November of 2007, however, facing a delayed, scaled-back dress rehearsal, and early 2010 Census operations not too far behind, the Harris Corporation requested that the Census Bureau deliver the final 2010 Census requirements by November 30, 2007 so that they could conduct a re-plan to align scope, schedule, and cost. These requirements were to include: Operations not planned in Dress Rehearsal, known defects in the operations, the de-scoped Dress Rehearsal requirements, as well as any clarifying requirements from those operations planned for Dress Rehearsal. We did deliver the final change requirements for Address Canvassing (the first major Census operation that Harris is participating in) by November 30, and in early December, negotiated with Harris to deliver final requirements by January 16, 2008.

DEPARTMENT INFORMATION SYSTEMS

Question. For the last 7 years, the Inspector General has noted that the Department has a material weakness in its information technology (IT) security because of problems with its certification and accreditation (C&A) process. I understand that several Department systems have recently been compromised.

What is the Department doing to improve the C&A process so the material weaknesses can be resolved?

Answer. Since fiscal year 2001 when the system certification and accreditation (C&A) material weakness was first reported, a deadline of one year was set for its resolution. Because of the short timeframes, efforts mainly focused on completing C&As instead of improving their quality. It is the poor quality of the C&A packages that caused the material weakness to continue. To that end, an OCIO/OIG joint strategy has been developed to incorporate realistic milestones, take measurable steps, and build consistent and repeatable C&A practices. We have established a 24-month schedule to meet these commitments, with the following significant milestones:

—Standard assessment cases can promote consistency and improved security for the Department's IT systems. Bureaus will use the examples to develop system specific assessment cases that will be used during security control assessments associated with certification and continuous monitoring by May 2008.

—The C&A package documents the security posture of a system as a snapshot in time, but continuous monitoring must be performed to ensure that appropriate adjustments are made to security controls and the system security plan as changes to the information system and external environment occur. OCIO will develop Department-wide continuous monitoring policy and guidance to help achieve consistency and compliance. The planned completion date for this guidance is June 2008. As part of its independent Federal Information Security Management Act (FISMA) reviews of C&A packages and security control assessments, OIG will identify controls that have not been adequately assessed and recommend that they be assessed during continuous monitoring. OIG will later review continuous monitoring activities for those systems to determine whether appropriate actions were taken. OIG will also assess compliance with the continuous monitoring policy and guidance when it becomes available. This work will be performed on an ongoing basis as part of our fiscal year 2008 and fiscal year 2009 FISMA reviews.

—The Information Systems Security Line of Business (ISSLoB) initiative requires that agencies use a designated FISMA automated tool to standardize tracking and reporting. The Department has begun to implement the Justice Department's Cyber Security Assessment and Management (CSAM) tool to standardize the C&A process and documentation as well as conduct compliance reviews. CSAM will be implemented in two phases—the management information inventory phase, which will provide consistent security records for IT investments, is scheduled for September 2008; full implementation, including conversion of existing packages, is scheduled for June, 2009.

—IT security compliance is one of the Department's highest priorities. To ensure this effort is on track, both OCIO and OIG will brief progress at the Department's Senior Management Council (SMC) on a quarterly basis. We will also brief the CIO Council on a quarterly basis.

Question. The Inspector General recently reported that only 1 of the 16 system security officers at Census is an IT security specialist. What are you doing to ensure there are enough qualified IT security professionals to protect the Department's many sensitive systems and to oversee the work of its IT security contractors?

Answer. The attraction and retention of experienced IT Security Officers is a challenge. The insufficient number of individuals proficient in IT security has been raised in various government and private-sector organizations. Experienced IT security professionals are not easy to come by, and the Department must compete in the market place for these skills.

In 2007, the Departmental CIO worked with Office of the Secretary Information Technology Review Board, CIO Council, and Commerce Information Technology Review Board. Discussions regarding the increasing threat environment and escalating requirements resulted in an increase in the fiscal year 2009 budget for IT security. Part of this budget is set aside to address training and certification of our IT security personnel.

Census continues to actively address building a robust IT security staff. The Census Bureau has taken steps to address this problem area by supplementing its limited staff resources through the use of highly qualified contractors. These additional skilled resources, together with the adoption of new and improved processes, have resulted in a great improvement in the Census Bureau's ability to assist the system owners, authorizing officials, and Information System Security Officers (ISSOs) in understanding and carrying out their information security responsibilities.

Over the past two years, we have seen a dramatic increase in security-related activity throughout the Federal government. Heightened threat levels, as well as a need to strengthen the overall IT security program, have led the Census Bureau to review its budget and consider future increases, as well as a plan of action to improve the Division Security Officer/Information System Security Officer (DSO/ISSO) program. The Census Bureau is considering options for significantly increasing staffing to support the IT Security Program. More specifically, the Census Bureau is studying ways to provide resources to the office so that it can provide more advice and guidance to senior executives and all other roles relating to IT security. This includes training and support to ensure that authorizing officials, system owners, and DSO/ISSOs are performing their roles properly.

Further, the Census Bureau hired MITRE Corporation to conduct an independent organizational assessment of the Census IT Security Office (ITSO). The assessment was to identify strengths as well as areas for improvement in the ITSO management, communications, processes, and structure. The analysis generally found that, despite many challenges in today's Federal IT security environment, the ITSO has significantly improved information security at the Census Bureau over the past few years. Based on MITRE's recommendations, the ITSO developed a five-year strategy to address the findings of the assessment and other gaps in the program, to include strengthening the role of the DSO/ISSO. The ITSO is currently conducting a gap analysis of the DSO/ISSO role structure and intends to recommend a plan of action to the Census Bureau Executive Staff in June 2008.

NOAA'S FLEET MODERNIZATION PLAN

Question. Mr. Secretary, over the past several years this Committee has supported and funded new Fisheries Survey Vessels for NOAA's fleet. These vessels provide a valuable service to this county, and the aging ships they replace deserve retirement. However, these fishery vessels represent only a fraction of NOAA's fleet. NOAA also has hydrographic and oceanographic research vessels, some of which are well past their prime. We need to do more to support the officers, crew and shore support staff that keep these vehicles working well past their prime.

When will this Committee receive a long-term fleet modernization plan that covers the entire NOAA fleet?

Answer. NOAA's Ship Recapitalization Plan has been drafted and is currently undergoing Administration clearance.

LAKE PONTCHARTRAIN

Question. A number of members have raised a concern about a lack of funding for the Lake Pontchartrain Restoration Program which would provide funding which would help restore and preserve the estuarine areas. Tell us whether this is a priority of NOAA and what NOAA is doing to assist Lake Pontchartrain.

Answer. The Lake Pontchartrain Restoration Program is important to NOAA. The current research conducted has provided NOAA a better understanding of the water quality, critical habitats, biological resources, and contaminant sediments, thus benefiting those living on the Lake's shores. These research and education efforts contribute to NOAA's priority of habitat conservation and restoration. NOAA recognizes the need for such projects as they preserve nursery habitats for fisheries and protects and buffers coastlines. In fiscal year 2008, NOAA will provide approximately $500,000 to support the Lake Pontchartrain Restoration Program.

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

FISHERIES RESEARCH AND MANAGEMENT FUNDING LEVELS

Question. I have heard from fishermen in my state with concerns about the level of NOAA funding for Fisheries Research and Management in the fiscal year 2008 omnibus. Effective management of our fisheries depends on sound science.

Will funding in the fiscal year 2009 budget allow for the stock surveys necessary to ensure sustainable management of Alaska's fisheries and the fisheries of the nation?

Answer. Based on the fiscal year 2009 President's request, we estimate that we would allocate $57.1 million for the Alaska Fisheries Science Center (AFSC), an increase of $2.7 million compared to the fiscal year 2008 level. In addition, the 2009 President's request restores funding for core survey and monitoring activities that were not included in the passage of the 2008 enacted budget.

While additional funds for survey activities may be available, due to increased charter and fuel costs, it is unlikely that the total cost of all bottom trawl and acoustic surveys needed in fiscal year 2009 will be realized. The AFSC would prioritize the acoustic surveys for pollock, and the Bering Sea bottom trawl surveys as top priorities. Restoration of the Aleutian Islands survey, cancelled in fiscal year 2008, would not be possible at the 2009 funding levels. Likewise, the Gulf of Alaska slope survey would be cancelled and a portion of the Gulf of Alaska shelf survey would likely be scaled back.

MSRA IMPLEMENTATION—IUU

Question. Can you give me an update on the progress the Department is making toward implementing the provisions of the Magnuson-Stevens Act, specifically with respect to ending overfishing and addressing the problem of illegal, unreported, and unregulated (IUU) fishing?

Answer. Under the international provisions of the MSRA, the Secretary of Commerce is required to take action to combat illegal, unreported, or unregulated (IUU) fishing activities. The fiscal year 2009 President's budget request includes a total request of $2.6 million for international cooperation and assistance activities to combat IUU fishing. Of this amount, $1.5 million is for consultation with nations that have been identified as having vessels engaged in IUU fishing and engage in capacity building activities with developing countries. The above figure also includes $1.1million for the Law Enforcement program to support the MSRA requirement to strengthen international fisheries enforcement by providing additional infrastructure and personnel to monitor imports of fish and fish products into the United States through collaboration with enforcement entities in other federal agencies and foreign governments. Furthermore, the Secretary of Commerce is required to produce a biennial report to Congress which lists countries the United States has identified as having vessels engaged in IUU fishing and to certify whether identified nations have taken appropriate corrective action to warrant receipt of a positive certification. The absence of steps to address these IUU fishing activities may lead to prohibitions on the importation of certain fisheries products into the United States and other measures.

In January 2008, the NMFS Office of International Affairs released a progress report on the status of implementation of the MSRA international provisions. This report summarizes efforts to combat IUU fishing around the world and can be found at http://www.nmfs.noaa.gov/msa2007/.

In preparation for the first biennial report, which is due to Congress in January 2009, NMFS has begun to collect information the agency can use to identify nations engaged in IUU fishing activities. To help acquire this information, on March 21, 2008, NMFS published a notice in the Federal Register that solicited information from the public regarding nations whose vessels are engaged in IUU fishing and bycatch of protected resources. The information request has been circulated broadly within constituent groups.

NMFS is drafting a proposed rule for the identification and certification of nations whose vessels are engaged in IUU fishing or bycatch of protected living marine resources. We hope to have the rule available for public comment this summer. In preparation for the development of the proposed rule, NMFS published an Advanced Notice of Proposed Rulemaking in June 2007, and the agency held several public meetings in July 2007 to solicit public comments on this process.

NMFS is also undertaking projects that will address IUU fishing and bycatch of protected living marine resources all around the world, with a focus at present on Central America and West Africa. These projects include workshops to provide technical assistance on the adoption of bycatch mitigation technologies and to improve enforcement. The enforcement activities focus on the development of effective legal frameworks and the implementation of improved monitoring, control and surveillance (MCS) programs.

The United States continues to serve as Chair of the international MCS Network. In addition, we are also continuing to collaborate with various countries to address pelagic longline sea turtle bycatch through the use of circle hooks and we have collaborated with the U.S. Navy in partnership programs aimed at providing development assistance in Latin America and West Africa.

The NOAA Office of Law Enforcement (OLE) is working closely with enforcement entities, with other federal agencies and foreign governments, to gather intelligence data on IUU fishing activities and trade in IUU fish and fish products. NOAA OLE is also developing its capability to analyze this intelligence data to create intelligence-based products to improve the detection and intercept IUU fish product entering the United States.

ENDANGERED SPECIES LISTINGS IN ALASKA

Question. I am concerned about Endangered Species Act petitions for species in Alaska. In addition to the current listings for Stellar Sea Lions, there are proposed listings for Cook Inlet Beluga Whales and ribbon seals before the Department of Commerce. Decisions on these listing could have huge consequences for development in my state.

Would increased funding for research in this area improve NOAA's ability to make scientifically supported decisions on these listings?

Answer. NOAA must render an ESA listing decision based on the best available scientific and commercial data information. More research will likely reduce scientific uncertainty and assist NOAA's ability to determine how to recover the species if they are listed.

ECONOMIC DEVELOPMENT ADMINISTRATION FUNDING

Question. The President's fiscal year 2008 budget includes a 51 percent decrease in funding for the Economic Development Administration. How will this reduction impact the Department's ability to assist economically distressed communities?

Answer. EDA will maintain its mission to "lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy," to the best of its ability, regardless of EDA's budget funding levels. The agency will continue to assist distressed communities through its grant investments and the agency's "soft assets" such as sharing best practices and technical expertise with communities.

The fiscal year 2009 funding request is based on budget priorities to help balance the federal budget. In a difficult budget environment, the Administration has made tough choices. EDA has a flexible and scalable nature—we can "ramp up" operations, as well as "ramp down" based on available funds.

DIGITAL TRANSITION

Question. As the nation prepares for the transition to digital television, I am concerned that there is no focus on the special needs of rural American when implementing the converter box program. I am particularly concerned that customers are not being properly educated about needing a pass through converter box if their communities rely on low power or translators for their broadcasting.

What is the National Telecommunications and Information Administration doing to address this concern?

Answer. To minimize confusion to viewers of low-power stations, NTIA has been working closely with organizations representing low-power and translator stations to communicate effective messages to consumers. First, the materials consumers receive in the envelope with their coupons identify which converter boxes will pass through analog signals. This information enables consumers to determine on their own which retail outlets stock these analog pass through boxes. Second, NTIA has added information about the low-power issue to list of Frequently Asked Questions (FAQs) on the Coupon Program website www.DTV2009.gov. This information includes a list of low-power and translator stations by location to help consumers determine, first, whether they receive service from one of these stations and, if so, whether they need to consider purchasing a pass through converter box. NTIA also identifies other options for viewers of low-power and translator stations, such as buying a low-cost splitter, which enables viewers to use any of the certified converter boxes to view programs broadcast in analog and digital.

NTIA is also working expeditiously to ensure that low-power operators in rural areas have resources to assist them with the transition in a timely fashion. On

March, 5, 2008, NTIA sent a letter to all licensees of Class A, low-power and translator stations with a fact sheet they could use to inform their viewers about the digital transition. The letter also included information about the Coupon Program and listed of all approved converter boxes that included analog pass through.

The letter also included additional information about two NTIA grant programs to assist low-power facilities. The Low-Power Television and Translator Digital-to-Analog Conversion Program currently provides $1,000 to eligible low-power stations that must purchase a digital-to-analog conversion device to convert the incoming digital signal of a full-power television station to analog for transmission on the low-power station's analog channel. To date, NTIA has awarded 232 grants under this program. Applications will be accepted until February 17, 2009.

Of course, stations that operate at less than full power will eventually convert to digital broadcasts. The Low-Power Television and Television Translator Upgrade Program established by Congress directs NTIA to assist this effort through a program that provides $65 million for necessary equipment upgrades to stations in eligible rural communities. To implement this program in a timely manner, a technical correction to the program authorization is required to permit the agency to begin making funds available during fiscal year 2009. On April 24, 2008, the Senate Committee on Commerce, Science, and Transportation favorably reported S. 2607, which would effectuate this technical correction. NTIA will continue to work with the Federal Communications Commission, industry and the broadcast community to assist low-power television stations and their viewers during the transition to digital broadcasting.

SUBCOMMITTEE RECESS

Senator MIKULSKI. The subcommittee stands in recess until Thursday, March 13, at 10 a.m., when we will take testimony from the Administrator of the National Oceanic and Atmospheric Administration (NOAA) and the Director of the National Science Foundation (NSF).

[Whereupon, at 11:14 a.m., Thursday, March 6, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, March 13.]

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2009

THURSDAY, APRIL 3, 2008

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:02 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senator Mikulski.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

STATEMENT OF HON. DR. MICHAEL GRIFFIN, ADMINISTRATOR

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Good morning. Today the Subcommittee on Commerce, Justice, and Science will come to order.

Today the subcommittee will hear from the National Aeronautics and Space Administration (NASA) Administrator, Dr. Michael Griffin, about the NASA budget request and its priorities. This is Administrator Griffin's fourth appearance before the CJS Subcommittee and we feel that we have a very good, productive relationship with both him and his team.

There are many issues facing NASA and there is also good news. And we look forward, as we talk with NASA, about its tremendous history.

This year we honor important milestones in America's space program. It is the 50th anniversary of NASA's creation. It is the 25th anniversary of when Dr. Sally Ride became the first American woman in space. But we want to be sure that NASA is not an agency with a great history, but with a great future.

We regard this year as a year of transition. We say this is a year of transition because this time next year we will have a new President, but whatever we do for this year's appropriation for fiscal year 2009 will be the operating budget for the President's first year for the space program. So we have got to get it right as the new President comes in. So as the chair this year, I want to make sure we put the right resources in the right places in the checkbook to make sure America's space program remains number one in the world.

When I looked at the President's budget for NASA, I was disappointed. I regarded it as stagnant despite the advocacy both from the agency and externally. The President's budget request is $7.6 billion. This is only $300 million above the 2008 omnibus level. This 1.8 percent increase does not even keep up with inflation when one simply looks at rising energy costs. Science is held steady at $4.4 billion, and though it does include launch plans for the decadal study, it is only 5 of the 17 priorities.

Of deep concern to this subcommittee are the cuts in aeronautic research. It is cut by $65 million, for a total of $447 million. We feel that aeronautics is so crucial to the future of America's aerospace industry. And once again, regrettably, there is no additional funding to help pay back NASA for the cost of returning the Shuttle to flight after the terrible accident a few years ago. And it also perpetuates a 5-year gap between the Shuttle's return in 2010 and the launch of Orion and Ares in 2015.

So we are worried about lost opportunities and we want to restore those opportunities and keep America's space program number one. We continue to face challenges from other countries. We know China is on the rise with its capability and its intent. Russia is always there, and we do not see this like a war for space, but we do say who is going to be the premier space agency. We want the United States to continue to lead the way not only for national prestige and honor, also not only for national security reasons, but the fact that we believe that our values, as we became the first in space, were that space belongs to the world and does not belong to a single nation.

Anyway, coming back to where we are, I will continue in my fight, joining with Senators Shelby and Hutchison, to fight again this year to add the $1 billion to deal with the cost that was incurred in returning to flight after the *Columbia* accident. It should not be a question of whether we should or should not. It is just a question of doing it.

We are also going to remember the original Augustine Commission which says we need to have a balanced space program of human space exploration, a reliable space transportation system, and investments in science and also investments in scientific research.

For science, the budget request of $4.4 billion is what the President requested. Science at NASA is guided by decadal reports prepared by the National Academy of Science. It also guides this subcommittee. These decadals are road maps for NASA. Science at NASA is something that is so important because it saves lives, saves the planet, and creates jobs for the future.

So I am puzzled why the science budget has been flat-funded for this year and for the next 5 years. We need to maintain our very important commitment to Earth science and the role that it plays in global warming. Missions like Ice, Clouds, Land Elevation Satellite (ICESat) and the tropical rainfall measurement mission (TRMM) measure and monitor the world's ice sheets and rain forests. We also need to have science that takes us into new breakthrough thinking like a great telescope like Hubble whose life we will extend and also the James Webb telescope. If you liked Hubble, you are going to be crazy about the James Webb telescope and what it will do for those advancements.

Again, aeronautics. In 1998, the aeronautics budget at NASA was $1.5 billion. Today it is less than $500 million. Every commercial aircraft flying today uses technology developed by NASA. We must maintain this leadership, and we see, as we travel the world, how competitive aerospace is becoming.

The budget request for the Space Shuttle is $3 billion. It calls for 10 more flights to the Space Station by 2010 and one flight is reserved to service the Hubble telescope. Retiring the Shuttle and transitioning the workforce will be major challenges for NASA. The United States cannot afford to lose our science and engineering talent. Therefore, we need to look at what will be our employment plan.

As always, no matter what we do, the safety of our astronauts has to be number one. The budget request for exploration is $3 billion. It is over $600 million above 2008, and this subcommittee, chaired by both myself and Ranking Member Shelby are absolutely committed to the goal of returning U.S. astronauts to the Moon and maintaining a presence there. We estimate that it will cost $16 billion to build Ares and Orion. While this is a significant investment, we again continue to be disturbed by the gap of almost 5 years between the retirement of the Space Shuttle and the launch of Orion and Ares. I want to know what we can do, as we engage in our conversation, to minimize the time gap and minimize the impact on the workforce and what is our path forward.

The Space Station is $2 billion, $200 million above the omnibus level. It is a national laboratory. We must keep our international commitments. We need to make sure we finish the station and we also need to continue to have access to the Shuttle which goes to our partnership with the Russians and the commercial orbital transportation services (COTS) program. I fully support the COTS program which is funded at $170 million.

We have a tough road ahead as we put together our bill. It will be the intention of the committee to have our bill completed before the Memorial Day recess so that we can be ready to fly our space ship, the CJS bill.

So having laid that groundwork, we are going to turn to Administrator Griffin.

But I want the record to show that Senator Richard Shelby is not here because his duties as the ranking member of the Banking Committee have him on the floor. He is the lead ranking member on moving the bill to deal with our terrible, terrible housing and foreclosure crisis. Senator Shelby must be on the floor, but we assured him his views would be presented here. We will submit his statement and questions for the record. He has questions about the future of robotic missions to the Moon, the NASA education program, the gap in human space flight, and issues related to accountability and stewardship. I too share those questions. Without objection, we will put these in the record and I will proceed.

[The statement follows:]

PREPARED STATEMENT OF SENATOR RICHARD C. SHELBY

Thank you, Madam Chairwoman.

Dr. Griffin, thank you for joining us today. This is an important hearing because it gives us an opportunity to discuss the significant role of the National Aeronautics and Space Administration (NASA) and its fiscal year 2009 budget proposal.

NASA's proposed budget is $17.6 billion. This is a $300 million, or 1.8 percent, increase over the fiscal year 2008 funding level. This is a sizeable sum considering the funding constraints that the Federal Government faces, yet it still does not begin to provide enough for NASA to do all of the critical missions it has been asked to do. Therefore, the Committee continues to be posed with many difficulties as we try to develop a sound budget for NASA.

The budget reflects funding choices that have been made by the Administration to achieve the goal of returning to the Moon, providing a $357 million increase for the Exploration account.

However, without overall growth in NASA's base budget, this translates to either little growth or even serious cuts in funding for other critical missions and activities. The budget keeps science funding flat for years to come, as well as proposing serious reductions in aeronautics and education programs.

The proposed budget continues to force the development and operation of manned vehicles to compete with science and education for limited funding, making balancing NASA's budget increasingly difficult.

When the President proposed his vision for returning to the Moon, he outlined a funding plan that showed what it would take to continue our leadership in space exploration. Yet, the funding levels that were initially proposed have never been requested by the Administration. The shortfall for NASA has been estimated to be up to $4 billion. This, coupled with serious budget constraints faced by this subcommittee, have made it challenging, if not nearly impossible, to provide NASA with the money it needs to carry out its critical missions.

Last year, through the leadership of Chairwoman Mikulski, the Senate attempted to alleviate some of NASA's budget constraints by approving an additional $1 billion. This funding would have allowed NASA's exploration programs to continue without massive cuts to science and aeronautics accounts. Further, it would have helped NASA's budget recover from the effects of the *Columbia* shuttle disaster. However, these efforts were met by opposition within the Administration and ultimately thwarted.

Dr. Griffin, you have commented in the past that NASA cannot do all it is asked to do with the funding provided. Yet, when more funds are proposed, the cooperation from those in the Administration have been painfully absent.

While the NASA budget clearly cannot move forward without more funding, the fiscal year 2009 budget does stays the course for the work NASA is currently doing. It contains some interesting pieces that will help further our understanding of the solar system and our own Moon. A proposed new outer planets flagship mission and the upcoming Hubble servicing mission will enhance the world class science that NASA does every day.

The plan has been laid out, and now NASA is doing its best to implement it. Accomplishing the vision for exploration must keep moving forward.

I am particularly pleased to see that the Administration has seen the wisdom of flying a robotic lunar precursor mission and the benefits that can be achieved in doing such a mission. The National Research Council indicated that this type of mission would be beneficial in their lunar science report and I look forward to discussing further how this mission will be implemented by NASA.

As we continue to discuss the future of NASA, it is important to remember that NASA's know-how not only allows us to reach beyond Earth, but also directly impacts our daily lives.

Scientists at Marshall Space Flight Center developed software that clarifies and refines image processing to allow us to view clear, new images of the Sun. The software adjusts and corrects computer and video images for zoom, tilt and shakiness, giving us the ability to review the Sun in a whole new way. Yet, this capability has applications far closer to home. This technology is now being used in countless criminal cases to assist our law enforcement in solving crimes.

Last month, a young female student at Auburn University was kidnapped and murdered. Through the expertise of the U.S. Marshal's Service, the killer's image was captured in a grocery store surveillance video where the victim's debit card was used. The Marshal's Service sent the surveillance images to Dr. David Hathaway at Marshall Space Flight Center in Huntsville where an image enhancement program was used to clear the grainy surveillance photos. It was these images that were later used to capture the killer.

And this type of work does not stop here. It is my understanding that Dr. Hathaway has also been assisting America's Most Wanted in the Lane Bryant Chicago murders. He is to be commended for being such an asset to the law enforcement community and NASA is to be lauded for their role in developing this vital technology.

We could spend all morning talking about the many successes of NASA, and yet we are here today to discuss the difficulty in balancing a budget that will fund only a fraction of the potential this agency could achieve.

The continual budget strains will require that we all work together as partners to ensure NASA can meet its many objectives.

It is my hope that the implementation of the President's vision can be accomplished while still maintaining the capabilities that NASA has developed in other mission areas.

The Administration did not leave many crumbs on the table, but I look forward to discussing how we may find a solution that keeps all of NASA's activities moving forward. While it will be a difficult task given the demands for funding across all of the agencies funded in the CJS bill, I look forward to working with you, Dr. Griffin, and the Chairwoman to ensure that NASA receives the funds necessary to achieve the nation's goals.

Thank you, Madam Chairwoman.

OPENING STATEMENT OF ADMINISTRATOR GRIFFIN

Senator MIKULSKI. So, Dr. Griffin, we are going to turn to you and go with your testimony.

Dr. GRIFFIN. Thank you and good morning, Chairman Mikulski. I too regret Senator Shelby could not be here, but please be assured we will answer his questions for the record as expeditiously as possible.

I want to thank you for inviting me here today to discuss our fiscal year 2009 budget request of $17.6 billion. Rather than delving into the details of the budget request itself, I would like to use this opportunity to explain the rationale behind the strategic choices made with America's investment in our Nation's space program.

Our annual budget represents less than six-tenths of 1 percent of the $3.1 trillion Federal budget, a small yet strategic investment in our Nation's leadership on "The New Frontier", as President Kennedy characterized our Nation's first halting steps and then giant leaps beyond Earth.

When strategically applied, America's investment in NASA also benefits our Nation by spurring development in new, innovative technologies and advancing our scientific understanding of the Earth, the Sun, the solar system, and the rest of the universe in ways that we can hardly fathom today, but which inspire us to learn more. Space exploration also contributes to our national security in a very deep way by enabling us to build closer ties with other nations and societies and by inspiring young people to study difficult subjects—mathematics, science, and engineering—so that the next generation of Americans remains at the cutting edge of technical progress. What we do is rocket science. The conquest of air and space is one of mankind's most interdisciplinary activities. The capabilities we bring into being help not only to build a better future for aviation and space; they benefit our entire society.

This year, we celebrate the 50th anniversary of NASA's creation by the Congress with the passage of the National Aeronautics and Space Act of 1958, a strategic national response to the historic achievements of the Soviet Union in the arena that President Kennedy would label, so aptly, "this new ocean." It was this foresight in recognizing the strategic importance of space which inspired and challenged a now aging generation of Americans, my generation, to study math, science, and engineering so that we could take part in this great enterprise.

However, as we celebrate NASA's 50th anniversary, I must also tell you that I am worried. Senator Mikulski, in absentia members of the committee, I am concerned that our Nation is now facing a silent *Sputnik*, a moment when many other countries are racing for a new high ground of innovation while our own advantages—technological, economic, intellectual—are showing signs of wear. While I believe that America's greatest days lie always ahead of us, this optimism is misplaced unless we recognize our problems, confront them, and strive with concerted energy to fix them. We need your help.

We face many challenges at NASA, but I believe the greatest of these is the need to maintain a determined and unified sense of purpose as we pursue the tasks before us. Our achievements, the things we do that awe the world, do not come cheaply, quickly, or easily. Space exploration is not for the faint of heart. It is not for those who are easily distracted. It is not for those who require instant gratification.

This year, all of us in the space community took a moment to recall where we were just 5 years ago when the Space Shuttle *Columbia* disintegrated over Texas and Louisiana, and to reflect upon the ultimate sacrifice our astronauts made while pursuing our Nation's endeavors in space, and to take cautious, sober pride in the progress that we have made in the short time since then.

At great expense, and with considerable technical difficulty, we returned the Space Shuttle to flight, and we are using it today to complete the assembly of the International Space Station (ISS). In the last few months, we have installed the European Columbus laboratory, the first of three components of the Japanese Kibo module, and the Canadian Dextre robotic arm. We have 10 more assembly and logistics missions ahead of us, plus one final Shuttle servicing mission to the Hubble space telescope scheduled for later this year. Barring unforseen circumstances, I believe we are well positioned to complete station assembly by 2010, and then retire the Shuttle in accordance with the thoughtful recommendations of the Columbia Accident Investigation Board (CAIB).

It took a crisis, the *Columbia* tragedy, for our Nation's leaders in the White House and Congress to recognize the truth of the damning assessment of the CAIB. Quoting, "The U.S. civilian space effort has moved forward for more than 30 years without a guiding vision." The President and Congress honored the sacrifice of the *Columbia* crew, with a new civil space policy noteworthy for the logical progression of its goals and its clarity of purpose. We must not allow that clarity to fade with the passage of time. We must not let it just slip away.

So, we are honoring America's prior commitments to our international partners on the station. We have begun the necessary steps, now turning into longer strides to develop a new generation of capabilities with the Orion crew exploration vehicle and the Ares family of rockets to replace the aging Space Shuttle. We are using the market provided by the ISS to help bring about U.S. commercial space transportation capability with our COTS program that you mentioned.

By being good partners on the ISS and with an armada of Earth and space science missions, through good times and in bad, it is my belief that other countries will want to join the United States in returning to the Moon, exploring Mars and other planets and moons of our solar system, and discovering what lies beyond. There is little we cannot do if we pursue this common vision together.

However, please do not confuse my desire for international collaboration with a willingness to rely upon others for strategic capabilities. Today we are dependent upon the Russian *Soyuz*. This dependence upon Russia for such a critical capability is not an option we would choose, but it is where we are today. In fact, we must seek an exception to the Iran, North Korea, Syria Nonproliferation Act (INKSNA) because we have no immediate replacement for the Shuttle and no other recourse if we wish to sustain the ISS.

Since that is a fact—and I prefer to deal in facts—I am glad that in today's world we have the option to avail ourselves of Russian crew transportation capabilities. But we did not get here by design. We got here by default. And as Admiral Gehman observed in the CAIB report, ". . . previous attempts to develop a replacement vehicle for the aging Shuttle represent a failure of national leadership." That failure has had and will have costs. The most important of those costs are not measured in money or in jobs, though both of these measures have been much in the news, but rather in terms of our Nation's posture and standing in the world. I will leave it to others to assess the larger consequences of the failure of American leadership, to which Admiral Gehman referred.

So let me be perfectly clear. While we have made significant progress in the past 5 years, the journey ahead is not easy. It requires courage on the part of those who must carry it out and commitment from those in leadership who would see it succeed. To reach this point in the aftermath of *Columbia* has required extraordinary self-sacrifice by everyone involved, and even more will be required in the years ahead. Transition from Shuttle to Orion and Ares, the next generation of constellation systems, while utilizing the Space Station with its six-person crew, and sustaining it with United States and commercial and foreign transportation services, is NASA's greatest management challenge.

We must not make promises we cannot keep. We must carefully consider any new missions to ensure that they are affordable. We must set priorities. We must focus upon the next steps: finishing the Station, building a new space transportation system to replace the Shuttle, and then venturing out again beyond low Earth orbit. We must keep always before us the real reasons why we explore this New Frontier, and the consequences of allowing our hard-earned leadership on that frontier to slip away.

None of this will be finished in a single year, a single presidential administration, a session of Congress, or even in the lifetime of anyone here today. It is a challenge for generations to come, but one which requires leadership on our part today on behalf of those generations to come.

In the immortal words of President Kennedy, "Now is the time to take longer strides."

Thank you.

Senator MIKULSKI. Thank you, Dr. Griffin.

[The statement follows:]

PREPARED STATEMENT OF MICHAEL D. GRIFFIN

Chairman Mikulski and Members of the Subcommittee, thank you for the opportunity to appear today to discuss the President's fiscal year 2009 budget request for NASA. The President's budget request for NASA is $17.6 billion, a 2.9 percent increase over the net budget authority enacted for 2008, along with a steady, five-year runout commensurate with inflation. This increase demonstrates the President's commitment to funding the balanced priorities he set forth for the Agency in space exploration, Earth and space science, and aeronautics research. We are making steady progress in achieving these goals. I ask for your continued support as you consider the President's fiscal year 2009 budget request for NASA.

When I testified before this Subcommittee last year, I spoke about the Administration's balanced priorities for our Nation's civil space and aeronautics research goals as set forth by the Congress and the President. NASA's mandate is clear, and NASA's authorizing legislation, as well as the level of funding appropriated to NASA in fiscal year 2008, tell me that Congress broadly endorses the balanced set of programs the Agency has put forward in this era of limited budget growth.

I have said this in other forums, but it warrants repeating here: at present funding levels, NASA's budget is sufficient to support a variety of excellent space programs, but it cannot support all of the potential programs we could execute. No plan or level of funding can fully satisfy all the many constituencies we have. Balanced choices must be made. But they cannot continually be remade and revisited if there is to be steady progress toward our common, defined objectives.

As the Columbia Accident Investigation Board noted, and as stakeholders acknowledged in ensuing policy debates, it would have been far worse to continue with the prior lack of strategic direction for human space flight, to continue dithering and debating and inevitably widening the gap between Shuttle retirement and the availability of new systems. Until and unless the Congress provides new and different authorization for NASA, the law of the land specifies that we will complete the International Space Station, retire the Shuttle, design and build a new spaceflight architecture, return to the Moon in a manner supporting a "sustained human presence," and prepare the way to Mars.

We are doing those things as quickly and efficiently as possible. System designs for the early elements have been completed, contracts have been let, and consistently solid progress is being made with a minimum of unexpected difficulty. True, the progress might be slower than all of us would prefer, but applying resources in the right direction, irrespective of pace, is always productive—and we are doing that. The Ares I Crew Launch Vehicle and the Orion Crew Exploration Vehicle, as they are presently taking form, are the building blocks for any American future beyond low-Earth orbit (LEO).

Given that this endeavor will be our first step beyond LEO for crewed spacecraft since 1972, I believe that bypassing the Moon to venture directly into deep space—a proposal some have suggested revisiting—poses unacceptable risk. Returning to the Moon and consolidating the gains to be made thereby will set us properly on the path toward Mars. I ask for your continued support and leadership as we progress toward achieving these worthy National objectives.

Before I highlight key elements of NASA's fiscal year 2009 budget request, I would like to summarize NASA's initial fiscal year 2008 Operating Plan. The initial Operating Plan provides aggregate funding of $17.3 billion, at the level of the President's fiscal year 2008 request. Pursuant to the rescission of $192.5 million in NASA unobligated balances in the Consolidated Appropriations Act, 2008 (Public Law 110–161), aggregate funding in NASA's fiscal year 2007 Operating Plan is reduced by $185.2 million, and prior year balances are reduced by $7.2 million. Implementation of direction in Public Law 110–161 has resulted in a total reduction of $620.9 million in planned NASA activities, consisting of the rescission of $192.5 million, offsets for programmatic augmentations totaling $345.2 million, and site-specific Congressional interest items totaling $83.2 million. Finally, in accordance with Congressional direction, NASA has established seven Agency appropriations accounts in the fiscal year 2009 budget request. As a result, the budgets for NASA's programs and projects are requested in terms of direct costs, not the additional indirect costs associated with operating the Agency's field Centers, assuring safety and mission success, and Agency management and operations. The direct budgets will continue to reflect labor, travel, and procurement costs associated with each program and project. The indirect costs are now budgeted solely within the Cross Agency Support account, and not in the NASA programs and projects. We will strive to ensure that these changes are transparent to our stakeholders.

I am appreciative of the action by the Committees on Appropriations and Congress in providing regular fiscal year 2008 appropriations for the Agency at the level of the President's request, including essentially full funding for the Orion, the Ares I, the Space Shuttle, and the International Space Station. This total fiscal year 2008 appropriations level, with some adjustments within the total, will enable NASA to meet critical priorities in accordance with the direction from the Congress and the President.

HIGHLIGHTS OF THE NASA FISCAL YEAR 2009 BUDGET REQUEST

I am pleased to report that the fiscal year 2009 budget represents a substantial step forward in responding to the recommendations of the National Research Council's (NRC) first decadal survey of Earth Science, released in January 2007. The five-year budget runout requests $910 million for priorities enumerated in the report. Funding will support development of two Decadal Survey new mission priorities—the Soil Moisture Active/Passive (SMAP) mission scheduled to launch as early as 2012, and the Ice, Clouds, land Elevation Satellite II (ICESat II) scheduled to launch in 2015—as well as formulation of three additional decadal survey missions.

Working closely with NOAA, we also are making significant progress toward restoring climate sensors that had been removed from the tri-agency National Polar-Orbiting Operational Environmental Satellite System (NPOESS) in 2006. The fiscal year 2009 budget request of $74 million for NOAA supports the addition of a Clouds and the Earth's Radiant Energy System (CERES) instrument onto NASA's NPOESS Preparatory Project (NPP) satellite, set to launch in 2010; instrument development and ongoing analyses to identify a suitable satellite platform for hosting the Total Solar Irradiance Sensor (TSIS); and development of climate data records. These actions, which will be implemented through close coordination between NASA and NOAA, come in addition to the inclusion of the Ozone Mapping and Profiler Suite (OMPS)-Limb sensor on the NPP satellite that was announced earlier in 2007.

The Agency's fiscal year 2009 budget request also reflects a number of exciting developments in the space sciences, including an increase in the number of new missions, a new initiative in lunar science and initiation of plans for high-priority missions in Astrophysics and Planetary Exploration. The fiscal year 2009 request includes an increase of $344 million over 5 years for Lunar Science in order to better understand our Moon. NASA's Science Mission Directorate, with support from the Exploration Systems Mission Directorate, is developing two small lunar landers, and the Science Mission Directorate is initiating a series of new and exciting missions headed to the Moon over the next decade. Meanwhile, we are focusing our Mars program after 2013 on a Mars sample return mission to launch by 2020, and have identified funds to initiate development of an outer planets flagship mission to be selected in October of this year for launch by 2017. The budget also significantly increases Research and Analysis funds in the space sciences to gain better value from the missions we are flying, and so too, it increases the funding and, therefore, the flight rate of our suborbital rocket and balloon research programs in the space sciences.

Our Aeronautics Research portfolio is positioned to address the challenges facing the Next Generation Air Transportation System, while also developing world-class aeronautics expertise and capabilities. Research is aligned with the National Plan for Aeronautics Research and Development and Related Infrastructure, approved by the President in December 2007. In fiscal year 2009, we will conduct a key test to advance our understanding of aircraft aging and durability, and develop algorithms to optimize the use of crowded airspace and airports. We will continue work on blended-wing-body aircraft, which may reduce fuel consumption and emissions, as well as aircraft noise. Additionally, NASA's Aeronautics Research Mission Directorate continues to strengthen partnerships with academia, industry, and other Government agencies to accomplish its strategic goals.

NASA's commitment to its exploration objectives is clearly reflected in the fiscal year 2009 budget request. As assembly of the Space Station nears completion, NASA will increasingly focus its efforts on continuing the development of the Orion Crew Exploration Vehicle and Ares I Crew Launch Vehicle. This budget request maintains Orion initial operational capability in March 2015, and full operational capability in fiscal year 2016, though we are striving to bring this new vehicle on line sooner. In fiscal year 2008, we will see the completion of the formulation phase for major elements of the Constellation program; both Orion and Ares I will undergo their preliminary design reviews. We will conduct the first Ares ascent development flight test with the Ares I–X in the Spring of 2009, and we will continue to conduct research and develop and test technologies through the Advanced Capabilities Human Research and Exploration Technology Development Program. The Lunar Reconnaissance Orbiter (LRO)/Lunar Crater Observation Sensing Satellite (LCROSS), an important part of NASA's lunar exploration strategy, is on track for launch at the beginning of fiscal year 2009. The Agency is also requesting $173 million to provide incentives for entrepreneurs—from big companies or small ones—to develop commercial transport capabilities to support the International Space Station. With more than $2.6 billion in NASA funds available over the next five years to purchase cargo and crew services to support Space Station operations, our objective and strong preference is to use these funds to purchase these services from American commercial companies wherever possible.

While I would prefer that the United States have domestic alternatives to purchasing crew transport services from Russia, I am glad that the Russians are our partners and have such capabilities, because the consequences if they were not available are far worse. If NASA astronauts were not onboard the Space Station, our National Laboratory in space simply would not survive. If there is no Space Station, there is no market for the commercial providers we are trying to help bring into existence, and our international partnership would simply fall apart. So, in order to keep these objectives viable, NASA may need to obtain additional crew and cargo transport services from our international partners if U.S. commercial services are not yet demonstrated and available.

In the area of Space Operations, NASA's fiscal year 2009 budget request will allow us to continue to expand the Space Station, complete the supporting truss structure and solar arrays, and deliver the final component of the Japanese laboratory. This will round out the set of three space laboratories aboard the Station, with one each from the United States, Europe, and Japan. In addition, fiscal year 2009 will mark another milestone for the International Space Station Program—for the first time, the Station will be able to support a full-time crew of six astronauts. With three major scientific facilities available to them, these larger crews will be busy as Station kicks off a new era in microgravity research aboard this National Laboratory in orbit. Critical to these achievements, the Space Shuttle is scheduled to fly five times in fiscal year 2009. During fiscal year 2009, NASA also plans to launch payloads on eight expendable launch vehicles. Fiscal year 2009 will also see the consolidation of the Deep Space, Near-Earth, and Space Communications networks into a unified Space Communications and Navigation (SCaN) architecture within the Space Operations Mission Directorate.

NASA is continuing to transition from the Space Shuttle to new Exploration systems, and will need a complement of critical tools and authorities necessary for the transformed Agency to execute its mission. This transition is the largest and most daunting since the end of the Apollo program and the beginning of the Space Shuttle program. It dictates that we obtain the authorities needed to ensure sufficient support in the future. We hope to discuss the details of these legislative requests with Members of Congress in the weeks ahead.

The remainder of my testimony outlines the fiscal year 2009 budget request for NASA in greater detail.

SCIENCE MISSION DIRECTORATE

In 2007, NASA successfully launched four new orbital and planetary science missions (THEMIS, AIM, Phoenix, and Dawn), almost 20 suborbital science missions, and two major airborne Earth science campaigns. This past year also saw the first test flights of the Stratospheric Observatory for Infrared Astronomy (SOFIA) 747 airborne infrared observatory, as well as the provision of rapid-response airborne remote sensing aid to the California wildfire emergencies. In addition, 2007 was a year of remarkable scientific discovery about the Earth, the Sun, the planets and the universe. For example, data from the Ice, Clouds, and land Elevation Satellite (ICESat), the Gravity Recovery and Climate Experiment (GRACE), and other satellites have provided dramatic new insights on ice sheet changes in Greenland and Antarctica. The Solar TErrestrial RElations Observatory (STEREO) satellites (A and B) have provided the first three dimensional images of the sun and the structures of the heliosphere. These new 3-D views, along with unprecedented observations from Hinode (Solar-B), NASA's Time History of Events and Macroscale Interactions during Substorms (THEMIS) mission, and the Aeronomy of Ice in the Mesosphere (AIM) satellite are revolutionizing knowledge of the variable Sun and its interactions with the Earth. Also, the Cassini spacecraft radar imagery of Titan revealed large lakes of methane in Titan's North polar region, indicating a hydrological cycle. Finally, a new map provides the best evidence to date that normal matter, largely in the form of galaxies, accumulates along the densest concentrations of dark matter. Mapping dark matter's distribution in space and time is fundamental to understanding how galaxies grew and clustered over billions of years.

NASA's fiscal year 2009 budget request provides $4.44 billion for the Agency's Science portfolio to study the Earth, our Sun and its heliosphere, our solar system, and the Universe. This funding enables NASA's Science Mission Directorate (SMD) to start major new missions, to increase research and analysis funding, and to operate and provide ground support for 55 operating science missions, including 13 Earth science mission extensions. It provides support for over 3,000 current operating research and analysis grants, while continuing to develop high priority missions in Earth Science, Heliophysics, Planetary Science and Astrophysics, consistent with the priorities established by the NRC's decadal surveys.

The fiscal year 2009 budget request for Earth Science provides $1.37 billion to help us better understand the Earth's atmosphere, lithosphere, hydrosphere, cryosphere, and biosphere as a single connected system. In addition to 14 operating missions, the request includes funding for seven missions in development. The Landsat Data Continuity Mission and Ocean Surface Topography Mission (to launch in 2008) continue the decades-long time series of land cover change and ocean surface height data, respectively. Glory targets the impact of aerosols on climate. The National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) paves the way for the future national weather system and continues essential measurements from the NASA Earth Observing System (EOS), Aquarius, and the Orbiting Carbon Observatory (OCO), set to launch in 2008. Aquarius and OCO will make the first-ever global measurements of ocean surface salinity and atmospheric carbon dioxide, respectively. The request specifically increases funding for OCO and the Aquarius missions to maintain development schedules. The Global Precipitation Measurement (GPM) mission will extend the rainfall measurements made by the Tropical Rainfall Measurement Mission (TRMM) to the global scale. The request retains the GPM core mission launch readiness date. With respect to Glory, the development estimate included in the fiscal year 2009 request represents cost growth of more than 30 percent from NASA's baseline development estimate, which, under the terms for Major Program Activity Reports under Public Law 109–555, will require explicit Congressional authorization in the next 18 months to continue.

The budget request responds to the Earth Science Decadal Survey by establishing a funding wedge of $910.0 million over the budget runout to initiate five new earth Decadal Survey missions for launch by 2020, while continuing to implement seven precursor missions for launch between 2008 and 2013. NASA will continue to contribute to the President's Climate Change Research Initiative by collecting data sets and developing predictive capabilities that will enable advanced assessments of the causes and consequences of global climate change.

The Heliophysics budget request of $577.3 million will support missions to understand the Sun and its effects on Earth, the solar system, and the space environmental conditions that explorers will experience, and to demonstrate technologies that can improve future operational systems. The request increases budgets for Sounding Rockets, Research Range, and Research and Analysis to achieve a more robust level of small payload opportunities. In addition to supporting 16 currently operational missions, the request supports the Interstellar Boundary Explorer (IBEX) mission focused on the detection of the very edge of our solar system and the Coupled ion-Neural Dynamics Investigation (CINDI) "Mission of Opportunity" that will provide new insight on the Earth's ionospheric structure, both of which are planned for launch in 2008. In early fiscal year 2009, the Solar Dynamics Observatory (SDO) to study the Sun's magnetic field is planned for launch, and the Geospace Radiation Belt Storm Probes (RBSP) mission will begin development. RBSP will improve our understanding of how the Earth's radiation belts are formed and how solar output modifies the Earth's Van Allen radiation belts. Further, the 5-year budget funds a new Solar Probe mission, which has long been sought by the U.S. scientific community and is recommended highly in the most recent Heliophysics decadal survey.

The Planetary Science budget provides $1.33 billion to advance scientific knowledge of the solar system, search for evidence of life, and to prepare for human exploration. The budget supports an array of eight currently operating spacecraft and rovers traveling to or now studying Mercury, Mars, the Asteroid Belt, Saturn, and Pluto, in addition to a series of instrument missions of opportunity. The budget request augments Lunar Science to include a series of small robotic lunar satellites to begin development in fiscal year 2009 and initiates an outer planets flagship mission, planned for launch in 2016 or 2017. The request includes continuation of funds for all five of NASA's operating Mars missions, the development of a Mars Science Laboratory for launch in 2009, a Mars Scout mission in 2013, expanding U.S. participation on the ESA/ExoMars mission by selecting two instrument Missions of Opportunity for study and technology development, a Mars mission in 2016. and an increase in Mars research funds. The Mars Program has been directed, consistent with National Research Council advice, to begin exploring concepts for a Mars Sample Return mission, to launch no earlier than 2020. With the New Horizons spacecraft continuing on its way to Pluto, the request realigns the New Frontiers Program's Juno Mission to Jupiter to be consistent with a 2011 launch date, and funds initiation of the next New Frontiers mission. An open competitive solicitation for the next mission is planned for release near the end of this calendar year. The request continues support for the operating Discovery mission and for the development of the new Gravity Recovery and Interior Laboratory (GRAIL) Discovery mission, the latter of which will use high-quality gravity field mapping of the Moon to determine the moon's interior structure.

The Astrophysics budget provides $1.16 billion to search for answers to fundamental questions about how the universe works, how we got here, and whether we are alone. The request supports a restart of the Nuclear Spectroscopic Telescope Array (NuSTAR) Small Explorer with a launch date of no-earlier-than 2011, increases funding for sounding rocket payloads, balloon payloads, detector technology and theory, and initiates the Joint Dark Energy Mission (JDEM) in fiscal year 2009. The Astrophysics suite of operating missions includes three Great Observatories (Hubble Space Telescope, Chandra X-Ray Observatory and the Spitzer Space Telescope), which have helped astronomers unravel the mysteries of the cosmos. The request will support the Gamma-ray Large Area Space Telescope (GLAST), which is now planned for launch in May, 2008, to begin a 5-year mission mapping the gamma-ray sky and investigating gamma-ray bursts. It also provides funding for the Kepler telescope, which is planned for launch in February 2009 to detect planets in the "habitable zone" around other stars. SOFIA will begin science operations in 2009, significantly earlier than previously planned. The request supports development of the Wide-field Infrared Survey Explorer (WISE), which will conduct an all-sky survey, and the James Webb Space Telescope, which will explore the mysterious epoch when the first luminous objects in the universe came into being after the Big Bang.

AERONAUTICS RESEARCH MISSION DIRECTORATE

In 2007, the Aeronautics Research Mission Directorate (ARMD) continued to pursue high-quality, innovative, and cutting-edge research that develops revolutionary tools, concepts, and technologies to enable a safer, more flexible, environmentally friendly, and more efficient national air transportation system. ARMD's research also plays a vital role in supporting NASA's space exploration activities. ARMD's program content and direction is consistent with the National Aeronautics Research and Development Policy, as well as the follow-on National Plan for Aeronautics Research and Development and Related Infrastructure that the President approved on December 21, 2007.

A primary goal across all of the programs in ARMD is to establish strong partnerships with industry, academia, and other Government agencies in order to enable significant advancement in our Nation's aeronautical expertise. NASA has put many mechanisms in place to engage academia and industry, including industry working groups and technical interchange meetings at the program and project level, Space Act Agreements for cooperative partnerships, and the NASA Research Announcement (NRA) process that provides for full and open competition for the best and most promising research ideas. ARMD has established over 35 Space Act Agreements with industry partners and more are in the works. We have ensured that all Space Act Agreements are negotiated so that results of collaborations will be broadly disseminated. To date, NASA has selected 346 proposals for negotiation of award through the NRA process from more than 70 different universities and 60 different companies and non-profits. NASA investment in NRAs will increase steadily from fiscal year 2009 ($72 million) through fiscal year 2013 ($100 million).

We have also strengthened our partnerships with other Government agencies. For example, NASA and the Joint Planning and Development Office (JPDO) have established quarterly reviews to ensure close coordination, and NASA participates in all major JPDO planning activities. In addition, NASA and the Federal Aviation Administration have developed a joint program plan for the Aviation Safety Information Analysis and Sharing (ASIAS) effort with well defined roles and responsibilities. Also, NASA and the United States Air Force have established an Executive Research Council that meets at least twice a year to ensure close coordination and collaboration. Lastly, NASA and the Army have signed a Memorandum of Understanding to coordinate research efforts on rotorcraft.

In fiscal year 2009, the President's budget for NASA requests $446.5 million for Aeronautics Research. ARMD is directly addressing the fundamental research challenges that must be overcome in order to enable the JPDO vision for the Next Generation Air Transportation System (NextGen).

NASA's Airspace Systems Program has partnered with the JPDO to help develop concepts, capabilities and technologies that will lead to significant enhancements in the capacity, efficiency and flexibility of the National Airspace System. In fiscal year 2009, NASA's budget request will provide $74.6 million for the Airspace Systems Program to conduct trajectory analyses for service-provider-based automated separation assurance with time-based metering in an environment with two to three times capacity and with delay and separation comparable to or better than that achieved today. In addition, the Airspace Systems Program will develop algorithms to generate robust, optimized solutions for airport surface traffic planning and control. These surface models will be developed as a basis for the optimized use of super-density airports, integrated airport clusters, and terminals where demand for runways is high.

NASA's Fundamental Aeronautics Program conducts research in all aeronautics disciplines that enable the design of vehicles that fly through any atmosphere at any speed. The fiscal year 2009 budget request, amounting to $235.4 million, will enable significant advances in the Hypersonics, Supersonics, Subsonic Fixed Wing, and Subsonic Rotary Wing projects that make up the Fundamental Aeronautics Program. These projects focus on creating innovative solutions for the technical challenges of the future: increasing performance (range, speed, payload, fuel efficiency) while meeting stringent noise and emissions constraints; alleviating environmental and congestion problems through the use of new aircraft and rotorcraft concepts; and facilitating access to space and re-entry into planetary atmospheres. A wide variety of cross-cutting research topics are being pursued across the speed regimes with emphasis on physics-based multi-disciplinary analysis and design, aerothermodynamics, materials and structures, propulsion, aero-servo-elasticity, thermal protection systems, advanced control methods, and computational and experimental techniques.

The fiscal year 2009 budget request for NASA's Aviation Safety Program is $62.6 million. The four projects within the Program (Integrated Intelligent Flight Deck, Integrated Resilient Aircraft Control, Aircraft Aging and Durability, and Integrated Vehicle Health Management) will develop cutting-edge tools, methods, and technologies with close coordination among them to improve the intrinsic safety attributes of current and future aircraft that will operate in the NextGen. In fiscal year 2009, the Program will demonstrate aircraft engine safety and reliability improvements using advanced sensing technologies and new methods for modeling engine gas flow characteristics. In addition, ballistic tests will be used to study the effect of aging on the impact resiliency of composite fan-blade containment structures for aircraft engines. Multiple flight and simulation tests will evaluate technologies to protect aircraft during hazardous situations. For example, simulations will evaluate technologies enabling aircraft to land safely even when flight control surfaces are partially damaged or malfunctioning, and flight tests will examine forward-looking, multi-frequency radar systems for early detection of potential hazardous icing.

Finally, NASA's Aeronautics Test Program (ATP) will continue to safeguard the strategic availability of a critical suite of aeronautics test facilities that are deemed necessary to meet Agency and national aeronautics needs. The fiscal year 2009 budget request for the ATP is $73.9 million, which will enable strategic utilization, operations, maintenance, and investment decisions for major wind tunnel/ground test facilities at Ames Research Center in California, Glenn Research Center in Ohio, and Langley Research Center in Virginia, and will support specific aircraft and test bed aircraft at Dryden Flight Research Center, also in California. ARMD has established the National Partnership for Aeronautical Testing with the Department of Defense to pursue a coordinated approach to managing DOD–NASA aeronautical testing facilities. In fiscal year 2009, ATP will continue to reduce the deferred maintenance associated with its facilities and will also invest in new test technologies ensuring a healthy set of facilities and the new capabilities needed for future programs. In addition, ATP plans to continue off-setting the user rates for its facilities through the funding of a portion of the indirect costs resulting in competitive prices. Simultaneously, the Program will continue to move toward a long-term strategic approach that aligns the NASA and DOD facilities to meet future requirements with the right mix of facilities and appropriate investments in facility capability.

EXPLORATION SYSTEMS MISSION DIRECTORATE

In 2007, the Exploration Systems Mission Directorate (ESMD) delivered as promised and will continue to do so in 2008. Major development work is underway; contracts are in place, and our future Exploration plan is executable. By the end of 2008, ESMD will see its first spacecraft launched from the NASA Kennedy Space Center. This Lunar Reconnaissance Orbiter (LRO) and the Lunar Crater Observation Sensing Satellite (LCROSS) will help NASA scout for potential lunar landing and outpost sites. Additionally, in 2008, NASA will continue to plan how best to transition any needed Shuttle workforce and infrastructure to the Constellation program.

The fiscal year 2009 budget request of $3.5 billion for Exploration will support continued development of new U.S. human spaceflight capabilities and supporting research and technologies, and will enable sustained and affordable human space exploration after the Space Shuttle is retired at the end of fiscal year 2010. The budget request provides stable funding to allow NASA to continue developing our next-generation U.S. human spaceflight vehicles while also providing research and developing technologies for the longer-term development of a sustained human presence on the Moon. Budget stability in fiscal year 2009 is crucial to maintaining a March 2015 Initial Operational Capability for the Orion Crew Exploration Vehicle and Ares I Crew Launch Vehicle. There is minimum flexibility through 2010, so Congressional support for budget stability is critical. Additionally, NASA will continue to work with other nations and the commercial sector to coordinate planning, leverage investment, and identify opportunities for specific collaboration on lunar data collection and lunar surface activities in support of Exploration objectives.

The fiscal year 2009 budget request for Constellation Systems Program is approximately $3 billion. The Constellation program includes funding for the Orion and Ares, as well as for ground operations, mission operations, and extravehicular activity projects and a dedicated in-house effort for systems engineering and integration. Last year, the Constellation program made great strides and it will continue to do so in 2008. We have tested real hardware; we have tested landing systems; and we have logged thousands of hours in wind tunnels. So far, NASA engineers have conducted almost 4,000 hours of wind tunnel testing on subscale models of the Ares I to simulate how the current vehicle design performs in flight. These wind tunnel tests, as well as NASA's first scheduled demonstration test flight for Ares I, known as Ares I–X, are scheduled for spring 2009 and will lay the ground work for maturing the Ares I final design.

Constellation has an integrated schedule and we are meeting our early milestones. In fact, all major elements of the Orion and Ares vehicles were placed under contract by the end of 2007. Currently, NASA has civil servants and contractors on board for the Constellation program serving at all ten Agency Centers, as well as in more than 20 States. In 2008, NASA will continue efforts to define the specific work the Agency's Centers will perform in order to enable astronauts to explore the Moon. Preliminary work assignments covering elements of the Altair human lunar lander and lunar surface operations, as well as the Ares V, were announced in October 2007.

During 2007, ESMD completed a series of key project review milestones, including a System Definition Review for the Orion project in August and for the Ares I project in October. During these reviews, each project examined how its proposed requirements impact engineering decisions for the functional elements of the system. The Orion and Ares I teams are currently assessing design concepts, and are moving toward finalized reference designs that meets their requirements. This reference configuration will be the starting point for the design analysis cycle that leads to Preliminary Design Reviews for the Orion and Ares I projects, in turn leading to an integrated stack review by the end of December 2008. A Preliminary Design Review is a crucial milestone, during which the overall program verifies that the preliminary design meets all requirements within acceptable risk limits and within the cost and schedule constraints.

In fiscal year 2009, NASA is requesting $173 million for the Commercial Crew and Cargo Program and its associated projects. Full funding is essential to maintaining NASA's promised $500 million investment in this program to spur the development of U.S. commercial space transportation services to and from the Space Station, while also providing substantial savings to the taxpayer compared to NASA Government-owned and operated capabilities. On February 19, 2008, NASA announced that the Agency had signed a Space Act Agreement with a new funded partner, Orbital Sciences Corporation of Dulles, Virginia. Technical progress continues to be made by our other funded partner, SpaceX, of El Segundo, California, as well by as several of our unfunded partners.

The Agency's fiscal year 2009 budget request provides $453 million for activities in ESMD's Advanced Capabilities theme, which seeks ways to reduce the risks for human explorers of the Moon and beyond by conducting research and developing and maturing new technologies. In 2008, NASA's Human Research Program will focus on the highest risks to crew health and performance during exploration missions. We also will develop and validate technologies that serve to reduce medical risks associated with human spaceflight. For example, NASA will continue its work to understand the effect of space radiation on humans and to develop effective mitigation strategies. During 2008, NASA also will continue to research ways to reduce the risks to future explorers. Research onboard Space Station will include human experiments, as well as biological and microgravity experiments. In 2009, the Advanced Capabilities Exploration Technology Development program will conduct a range of activities, including testing prototype ablative heat shield materials; throttleable Lox Hydrogen engines suitable for a human lunar lander; and lightweight life support systems for Orion. The program also will deploy and test advanced environmental monitoring systems on the Space Station to advance the safety of crewmembers, and will continue to test in-situ resource utilization technologies as well as life support and cryogenic fluid management.

In response to Congressional direction contained in the Explanatory Statement accompanying the Consolidated Appropriations Act, 2008 (Public Law 110–161), ESMD will fund in 2008 a robotic lander project managed by NASA's Marshall Space Flight Center as a pathfinder for an anticipated network of small science landers based on requirements for NASA's expanded lunar science program. The first lander mission is planned to fly in 2013–2014. NASA's Exploration Systems and Science Mission Directorates will continue to work together combining resources to ensure that the goals of the science lander are achieved.

NASA's LRO and the LCROSS have a planned launch later this year from Kennedy Space Center. These dual-manifested spacecraft are in the assembly, integration, and test phase and are making excellent progress toward launch. The knowledge generated by these missions will enable future outpost site selection and new information about resources within the permanently shadowed craters at the lunar poles. The LRO/LCROSS missions represent NASA's first steps in returning to the Moon.

Lastly, facility, infrastructure, property, and personnel transitions from Space Shuttle to Constellation continue to be a major activity. NASA transition activities are focused on managing the evolution from current operations of the Space Shuttle to future operations of Constellation and emerging commercial services, in a safe, successful and smooth process. To date, NASA has met all of its milestones and disposition targets. This joint effort between the Space Operations Mission Directorate and ESMD includes the utilization and disposition of resources, including real and personal property, personnel, and processes, to leverage existing Shuttle and Space Station assets for NASA's future Exploration activities. Formalized Transition Boards are working to successfully achieve this outcome. An initial Human Spaceflight Transition Plan was developed in 2006. An updated NASA Transition Plan, supported by key metrics, is being refined and will be released this year.

SPACE OPERATIONS MISSION DIRECTORATE

The Space Shuttle and Space Station programs both enjoyed a highly successful and productive year in 2007. The Space Shuttle flew three missions during the year, continuing the assembly of the Station and expanding its capabilities. The June 2007 flight of *Atlantis* on STS–117 added a truss segment and new solar arrays to the starboard side of the Station to provide increased power. In August, *Endeavour* brought up another truss segment, supplies, and became the first Orbiter to use a new power transfer system that enables the Space Shuttle to draw power from the Station's solar arrays, extending the duration of the Shuttle's visits to Space Station. On the same mission, STS–118, teacher-turned-astronaut Barbara Morgan conducted a number of education-related activities aboard the Space Station, inspiring students back on Earth and realizing the dream of the Teacher In Space Project for which she and Christa McAuliffe trained more than two decades ago. In October 2007, *Discovery* flew the STS–120 mission, which added the Harmony node to the Station and featured a spacewalk to disentangle a snagged solar array.

The STS–120 mission paved the way for Station astronauts to conduct a series of ambitious spacewalks and operations using the Station's robotic arm to move the Pressurized Mating Adapter-2 and Harmony node in preparation for the addition of the European Columbus laboratory and the Japanese Kibo laboratory in 2008. These spacewalks are particularly challenging and impressive, as they are carried out entirely by the three-person Expedition crews, without benefit of having a Shuttle Orbiter, with its additional personnel and resources, docked to the Station.

NASA continues to expand the scientific potential of the Space Station in 2008, a year in which we are delivering and activating key research assets from two of our International Partners. In February, Shuttle *Atlantis* delivered the European Columbus laboratory during STS–122; the recently completed STS–123 mission featured the delivery by Shuttle *Endeavour* of the experiment logistics module portion of the Japanese Kibo laboratory, along with the Canadian Special Purpose Dextrous Manipulator, or Dextre. Dextre, the final component of the remote manipulator system provided by Canada, will act as the "hand" on the robotic arm, allowing astronauts to conduct operations and maintenance activities from inside the Space Station, rather than via spacewalks. In May, STS–124 will deliver the pressurized module component of the Kibo lab, and in late summer, the crew of STS–125 will become the final Shuttle crew deployed to a non-Station orbit, as they conduct the last Hubble Space Telescope servicing mission from the Space Shuttle. This mission will outfit the telescope with the Cosmic Origins Spectrograph and the Wide-Field Camera 3, as well as replace components to extend Hubble's operational life.

The Space Shuttle fiscal year 2009 budget request of approximately $3 billion would provide for five Shuttle flights to support assembly of the Space Station. This would include the flight of the Japanese Kibo laboratory's Exposed Facility, and the delivery of the final Station Truss segment.

The fiscal year 2009 budget request includes about $2.1 billion for ISS International Space Station activities, reflecting the presence of a permanent six-person crew and three major research facilities aboard Station.

After the Space Shuttle retires at the end of fiscal year 2010, NASA will use alternative means to transport cargo and crew to the Space Station. The Agency's first choice for such services is domestic, commercial capability, the development of which is the focus of the Commercial Orbital Transportation Services (COTS) effort. ESMD is funding the first phase of COTS under the Commercial Crew and Cargo Program, which will demonstrate this capability via funded and unfunded Space Act Agreements. SOMD will manage the second phase of the effort, covering actual cargo—and potentially crew—delivery services to the Space Station. Until such time that operational commercial means are available for resupplying the Station, NASA will look to its international partners to provide cargo resupply capability, much of which will be provided as part of the partners' contributions to the International Space Station Program. NASA has contracted with Roscosmos to provide Soyuz and limited cargo services through the end of fiscal year 2011, as permitted under the Iran, North Korea and Syria Non-proliferation Act of 2005 (Public Law 109–112). NASA is monitoring the progress of potential domestic commercial providers to develop cargo and crew transportation services to the Space Station, and the Orion project is on track to reach its Initial Operational Capability in March 2015. The Administration is considering options to maintain a U.S. crew presence aboard the Space Station after the retirement of the Shuttle and before the advent of Orion. Purchasing crew transportation services domestically is NASA's preferred method to meet the needs of the Space Station. Another option may be to seek relief from the provisions of the Iran, North Korea, and Syria Non-Proliferation Act of 2005 for additional Soyuz services to keep a U.S. crew presence on the Space Station until either domestic commercial crew transportation services, or Orion, become available. We will keep the Congress fully informed of our plans.

NASA remains focused on, and committed to, flying out the remaining Space Shuttle missions safely and completing the assembly of the Space Station. Beyond those aims, one of the challenges NASA faces as we approach the end of the Shuttle era is the smooth disposition of personnel and infrastructure. SOMD and ESMD have been working hand-in-hand to ensure that needed skills and facilities are retained and put to productive use during the development and operational phases of the Orion, Ares I, and Ares V projects. In fiscal year 2009, the Agency's transition milestones will include the transfer of Pad 39B and Mobile Launch Platform #1 to Constellation, after the Hubble Servicing Mission. In addition, the Space Shuttle Program is reviewing whether the Space Shuttle Atlantis will be retired in fiscal year 2008 or used to conduct existing missions within the planned manifest.

The Space Flight Support Program's fiscal year 2009 budget request of $733 million would help mitigate out-year costs associated with the Delta II launch pads. The request also reflects the consolidation of the Agency's space communications projects into the Space Communications and Navigation Program. Finally, it includes funding for the development of two satellites to replenish the Tracking and Data Relay Satellite System, planned for launch in 2012 and 2013.

EDUCATION

The fiscal year 2009 budget request for Education totals $115.6 million and furthers NASA's commitment to Science, Technology, Engineering, and Mathematics (STEM) education. NASA's primary objectives for Education are to: (1) contribute to the development of the Nation's STEM workforce through a portfolio of initiatives for students at all levels; (2) attract and retain students in STEM disciplines while encouraging them to pursue higher education that is critical to NASA's workforce needs; and (3) engage Americans in NASA's mission through strategic partnerships with STEM education providers.

NASA is committed to ensuring that its future workforce is fully prepared to handle a variety of challenging scientific and technical careers. NASA's Office of Education encourages student interest in STEM through the Agency's missions, workforce, facilities, and innovations in research and technology. The fiscal year 2009 budget request reflects a balanced portfolio of investments which takes into account Congressional priorities, the NASA Strategic Plan, and recommendations from the National Research Council, as well as the priorities of the education community. NASA Education is the critical link between the Agency's scientists and engineers and the education community. NASA Education translates the Agency's missions into educational materials, services, and opportunities for students and learners of all ages. NASA strives to support the role of educational institutions, which provide the framework to unite students, their families, and educators for educational improvement.

In 2008, NASA's Office of Education will continue to collaborate with Agency Mission Directorates and field Centers to assist educators in promoting scientific and technical literacy while attracting and retaining students in STEM disciplines and careers. NASA Education will also continue its work with other Federal agencies engaged in educational activities, along with public and private partners to leverage the effectiveness and reach of its efforts.

CROSS-AGENCY SUPPORT

The fiscal year 2009 budget request for activities within Cross-Agency Support includes funding for developing and maintaining NASA's technical capability including the Agency's vital mission support functions. Cross Agency Support provides a focus for managing technical capability and Agency mission support functions. This budget area consists of three themes: Center Management and Operations; Agency Management and Operations; and, Institutional Investments. Cross Agency Support is not directly identified or aligned to a specific program or project requirement but is necessary to ensure the efficient and effective operation and administration of NASA.

The most significant change is in the area of Agency Management and Operations. Agency Management and Operations provides for the management and oversight of Agency missions and functions and for the performance of many Agency-wide activities. Agency Management and Operations is divided into five programs: Agency Management; Safety and Mission Success; Agency Information Technology services; Innovative Partnerships Program; and, Strategic Capabilities Assets Program.

—The fiscal year 2009 budget request provides $414.6 million for Agency Management which sponsors and supports an executive-based, Agency-level functional and administrative management agenda. Agency Management delivers policies, controls, and oversight across a range of functional and administrative management service areas and also provides for independent technical assessments of Agency programs. It delivers strategic planning services. It assesses and evaluates NASA program and mission performance. It sponsors and directs the Institutions and Management agenda in procurement, human capital, real property and infrastructure, security and program protection, diversity, equal opportunity, and small business. Agency Management also provides for the operational costs of Headquarters as an installation, including salaries, benefits, training and travel requirements of the Headquarters workforce, as well as the resources necessary to operate the Headquarters installation.

—The fiscal year 2009 budget request provides $163.4 million for the Agency's Safety and Mission Success support activities required to strengthen and enable the fundamental and robust cross checks applied on the execution of NASA's mission. The engineering; safety and mission assurance; and health and medical independent oversight and technical authority which are essential to NASA's success and were established in direct response to the *Challenger* and *Columbia* shuttle accident board recommendations for independent funding of these efforts. The Safety and Mission Success program directly supports NASA's core values and serves to improve the likelihood for safety and mission success for NASA's programs, projects, and operations. The Safety and Mission Success program includes the corporate work managed by the offices of the Chief, Safety and Mission Assurance (including the NASA Safety Center), Chief Engineer (including the NASA Engineering and Safety Center), the Chief Health and Medical Officer, and the Director of the Independent Verification and Validation Facility.

—The fiscal year 2009 budget request for Agency Information Technology services is $163.9 million which encompasses cross-cutting services and initiatives in IT management, applications, and infrastructure necessary to enable the NASA Mission and improve security, integration and efficiency of Agency operations. In fiscal year 2009 significant emphasis will be placed on consolidation of networks and network management, improved security incident detection, response and management, further consolidation of desktop/laptop computer services, data center assessment for consolidation, and application portfolio management leading to consolidation. NASA is using an enterprise architecture approach to assess current assets, capabilities and costs for services and developing requirements, projects and procurements for transition to the desired consolidated state. Additionally, the underlying infrastructure and systems to instill strong authentication and access to information systems in alignment with HSPD–12 will progress significantly in fiscal year 2009. Critical work will continue under the Integrated Enterprise Management Program to improve business processes by minimizing data redundancy, standardizing information and electronic data exchanges, and processing. Also, NASA will continue participation in several Federal E-Government initiatives and Lines of Business to improve services to citizens and gain efficiencies across the Government.

—The fiscal year 2009 budget request for Innovative Partnerships Program activities is $175.7 million. This program provides leveraged technology investments, dual-use technology-related partnerships, and technology solutions for NASA. This program also facilitates the protection of NASA's rights in its inventions and the transfer of that technology for commercial application and public benefit. In addition, the Innovative Partnerships Program implements NASA's Small Business Innovation Research and Small Business Technology Transfer Programs which seek out high-technology small businesses to address key technology needs for NASA. The program also manages a Seed Fund to address technology needs through cost-shared, joint-development partnerships. The Centennial Challenges Program, which is also managed by the Innovative Partnerships Program, consists of prize contests to stimulate innovation and competition in new technologies for solar system exploration and other NASA mission areas. NASA has already benefited from Centennial Challenge competitions, and last year awarded $450,000 in prize money for the Astronaut Glove Challenge and Personal Air Vehicle Challenge. The Innovative Partnerships Program also transfers NASA technology for public benefit, as documented in NASA's annual "Spinoff" publication. "Spinoff 2007" documented 39 new examples of how NASA innovation has been successfully transferred to the commercial market place and applied to areas such as health and medicine, transportation, public safety, consumer goods, homes and recreation, environmental and agricultural resources, computer technology, and industrial productivity.

—Finally, NASA is requesting $28 million in fiscal year 2009 for the Strategic Capabilities Assets Program, a focused activity designed to ensure that critical Agency capabilities and assets for flight simulation, thermal vacuum testing, arc jet testing, and microgravity flight services are available to NASA missions when needed. Strategic Capabilities Assets Program assets are also used by other Government agencies, industry, and academia to improve the Nation's position in the global market place as well as its defense capabilities. The Strategic Capabilities Assets Program budget request covers the direct and associated costs required to sustain key test capabilities and assets including operating staff, preventive maintenance, subsystem repairs, and component replacements required to keep the assets in "ready for testing" condition. Incremental costs to conduct specific tests are borne by individual programs and reimbursable customers. The Aeronautics Research Mission Directorate budget request includes $73.9 million for the Aeronautics Test Program (e.g. wind tunnels and flight testing) and the Science Mission Directorate budget request includes $41.9 million for High-End Computing Capability (e.g. the *Columbia* super computer), which are also managed as Strategic Capabilities Assets. Centralized management at the Agency-level allows NASA to better prioritize and make strategic investment decisions to replace, modify, or disposition these capabilities and assets.

CONCLUSION

NASA has a lot of hard work ahead, but the Agency continues to make steady progress in managing its challenges. We are deploying our workforce to carry out the great task before us. Last fall, the Agency assigned new leadership roles and responsibilities for exploration and science missions to NASA's ten field Centers across the country in order to help restore the core technical capabilities across the Agency as we transition from the Space Shuttle to new capabilities. I ask your continued help to ensure that this Nation maintains a human spaceflight capability.

In a short span of years, we have already taken long strides in the formulation of strategies and programs that will take us back to the Moon and on to Mars and other destinations in our solar system. Indeed, a generation from now, astronauts on Mars will be flying and living aboard hardware America is funding and designing today, and will be building in the near future. This is a heady legacy to which we can aspire as we develop the next U.S. human space exploration vehicles. The foundation of this legacy will include work we plan to carry out in fiscal year 2009.

As I said earlier in my testimony, NASA is committed to executing the exciting programs and projects within the President's fiscal year 2009 budget request. Having reached a steady state on a balanced set of priorities, we now have a sense of purpose to make steady progress toward achieving our goals for continued leadership in space exploration, scientific discovery, and aeronautics research.

Chairman Mikulski, with your support and that of this Subcommittee, we are making the right strategic choices for our Nation's space program. Again, thank you for the opportunity to appear before you today. I would be pleased to respond to any questions that you may have.

PRESIDENT'S FISCAL YEAR 2009 BUDGET REQUEST SUMMARY BY APPROPRIATION ACCOUNT

[Budget Authority, in millions of dollars]

By theme	Fiscal year—						
	2007	2008	2009	2010	2011	2012	2013
Science	4,609.9	4,106.2	4,441.5	4,482.0	4,534.9	4,643.4	4,761.6
Earth Science	1,198.5	1,280.3	1,367.5	1,350.7	1,250.9	1,264.4	1,290.3
Planetary Science	1,215.6	1,247.5	1,334.2	1,410.1	1,537.5	1,570.0	1,608.7
Astrophysics	1,365.0	1,337.5	1,162.5	1,122.4	1,057.1	1,067.7	1,116.0
Heliophysics	830.8	840.9	[1] 577.3	598.9	689.4	741.2	746.6
Aeronautics	593.8	511.7	446.8	441.8	482.4	486.1	467.7
Exploration	2,869.8	3,143.1	3,500.8	3,737.7	7,048.2	7,116.8	7,666.8
Constellation Systems	2,114.7	2,471.9	3,048.2	3,252.8	6,479.5	6,521.4	7,080.5
Advanced Capabilities	755.1	671.1	452.3	484.9	568.7	595.5	586.3
Space Operations	5,113.8	5,526.2	5,774.7	8,872.8	2,900.1	3,089.9	2,788.8
Space Shuttle	3,315.3	3,266.7	2,981.7	2,983.7	95.7	....	....
International Space Station	1,469.0	1,813.2	2,060.2	2,277.0	2,176.4	2,448.2	2,143.1
Space and Flight Support	329.2	446.3	[2] 732.8	612.1	628.0	641.7	645.4
Education	115.9	146.8	118.6	126.1	123.8	123.8	123.8
Cross-Agency Support	2,949.9	3,242.9	3,299.9	3,323.9	3,363.7	3,436.1	3,511.3
Center Management and Operations	1,754.9	2,013.0	2,045.6	2,046.7	2,088.0	2,155.3	2,211.6
Agency Management and Operations	971.2	830.2	945.6	945.5	939.8	950.5	961.3
Institutional Investments	223.8	319.7	308.7	331.7	335.9	330.4	338.3
Congressionally Directed Items	....	80.0	....	....	....	....	....

PRESIDENT'S FISCAL YEAR 2009 BUDGET REQUEST SUMMARY BY APPROPRIATION ACCOUNT—Continued

[Budget Authority, in millions of dollars]

By theme	Fiscal year—						
	2007	2008	2009	2010	2011	2012	2013
Inspector General	32.2	32.6	35.5	36.4	....	38.3	39.2
Fiscal Year 2008 Rescission [2] ...	....	(192.5)	....	....	....	....	....
NASA Fiscal Year 2009	16,285.0	17,309.4	17,614.2	18,026.3	18,460.4	18,905.0	19,358.8

[1] Deep Space and Near Earth Networks Transfer $256 million to SFS in fiscal year 2009.
[2] Fiscal year 2008 Appropriation rescinded $192.475 million in prior-year unobligated balances, effectively reducing fiscal year 2008 authority. Not included in totals.

Fiscal year 2008 budgets are the enacted levels per the fiscal year 2008 Appropriation as shown in the Agency's fiscal year 2009 Budget Estimates. Totals may not add due to rounding.
2008 budgets include all direct costs required to execute the programs. Indirect costs are now budgeted within Cross-Agency Support.

SPACE TRANSPORTATION SYSTEM

Senator MIKULSKI. First of all, I know this was your oral testimony, which was more of a rhetorical document than a budget statement. So, we will put into the record your full testimony to the subcommittee, which I think went into very specific detail. We have the written testimony, which I know was vetted by OMB and powers that be, and it outlines the budget aspects that we want.

We too agree with your statement that says we must not make promises we cannot keep and carefully consider any new missions to ensure that they are affordable. Dr. Griffin—this is not directed at you, but really your predecessor and the White House—I agree with that. So, when they embarked upon the Mars mission, for which the Congress was not critical, they never gave us any money. So, we are very frustrated that we were given an assignment without the money and falling upon us to come up with the money.

So, I would agree with the premise let us not make promises we cannot keep and consider the affordability of any new missions. Well, we were given a new mission. A promise was made just like the promise was made on the Space Station. We got all those international partners involved, and now we wonder how in the hell are we going to get there. So we are cranky. We are not cranky with you, but we are cranky because we keep feeling like we are being set up and then it comes to us.

So we note your question about leadership, but we are not in here to finger-point today. We are into pinpointing our path forward. But I want to set the record straight, that a promise was made to go to Mars, but no money was given to us. The Gehman Commission outlined—and it cost NASA $2-plus-billion to return to space and return to space in a way that was safe for our astronauts, which always needs to be a national obsession. And no money back for the replacement costs paralleling the *Challenger*. So those for us are the big issues.

We went to the Space Station at the request of President Bush I and we have sustained that. And we have had difficulty paying for it since in two administrations. Now, this one gave us a Mars mission without the wallet.

So we appreciate your observation. We presume it is not a lecture. And number three, we are cranky because we keep getting missions and no wallet, and I know you must feel the same way.

That takes us, though, to really the heart of what you are saying which is a reliable space transportation system. That goes to the transportation system to replace the Shuttle because without a reliable transportation device, we cannot do any of the things, whether it is the return to the Moon or beyond.

Could you share with us because everyone is deeply concerned about the gap? I would like to go through some of the questions about the gap. I am going to say two things. One, colleagues both here and in the House are saying, well, why do we not give them more money and close the gap? So, I am going to ask if that is a realistic possibility if money were not the problem, just with sound engineering principles.

And then number two, as you know, there are some members in the House who are raising the concept of extending the life of the Shuttle until 2015.

So, let us go with acceleration. What could we, putting money aside, because I will come back to show me the money because that is what this is—can we accelerate or close that gap in a prudent way and not just be throwing money at it? And then what you think of the idea of extending the Shuttle until 2015.

Dr. GRIFFIN. Yes, of course, Senator Mikulski. Thank you. Let me start out by saying just for the record that if anything in my oral statement came across as presuming to lecture the Congress, that was not my intent. I was calling for the leadership that I know that you know we need and have provided, but certainly not lecturing the Congress.

But to answer the specifics of your questions, with regard to closing the gap, at this point with 65 percent statistical confidence, we are budgeted to deliver Orion and Ares for operational capability to the Space Station in March 2015. We have been asked by your colleagues in the Senate, as well as your colleagues in the House, if that could be improved. We have answered for the record, and I will give you the outlines of that answer now. At a cost of about $2 billion total over the next couple of years, it would be possible to bring March 2015 back into, let us say, the late fall of 2013. So we could improve the schedule by about 15 to 16 months at this point at a cost of $2 billion.

In general, as a rough guide for your planning, every $100 million extra that is put into the program improves the schedule by just about 1 month. So on the record, that is the best we have been able to determine.

Senator MIKULSKI. It seems like about $1 billion a year.

Dr. GRIFFIN. Yes, ma'am. That is correct. Now, we cannot, for any amount of money, get back earlier than the fall of 2013.

Senator MIKULSKI. So using $1 billion as a rule of thumb per year, even if we came up with $5 billion—highly unlikely—you could not——

Dr. GRIFFIN. The earliest technically achievable date at this point——

Senator MIKULSKI. Would be 2013.

Dr. GRIFFIN [continuing]. Given the water over the dam behind us, would be late 2013.

Senator MIKULSKI. Okay.

EXTENDING THE SPACE SHUTTLE LIFETIME

Dr. GRIFFIN. Now, in answer to your second question, my opinions about extending the lifetime of the Shuttle, my opinion is we should not do that. They are founded on several different principles. The first is that as I believe we all now know and as Admiral Gehman pointed out in the CAIB report, the Shuttle is an inherently risky design. We currently assess the per-mission risk as about 1 in 75 of having a fatal accident. If one were to do as some have suggested and fly the Shuttle for an additional 5 years, say, two missions a year, the risk would be about 1 in 12 that we would lose another crew. That is a high risk. We have elected as a Nation—the administration has decided and the Congress has concurred, and I believe that concurrence was absolutely correct—that we will complete the Space Station. But it is not being done without risk. To fly the Shuttle after the Space Station is completed for any significant length of time I believe would incur a risk I would not choose to accept on behalf of our astronauts.

Now, flying the Shuttle after the 2010 retirement date has other effects. It costs about $3 billion a year. You, ma'am, referenced just a few moments ago that our request this year to fly the Shuttle was $3 billion. I would rather see, if my opinion were being sought, extra money made available, if that were the case, to accelerate existing systems. If extra money were not made available, and the $3 billion had to come out of hide—as you mentioned, the return to flight costs of $2.7 billion was taken out of hide. If that were done again, every $100 million that comes out of the new systems extends their schedule for 1 month. On the back end of the program, we lose 1½ months. So if you delay *Constellation* by 1 year today, in order to fly the Shuttle for another year, then you delay *Constellation* by 1½ years on the back end. So you do not ever narrow the gap. You extend the gap if you fly the Shuttle longer.

Senator MIKULSKI. Well, that is an important thing. So, trying to keep the Shuttle going beyond the current designated time is high risk——

Dr. GRIFFIN. Yes, ma'am.

Senator MIKULSKI [continuing]. High expense.

Dr. GRIFFIN. Yes, ma'am.

Senator MIKULSKI. And the very goal we want to have, which is not to have a gap, we once more exacerbate.

Dr. GRIFFIN. Yes, ma'am.

RETURN TO FLIGHT

Senator MIKULSKI. I got it.

Did Admiral Gehman, when he looked at the return to flight as part of the review after the accident, look at this possibility?

Dr. GRIFFIN. Well, they did. Around pages 209 and 210 of volume I of the CAIB report, they devoted considerable discussion to the future of the Shuttle. I happen to have a few of those quotes with me. I am given to using them in speeches for just these purposes.

But Admiral Gehman pointed out—and I will quote for the record here—"because of the risks inherent in the original design of the Space Shuttle"—and I will skip a couple of points that do not matter—"it is in the Nation's interest to replace the Shuttle as soon as possible as the primary means of transporting humans to and from Earth orbit."

Admiral Gehman also points out that "there is urgency in choosing the design after serious review of a concept of operations for human space flight and bringing it into operation as soon as possible. This is likely to require a significant commitment of resources over the next several years. The Nation must not shy from making that commitment."

Senator MIKULSKI. Well, of course, we will look to the wisdom of working with their authorizers and you. But based on our conversations, both in preparation for this hearing and here, I really could not support the extension of the Shuttle to 2015.

What I want to do is, working on a bipartisan basis, see what we can do to prudently, both from an engineering and technology perspective and from a fiscal perspective, accelerate. Look to see if we cannot find the funds to accelerate closing the gap and the framework that I believe NASA already is thinking about and could do. So, we would have a plan A which would be to close the gap to 2013, which in and of itself would be pretty terrific. And plan B would be to stay the course, which would be the minimum threshold.

So from my perspective, again, working with Senator Shelby, Senator Nelson, Senator Hutchison, those of us involved, really the authorizing and so on, our goal would do that. I cannot speak for my colleagues, but speaking for myself, I would not envision trying to keep the Shuttle going. I think the risk is inherent and the national goals are not that which we want to accomplish.

RELYING ON RUSSIAN "SOYUZ" SERVICES

That takes me to using the *Soyuz*. Whatever it is, we are currently relying on the *Soyuz*. So could you tell us where we are? Do we not have some treaty issues? I mean, you and I are not State Department wonks here, but do we not have kind of anti-proliferation compliance? As a member of the Intelligence Committee, I cannot be out of compliance with proliferation issues. Where are we with that? And what is required and where are we? And can the subcommittee help facilitate this?

Dr. GRIFFIN. Thank you. Yes. They are excellent questions there. First, we need Russian *Soyuz* services today at a minimum for crew rescue capability on board the station. The Shuttle is not a lifeboat. So until we have a qualified replacement system, Orion and Ares, qualified for 6 months of flight and therefore can serve the lifeboat function, we will be dependent upon the Russian *Soyuz* system for crew rescue from station.

Second, after the retirement of the Shuttle in 2010, the only mechanism for crew transport will be the Russian *Soyuz* system.

To your point out treaty obligations, we have the INKSNA, the treaty that I mentioned and to which you referred, for control of space technology and missile technology proliferation, which prevents the purchase of certain goods and services from Russia for the Space Station program. We are currently operating under an exemption to that treaty. It ends on December 31, 2011. So until the end of 2011, we can purchase Progress cargo delivery services and *Soyuz* crew transport services. There is about a 3-year lead time for the Russians to produce a new *Soyuz*. So, if in 2012 we wish to have crew transportation for ourselves and our partners to whom we have treaty obligations, then by around early 2009, hopefully sooner, we need to have agreements in place with Russia. To accomplish that, I need to furnish to the Congress, within a very short period of time, a request from the administration for a continued exemption to the treaty.

IRAN, NORTH KOREA, SYRIA NON-PROLIFERATION ACT (INKSNA)

Senator MIKULSKI. Well, yes. Again, going back to my opening statement, this is a year of transition. Our new President does not take office until January 20 or 21, and we need to have this done in this current administration. It would be the hope of this subcommittee, working with our colleagues on Foreign Relations, Senators Biden and Lugar, who are experts on the proliferation issue—we would like to move this.

When do you think we can expect a request from the administration?

Dr. GRIFFIN. I believe, Senator Mikulski, that it is imminent. We have spoken with them just yesterday. The last elements of coordination within the White House are ongoing as we speak. We are working with them to get that to the Congress as quickly as we can.

Senator MIKULSKI. Well, over the next few weeks, we will be meeting with Secretary Rice on a variety of issues. So if we get bogged down, this subcommittee would like to offer a way of working with you and the administration to get it unstuck and over here for review by Senators Biden and Lugar so that we can move ahead with this. Okay?

Dr. GRIFFIN. Thank you very much.

"SOYUZ" LAUNCH CAPABILITIES

Senator MIKULSKI. Now, this though then goes to COTS. So right now we can accelerate, if we put in $2 billion, to 2013. We have got the *Soyuz*. What is the astronaut capability of the *Soyuz* to take people up, not the rescue mission, but what is the max number of astronauts they can take up?

Dr. GRIFFIN. Well, the crew capacity on a given *Soyuz* launch is three. So obviously to sustain a crew of six, we need two *Soyuz* systems flying in rotation to maintain the crew of six that we go to in April 2009.

Senator MIKULSKI. And how much are the Russians charging us per flight? Did they talk about that yet? Because they now have a monopoly.

Dr. GRIFFIN. Yes, they do. Our current contract calls for payments for *Soyuz* seats and progress flights through the end of 2011 of $780 million.

COMMERCIAL ORBITAL TRANSPORTATION SERVICES

Senator MIKULSKI. And that will go back and forth. Well, we will go into that in more detail.

Let us go to COTS. Could you outline what the budget request for COTS is? What do you think we buy for it, and do you think that is sufficient? And is COTS an answer in terms of beefing up COTS to take people up there where we would have our own kind of version of a *Soyuz*, in other words, not the full go to the Moon and so on, but really a Space Station vehicle which COTS is? Can you share with us those views? Because there is a lot floating around that COTS could be the answer to the gap.

Dr. GRIFFIN. COTS, commercial orbital transportation services, is a program that I initiated upon rejoining NASA on this occasion. I did so because I believe very strongly—I believe two things, that we need a strong Government development program for Orion and Ares to guarantee that we have the capability to get to Earth orbit again and to go to the Moon, as Admiral Gehman discussed. But I also believe that we need to stimulate, wherever possible as a matter of Government policy, provide rewards for the development of commercial capability available for purchase by the Government, but on an arm's length basis.

So the purpose of the program was to provide some, not all, of the money necessary for new systems development to reach Earth orbit, allowing companies to use that leverage of Government funds to seek other investment, and to bring to bear new capabilities.

We are focusing on initially cargo because I just want to be clear with everybody. We actually have a mechanism to get crew to the Station with the *Soyuz* system, but unless we can bring some new commercial capabilities online, we really have no cargo resupply. So actually of the two, the most important COTS capability to me right now is cargo, and I must be honest about that.

However, COTS is a program with four different phases to it, and phase D is human transportation. And yes, we would very much like to see a capability developed from U.S. commercial suppliers to provide crew transport to and from the Space Station, and I do believe that can be a solution going forward.

I do not believe that even with their best efforts and even if more money were provided, that COTS crew transportation capability will arrive in time to be available after the Shuttle retires or even by the end of the current contract with Russia in 2012. So I do not believe that it will be available.

Senator MIKULSKI. So what you are saying is there is no silver bullet or there is no magic potion available to close the gap.

Dr. GRIFFIN. Ma'am, I do not know of one.

Senator MIKULSKI. So extending the life of the Shuttle is not a reasonable option.

COTS, which is very promising technology—its first priority is cargo because that is what is needed to sustain the astronauts when we get them up there. Without a cargo vehicle, the cost is prohibitive. We cannot use *Soyuz* for cargo at the cost of the *Soyuz*, and I do not think it would be big enough for cargo.

Dr. GRIFFIN. That is correct.

Senator MIKULSKI. So we need COTS to do the sustainability of the astronauts.

At the same time, sure, COTS has promise, but you want to make sure that what is firmly in place is the cargo capability, but while they are developing their technologies, of course, we would look forward to possibilities of adding a human element. But that is an add-on to the mission.

Do I have it down right?

Dr. GRIFFIN. Yes, ma'am.

Senator MIKULSKI. What I am really getting to is people are fishing around—not fishing. I should say searching. That was not a good use of the word. Genuinely searching because of the gap. And like everything else we do in this Government, we have regrets about, oh, why was this not all thought about. But we are where we are.

So what you are saying is that right now the only reliable transportation system after 2010 will be *Soyuz*. So we have to work with the Russians, get our treaty in place, et cetera. We have got to keep COTS on track no matter what because that is the cargo. Even during the gap, we can sustain our American presence, and we will have an American vehicle in space. So it will not be like we are just sitting on the tarmac.

Am I correct?

Dr. GRIFFIN. Yes.

Senator MIKULSKI. But there is no magic potion to close the gap. The only prudent fiscal way to go is accelerate Ares and Orion by 2 years and, at the same time, keep COTS on track so we have the cargo capability. So, from the standpoint of fiscal reality and engineering sensibility, that would be the way to go.

Dr. GRIFFIN. Ma'am, I think you have it perfectly.

SPACE SHUTTLE WORKFORCE TRANSITION

Senator MIKULSKI. Well, the reason I took such a long time in asking these questions is there are a lot of ideas in the ethers out here and I wanted to be able to do that.

Now, my last question on this is what is the plan for the workforce transition when the Shuttle is retired? And I am talking about at Kennedy. It is of deep concern, of course, to our two colleagues from Florida. You know, we ask people to go into science and engineering. There have been people who have been working at Kennedy. They have given their life's work through good times and wrenching times. We remember the brave way they responded during Hurricane Katrina to keep everything in place. I mean, it is a wonderful talented, group of people, and we do not want to leave them hanging by their thumbs.

Dr. GRIFFIN. Well, we do not, and I know that your colleagues from Florida are concerned. But I too am concerned. I am the Administrator of this agency, and that is my workforce. So I am concerned as well.

Before I answer your question about what our plans are, I would like to note a positive thing for the record, if I might. I just received word that the planned docking of the European automated transfer vehicle, which is a cargo delivery vehicle to the Space Station in support of European obligations to the partnership, just successfully docked with the Space Station for the first time on its maiden flight. This accomplishment of an automated rendezvous and docking is the first by any nation other than Russia and brings our European partners fully on line as full partners in the Space Station. It is a magnificent accomplishment for the partnership.

Senator MIKULSKI. We salute our European colleagues.

Dr. GRIFFIN. I think they deserve every bit of that.

Now, to answer your question about our workforce, we are obligated to the Congress for a report twice a year. Every 6 months we must report on our transition plans to retire Shuttle and bring Ares and Orion online. We submitted the first of those per requirement on Monday, and it showed, among the contractor community at Kennedy Space Center, over the years the worst case scenario of a reduction of some 6,400 or so jobs over the years following retirement of the Shuttle.

Now, for the record, I must point out to this subcommittee that those projections are projections which are obtained by forecasting the job reductions from retirement of the Shuttle, but they do not forecast the job increases as we bring on a future lunar development program. So as we begin to get out of Shuttle and station operations, we are fairly well able to forecast who we will lose, but——

Senator MIKULSKI. But is that the same workforce?

Dr. GRIFFIN. Well, it will not be the same people. It will be a different skill mix.

Senator MIKULSKI. That is what I mean.

Dr. GRIFFIN. The Shuttle workforce, in terms of Shuttle operations, will be a much smaller operational workforce for Ares and Orion. That was a goal of retiring the Shuttle.

When we put new work down at Kennedy Space Center, it will, in some respects, require different kinds of skills. So we have the option—the companies have the option of retraining people, but many people will be moving to take other jobs and new people will be moving in to take new jobs.

Senator MIKULSKI. Well, Dr. Griffin, this is a conversation I really want to have Senator Shelby participate in and also our space authorizing team, Senator Nelson. We know that Senator Landrieu is deeply concerned about the Michoud issue where I think we estimate that there could be 1,000 more there.

Really then, what do we anticipate and what is it really going to take? Are we looking at retirements and therefore a steady glide path? Are we looking at retraining? Because we will have to give you money to do retraining as we are doing that. And we have got to look at how we are all moving in the same way. Just as you have your engineering plans and you have your critical path, we need to have the same critical path for our social—I hate to use the term "social" engineering, but our social plan, which is who is going to leave, who is going to stay to do the job they are doing, who is going to be retrained, what are we bringing on, and then how is this going to be paced and what is it then you would need from us with the workforce issues because we need people as well as our technology.

So, let us schedule that after we complete our hearing.

OVERALL SCIENCE BUDGET

Moving on, though, I want to go now to science. NASA's budget shows a flat science budget this year and also for the next 5 years. Some are winners like Earth science and planetary science. Others seem to not do as well, astrophysics and heliophysics.

Is where we are on the budget enough to meet our existing obligations to science and continue the development of new ones? In other words, we have things underway, whether it is Hubble—I worry about ICESat.

You know what everybody is excited about, of course, is the mission to our own planet Earth. I have been meeting with people. Senator Boxer has too in her global warming initiatives. Every scientist or environmental minister is crazy about NASA and also about the National Science Foundation (NSF) and about National Oceanic and Atmospheric Administration (NOAA). Because of our size, our scope, and our talent, we have become the indispensable nation in terms of the science that we do for our planet. Therefore, anything that we are going to do to solve the problems of our planet has to be rested on that.

So we worry about that and do we have enough to do what we are doing? Could you comment on it? Because we see you and NOAA, working with the NSF and National Institute of Standards and Technology, we save lives and we are saving the planet.

And what an incredible role of public diplomacy. You and I are sitting here talking about treaties with the Russians on making sure we do not proliferate, but those school kids in Australia or South Africa or Southeast Asia are looking at the same Hubble as the south Baltimore kids. The Danish environmental minister is looking at the Hubble stuff the way they are looking at the NOAA stuff over in India.

So we know that Secretary Rice thinks she is the diplomat, but so is NASA. And we view Hubble as one of our first technological diplomats.

So, my point is that where are we in terms of what we continue to do and in these new missions.

Dr. GRIFFIN. Well, Senator, although you did not ask, I could not agree with you more about the value of our space program as an instrument of positive American image and diplomacy in the world. Truthfully, over 60 percent of our science missions are done on a collaborative basis with other nations. Sometimes we supply an instrument. Sometimes we supply the major part of the spacecraft. But either way the collaborations that we do work, and they work for the United States and for everyone in the world.

Now, our science budget. I need to say a couple of things. First of all, our science budget as a fraction of our portfolio is around 32 percent this year, and it is at historically high levels. So science is well funded at NASA. It is not growing as much as we would like until 2011 when we retire the Shuttle. Science resumes its growth at the top line starting in 2011.

As you noted yourself, in these current years, our entire NASA top line growth is only 1.8 percent, and so for science to be slightly less than that is not a major difference between the agency's top line and the science portfolio top line.

We are budgeted to meet the commitments that we have made, everything from Hubble and James Webb down to the Mars science lab and other things in other divisions of our science portfolio. We are budgeted to meet the commitments we have made to you.

Certainly it is always possible, just as in our human space flight program, more money will buy more product. And there are always more new and interesting and fascinating science missions to do.

But we have a rich plate of missions, and I believe that we are adequately funded to execute the ones we have said we will execute.

Earth science did receive an increase this year I think in respect to the Earth science decadal. That is something we wanted to do. I was one of the people calling for a decadal 3 years ago and now we have one, and we are pleased with it. We have revamped our Earth science portfolio to respect that decadal. But at the same time, astrophysicists and planetary scientists and heliophysicists also have decadal surveys, and we try to honor those missions as well.

EARTH OBSERVING SENSORS

Senator MIKULSKI. Well, first of all, that is heartening to hear, and know that we have just a great passion about this.

I know you are so busy.

You know, there are things I want to talk about with both science and education. Let me come back to I think a very poignant moment.

The National Academy of Science. This goes to what they tell us they are concerned about. According to the National Academy, 40 percent of the Earth-observing sensors that are now in orbit will cease to function by the end of the decade unless they are replaced. And my question is, well, what does that mean? And what is NASA's plan to replace those sensors and satellites? In other words, do we have the money to even continue to do the pretty spectacular work we are already doing?

Dr. GRIFFIN. Right. We are in a difficult period right now. If you look at the sensor level on Earth sciences for climate research and environmental monitoring, we are in a difficult period because, as you know, the Department of Defense, the NOAA, and NASA NPOESS program being executed by the Air Force encountered some severe cost problems. And so the NPOESS spacecraft have been descoped. This has been the subject of other hearings before other committees of this Congress.

Senator MIKULSKI. I know.

Dr. GRIFFIN. And so the climate research sensors that were originally planned to go on NPOESS will now not fly on NPOESS. Now, we have known this for over 1 year. We have been scrambling to try to find ways to remanifest those climate research sensors on other missions, and we are doing that. But the recovery plan from the NPOESS descope of climate research sensors cannot happen instantaneously. Moreover, NASA was not budgeted for these additional climate research sensor flight opportunities because that budget went to NPOESS.

So in the White House and at NASA, by all means, we do recognize the seriousness of the concern about replacing the climate research sensors on orbit today. That was one of the originally intended purposes of NPOESS and we are having to find other ways to do it. And we are working that plan as aggressively as we are able.

NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM (NPOESS)

Senator MIKULSKI. Well, the subcommittee and its staff would like to have an ongoing conversation with you about this. First of all, we are very concerned about NPOESS.

Dr. GRIFFIN. Yes, ma'am.

Senator MIKULSKI. We have raised it and it has been an enormous challenge. Of course, our overall satellite capabilities are of growing concern.

But let me go to our accountability issue, and then we will conclude shortly. The Congress is going to have a commemorative ceremony noting the melancholy event that occurred 40 years ago tomorrow with the assassination of Dr. King. Both the House and Senate will gather for just a moment of reflection and really renewal to a commitment against violence in the world.

NASA has informed us that of 12 science missions that are under development, 4 are over budget and 8 are behind schedule. We would like to talk with you about that in more detail as we look at this, one, maintaining the schedule but also where those four missions are over budget. We are not going to go into that because, again, I want to join my colleagues.

I know Senator Shelby wanted to also ask about aeronautics and about education. The aeronautics is part of the NASA mission in education. So, we will follow up with aeronautics as we talk about it when we come together. Education, of course, continues to be such a major role at NASA.

CHAIRMAN'S CLOSING REMARKS

And I just want to tell you a story before we conclude about what your NASA Goddard people did that was so spectacular. We, in Baltimore, are the home to the National Federation of the Blind. It is their global headquarters.

Some years ago, a wonderful Ph.D. by the name of Dr. Zabrowski, who just passed away, wanted to move the blind into the future and the new economy. Over 40 percent of all blind people live below poverty level because they do not have access to education that often takes them into the new careers. So, they did that. And one of the things they wanted to do was see if blind kids could have access to information about astronomy.

On a modest grant of $50,000 from Goddard, working with the National Federation of the Blind, the Goddard Genius Club, and the Smithsonian Institution, we have now produced a textbook for blind kids, for middle school and high school, on astronomy. It is called "Touching the Invisible Sky." And when you see this book—have you seen it?

Dr. GRIFFIN. I have seen it, ma'am. It is incredible.

Senator MIKULSKI. It is incredible. The text is in Braille, but the pictures of the Hubble and other cosmic photographs are in these raised images that is having a profound impact.

And when I went to Dr. Zabrowski's memorial service and told the gathering over 600 people about this book and presented a copy in behalf of all of us to their library—but it will be widely disseminated—the audience response was overwhelming. And the response afterwards, as people came up, parents were talking about they do not know if their kids will be astronomers, but they know that they could go into science. They could go into technology. If you are blind, you can hear very well. There are jobs and everything from national security to other things.

So, you know, this is really about changing lives, transforming lives, and so on. And NASA is doing such great work. If we take the time for a modest $50,000 and transform opportunities for blind children—and once again, it will happen not only for our kids here in our own country, but this will go to south Baltimore and South Africa and so on. I mean, I think this is what we are all about.

So, we want to go to the Moon and we want to get out there to Mars, return our astronauts safely. And we want to see what we can do to help you.

So, I think we have covered our testimony today. I was kind of doing double dutch here. We will continue our conversations with you.

We hope to have our bill ready. We view the President's request as the minimum threshold. We are going to see what other ways, given our allocation, we can add to this to accelerate our capabilities of closing the gap, as well as improving our science and aeronautics capability and see what we can do. I also will pursue adding that amendment for another $1 billion as emergency funding.

So, since there are no further questions—and do not think that because my other colleagues are not here they are not interested. Many are chairing their own hearings on our accelerated schedule, and others are involved in the mortgage foreclosure.

ADDITIONAL COMMITTEE QUESTIONS

So, since there are no further questions—and Senators may submit questions for the subcommittee's official record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

ROBOTIC LUNAR LANDER

Question. I am pleased to see the budget request has a proposed lunar robotic lander mission for the Moon. This proposal comes on the heels of funding provided by this committee that followed recommendations from the National Research Council.

Can you expand on what this mission will entail and how the workload will be distributed and managed for this mission?

Answer. The Science Mission Directorate (SMD)-sponsored Lunar Science Program Office at Marshall Space Flight Center (MSFC) will provide program management for the Lunar Science Program, consisting of a small-sat lunar orbiter and a series of mini-landers. The Lunar Science Program Office will establish a mini-lander project, also to be located at MSFC, using the capabilities of the LPRP office to conduct a phase A and begin Phase B. In fiscal year 2008–2009, the focus of the mini-lander project will be on defining the mini-lander design through Preliminary Design Review. As appropriate for the missions, SMD will define significant roles for the Applied Physics Lab (APL), Ames Research Center (ARC), the Goddard Space Flight Center (GSFC) and the Jet Propulsion Laboratory (JPL).

Question. When do you anticipate this mission and will be ready to go to the moon?

Answer. The first two mini-landers, which will be developed by MSFC and the APL, are envisioned to be launched in the 2013–14 timeframe. Further definition will be undertaken as part of the Pre-Phase A identified in the previous question.

Question. Is there potential for these landers to be the first in a series of similar missions?

Answer. It is envisioned that these landers will be the backbone nodes of an International Lunar Network providing a series of standardized seismic, heat flow, and other scientific measurements (provided by both the United States and international partners). In addition, Exploration Systems Mission Directorate (ESMD) and SMD will cooperate on the definition of key enabling technologies that might be suited for flight on one or more of the mini-landers.

EDUCATION CUTS

Question. How can we take the ACI model and apply it to NASA education programs to encourage students to want to become future scientists and engineers?

Answer. NASA Education is taking steps that align with the ACI model to encourage students to enter STEM fields.

The following activities reflect direct action based on the recommendations of the ACI:

—Pursuant to Conference Report accompanying the America Competes Act, NASA is required to submit to Congress and the President an annual report describing the activities conducted pursuant to Section 2001 of the America COMPETES Act, including a description of the goals and the objective metrics upon which funding decisions were made. NASA will submit the first of these reports in January 2009.

—Also pursuant to Section 2001, NASA will submit a plan for assessing the effectiveness of the Agency's science, technology, engineering, and mathematics education programs in improving student achievement, including with regard to challenging State achievement standards.

—NASA is utilizing the Undergraduate Student Research Program to support basic research projects on STEM subjects.

—NASA is also leading the interagency ISS Education Coordination Working Group, with its concept plan, "An Opportunity to Educate: ISS National laboratory," which was submitted to Congress on June 20, 2008. The Working Group is also in early discussions with other interested agencies that are not formal participants.

Pursuant to direction included in the Explanatory Statement accompanying the fiscal year 2008 Consolidated Appropriations Act, NASA's Office of Education will soon release a competitive solicitation to the university community, based upon recommendations from Earth Science and Application from Space: National Imperatives for the Next Decade and Beyond, prepared by the National Research Council in 2007.

—The solicitation will address innovative opportunities for educating students on global climate change with a special component focusing on teacher education preparation (pre-service).

NASA is also pursuing other interagency activities that will facilitate the enhancement of its STEM education program.

—NASA Education serves on the Education Subcommittee of the National Science and Technology Council (NSTC) Subcommittee on Science, which is providing a report based on the Academic Competitiveness Council recommendations.

—The Office of Education also represents the Agency on the Interagency Aerospace Revitalization Task Force, a group of federal agencies with a vital interest in strategic planning for STEM education to strengthen the science and technology workforce.

EPSCOR AND SPACE GRANT FUNDING

Question. Are these reductions because the programs are ineffective in their objectives?

Answer. NASA has not de-emphasized its education program nor reduced these two projects being ineffective in their objectives. Though the 2009 request for NASA education is a reduction of $31.2 million from the 2008 enacted budget, it reflects the reality of addressing increasing mission operational requirements within limited funding.

Each program area in the Agency was impacted by the need to redirect funding. The overall Office of Education's budget reduction was further influenced by "Results Not Demonstrated" rating in last year's OMB Performance Assessment Rating Tool (PART) analysis due to the agency not providing sufficient data indicating the program's effectiveness. Baseline data and results have now been submitted to OMB for review. Education is and will continue to be a fundamental element of NASA's activities reflecting a diverse portfolio of Higher Education, Minority University Research and Education, Elementary & Secondary/Education, and Informal Education Programs.

For Space Grant, the quantitative change between the fiscal year 2009 and fiscal year 2008 budgets in DIRECT dollars is a decrease of $6.9 million. The Space Grant two tiers of alliances (35 states and 17 states) are funded at $730,000 and $535,000; respectively, in fiscal year 2008. As with all projects, the request includes agency administrative full costs that include corporate general and administrative costs, which are determined by the Office of the Chief Financial Officer (OCFO), as well as project-specific costs. For fiscal year 2008 Space Grant, the corporate general and administrative costs are approximately $7.6 million. Final allocations are dependent upon the passing of the NASA Appropriation and subsequent approval of the NASA Operating Plan. Funds will be apportioned to the Space Grant consortia in a pro rata manner consistent with 35 Designated consortia and 17 Program Grant/Capability Enhancement consortia.

Question. Are there better places for us to focus our resources for education funding, and if so, what education programs do you believe work the best at NASA?

Answer. NASA's Agency goals in education are outlined in both the 2006 NASA Strategic Plan and the NASA Education Strategic Coordination Framework: A Portfolio Approach.

All of NASA's education efforts are part of an integrated Agency-wide approach to human capital management. Within the NASA Strategic Plan, education is identified as a crosscutting function that supports all of the Agency's strategic goals and objectives.

For the fiscal year 2009 budget, Education used a defined process to create a balanced portfolio of investments to address the NASA Strategic Plan, recommendations from the National Research Council (NRC), and education community priorities.

Each project within the portfolio is mapped to one of the following Outcomes as defined in the NASA Strategic Plan and the Education Strategic Portfolio Coordination Framework:

—Outcome ED–1: Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goals through a portfolio of programs.
—Outcome ED–2: Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers, and faculty.
—Outcome ED–3: Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.

Background:

In 2006 and beyond, NASA will pursue three major education goals:

—*Strengthen NASA and the Nation's future workforce*.—NASA will identify and develop the critical skills and capabilities needed to ensure achievement of NASA's mission. To help meet this demand, NASA will continue contributing to the development of the Nation's science, technology, engineering, and mathematics (STEM) workforce of the future through a diverse portfolio of education initiatives that target America's students at all levels, especially those in traditionally underserved and underrepresented communities.
—*Attract and retain students in STEM disciplines*.—NASA will focus on engaging and retaining students in STEM education programs to encourage their pursuit of educational disciplines and careers critical to NASA's future engineering, scientific, and technical missions.
—*Engage Americans in NASA's mission*.—NASA will build strategic partnerships and linkages between STEM formal and informal education providers. Through hands-on, interactive educational activities, NASA will engage students, educators, families, the general public, and all Agency stakeholders to increase Americans' science and technology literacy.

10 HEALTHY CENTERS

Question. One of the challenges in running NASA is keeping a workforce and the agencies aging facilities running and operating efficiently. You have mentioned in the past of maintaining 10 healthy and productive centers. Not all centers are the same in their health, in fact, some will likely be healthier than others.

Can you give this committee an idea of which centers, in your opinion, are healthier and which ones are not quite as healthy?

Answer. Achieving the Agency's Space Exploration mission is a challenge requiring NASA to draw on all of its expertise and resources. Mission success will depend on ten strong, healthy centers. NASA's Strategic Management Council (SMC) has developed a set of attributes that define strong, healthy Centers as:

—Centers strategically positioned, configured, and operated to support NASA's Mission.

—Centers that are prepared to execute programs and project responsibilities successfully and are prepared to adjust or adapt to changes necessary for future Center and Agency success (i.e., Centers doing the right job with the right number of competently prepared people supported by the right mix of state-of-the-art facilities and the right budget.)

The indicators of strong and healthy centers can be grouped into two major categories:

—*Human Capital*.—The ability to productively utilize the NASA workforce and to adjust workforce size and skills to meet current and future mission requirements and sustain the operations of the center.

—*Physical Capital*.—The quality and utilization of mission and center institutional assets (facilities, buildings, etc.) required to meet not only NASA programmatic goals, but also to sustain national interests while providing for safe and stable center operations.

Human Capital.—NASA plans to assign important spaceflight development activities in exploration and science to all of the Centers. Workforce planning has been more effectively integrated into the annual budget process and the assignment of work to the NASA workforce is supported though a high level of collaboration between the programs and the Centers. Where work demand exceeds available workforce at a center, it is shifted to centers where workforce is available. In the out-years of the budget planning horizon, ARC, GRC, LaRC and DFRC have a small amount of workforce available that have not yet been planned to identified program demand and funding. However, matching work assignments to this workforce is a manageable challenge that we expect to resolve as we complete the development of our fiscal year 2010 budget. An additional measure of workforce health is its scalability. NASA can adjust the size of its workforce through strategies such as buyout and early retirement incentives, hiring controls, and expanded use of non-permanent workforce; i.e., term appointments. At the monthly Baseline Performance Review, NASA senior leadership reviews key workforce metrics to monitor Center workforce health and make adjustments as needed.

Facilities.—The condition of NASA facilities are approximately consistent from Center to Center. Facilities condition varies from Center to Center by 0.7, rated on 0 to 5.0 scale.

Question. If there are centers that are struggling to be healthy, would it not be fair to consider converting a less healthy center into some other instrument that NASA could utilize like a federally funded research and development center (FFRDC)?

Answer. There are currently no large differences in Center health across the Agency, primarily due to the efforts of NASA's leadership over the past three years in assigning exploration and science development work to strengthen and maintain a healthy workforce balance. NASA will continue to face challenges but intends to work proactively and strategically to mitigate issues. In 2004–2005, NASA investigated the possibility of converting the operations and management of some NASA Centers to other organizational models such as FFRDCs, Government Corporations or university consortia. At that time, several Centers had significant issues that contributed to their unhealthy state. Since then, the goal of 10 healthy Centers has been developed and maintained, and NASA is not currently pursuing other organizational models for its Centers.

EXPLORATION ACTIVITIES

Question. You have already touched on what is currently happening in with the Ares and Orion programs. These programs are integral to maintaining our Nation's manned spaceflight activities.

Can you provide us an update on where we are in the schedule?

Answer. NASA's Constellation program has moved beyond being just a mere concept on paper; we are making real progress. We have tested hardware; we have tested landing systems; and we have logged thousands of hours in wind tunnels. So far, the Ares I project has conducted more than 4,000 hours of wind tunnel testing on subscale models of the Ares I to simulate how the current vehicle design performs in flight. These tests support development of the J–2X engine for the Ares I and the Earth Departure Stage of the Ares V. By December 2007, all major elements of the Orion and Ares vehicles were placed under contract. This year, Constellation will be busy with hardware activities which include fabrication of the First Stage Development Motors 1 and 2 for Ares I; complete construction of the Upper Stage Common Bulkhead Demonstration article and also deliver the first Ares I–X demonstration test flight hardware to KSC in October 2008. Orion will be just as busy, culminating the year with a test of its launch abort system at the U.S. Army's White Sands Missile Range (WSMR) in New Mexico.

All activities are progressing to support all planned design reviews. The Ares I and Orion projects recently completed their Systems Definition Review (SDR) and the Preliminary Non-Advocate Reviews that confirmed NASA is employing a strong systems engineering approach to refine the current program requirements and the requirements were properly allocated down to the projects. Orion and Ares I Projects are currently proceeding toward their individual Project level Preliminary Design Reviews (PDR) by the end of the year. These reviews provide opportunities to confirm that the subject activities, products, and process control requirements have been adequately flowed to—and implemented within—the Projects. The Projects, along with the program, are tracking all products required for PDR to insure all data is available on time and at the appropriate maturity level.

Question. Are there any technical issues that NASA is aware of today that will cause the current schedule to slip and make the gap between the Shuttle retirement and Ares and Orion even longer?

Answer. NASA is very confident in the capability of our government and contractor Constellation team, to accomplish this complex system acquisition. We are not dependent on the development of exotic new technologies to make this program a reality. Our challenge is the integration of complex systems that must work together. Issues have and will inevitably arise, but none are expected to delay the Initial Operating Capability of Ares and Orion, set for March 2015.

NASA is continuing the design process for the Orion and is pleased with the progress made so far. The current design configuration establishes a robust vehicle and meets the weight requirements, including meeting the more demanding lunar configurations. However, NASA recognizes that the design is still young and much work remains to be done to complete it. Some of the key areas NASA is following closely with Orion are:

—Crew support for safety;
—Ensuring the vehicle adequately supports the crew in the event of contingency landings when the crew may have to spend an extended period of time in the vehicle prior to recovery by ground support teams;
—Landing scenarios assessment;
—The assessment of mass threats and opportunities against the Orion PDR configuration; and
—Understanding the vulnerabilities of the vehicle design and understanding the Loss of Crew and Loss of Mission probabilities.

Question. What would it take to make these systems come on-line sooner, or are we at a point where no matter how much additional funding is provided, the successful launch of the Constellation vehicles cannot be accelerated?

Answer. Full funding of NASA's fiscal year 2009 budget request for Constellation is needed so that we can continue successful transition between the Shuttle and the Orion and Ares I. The fiscal year 2009 budget request supports Orion IOC in March 2015 at a 65 percent cost confidence and full operational capability (FOC) in fiscal year 2016, though NASA is working to bring this new vehicle online sooner.

In preparation for NASA's fiscal year 2010 budget submission to Congress next year, NASA is beginning to make several new assessments of the program plans, budget available and schedule for the Orion and Ares vehicles. Although those calculations are not final, NASA believes that acceleration to September 2014 IOC may be possible if additional funding for these vehicles beyond what is projected in the fiscal year 2009 Presidential Budget Request were made available.

FINANCIAL SYSTEMS

Question. For several years now this committee has asked about NASA's financial systems. NASA has a recent track record of failing its independent audits. We keep being reassured that the financial system was being improved.

Can you point to any improvements in the way NASA keeps track of its $17 billion in funds?

Answer. NASA has two remaining material weaknesses: Financial Systems, Analyses, and Oversight (FSAO); and, Enhancements Needed for Controls Over Property, Plant and Equipment (PP&E) and Materials. The FSAO material weakness addresses multiple entity-wide internal control weaknesses, identified by the agency's independent auditor. To resolve these issues, NASA has developed a Comprehensive Compliance Strategy (CCS) that focuses on ensuring compliance with Generally Accepted Accounting Principles (GAAP) and other financial reporting requirements. The CCS also covers the standards and requirements necessary to cure deficiencies noted in recent audit and related reports. The CCS serves as the basis for implementing comprehensive proactive corrective actions and provides the guiding principles for executing effective financial management functions and activities with internal control and compliance solutions inherently embedded in the processes.

In the first quarter of fiscal year 2008, NASA undertook an internal review and engaged a nationally-recognized accounting firm to perform an in-depth analysis of requirements for NASA to be in compliance with GAAP and other applicable financial standards, to demonstrate such compliance through auditable evidence, and to operate with robust and comprehensive internal controls. Validation of this framework and plans to implement the required actions to conform NASA policies to this framework were completed in the second quarter of fiscal year 2008. An assessment of the remedial actions necessary is underway, and upon completion of the assessment, timing and phasing for resolution will be determined. The CCS provides the critical path milestones for NASA to resolve the FSAO material weakness.

The Property, Plant and Equipment material weakness is comprised of issues primarily related to the agency's reliance on contractors to "report property values at periodic intervals without robust agency-wide detect controls," and difficulties ensuring the completeness of balances for certain legacy assets.

In November 2007, NASA implemented a new policy and related procedures for identifying the cost of individual assets throughout the asset's acquisition lifecycle. This policy change was based on guidance received from the Federal Accounting Standards Advisory Board (FASAB). These changes support the verification and reconciliation of asset values for those assets developed through new contracts (post November 2007) and certain large pre-existing contracts. For legacy assets, like the Space station and Space Shuttles, NASA does not have the necessary supporting information available to provide auditable book values for the Space Shuttle and the International Space Station (ISS). Together, Shuttle and ISS related assets currently represent over $14 billion of the total $20.6 billion PP&E net asset value reported in the September 30, 2007 fiscal year-end financial statements. While certain of the existing Shuttle and ISS assets will be transitioned for use on other NASA programs, much of this issue may become moot with the passage of time, as the Shuttle is to be retired in 2010, and the ISS is being depreciated based upon a 15-year specification life through 2016. While the ISS depreciation schedule naturally leads to 2016 as an outside date for resolution of this issue, NASA is presently developing and evaluating a variety of alternatives with a view to achieving a more timely, albeit still cost efficient and effective, solution for this issue.

Question. Will we see any improvement in how NASA manages its funds so that it is clear to everyone what is happening with taxpayer funds?

Answer. Even though we still have two material weaknesses outstanding, NASA has high confidence in the current data collected and reported in our financial systems from our contractors and NASA facilities. With this data, we are reporting monthly program status to NASA management and Congressional members and staff. We are actively using this information to make decisions daily about the execution of our programs and projects. Our financial systems permit a comprehensive monthly assessment of the execution status of our projects, helping us to identify which projects might require additional funding, and which may be potential sources for funds re-balancing. You will see operating plan requests that are based upon this level of insight.

Our financial systems now provide standard data reports that can be used by senior managers to assess how well projects are using their appropriated funds and to allow managers to make corrections as needed to ensure proper funds management. Starting last summer, we initiated an Agency-wide effort to ensure efficient use of appropriated funds, with a goal of reducing our end of year unobligated balances by over 40 percent. Through better reporting, better funds distribution processes, and better management tools and standards, we expect to achieve this goal by the end of fiscal year 2008.

Question. In your proposed budget for the Shuttle, there is funding identified through fiscal year 2011. For a vehicle that has been around as long as the Shuttle, I find it hard to believe that the program can be completely closed out in that short of time. What is the plan to fund and perform this close out activity?

Answer. Current plans call for Shuttle transition and retirement real and personal property disposition activities (the long-term item in transition and retirement) to be effectively complete (with no further significant budget impacts to ongoing programs) by about the middle of the next decade. Shuttle transition and closeout began two years ago and the rate of closeout continues to increase as the Shuttle flies out the remaining manifest. The goal, projections, and progress indicate that Shuttle closeout will be well on its way to completion at the end of 2010. NASA will develop estimates for transition and retirement funding needed from 2011 and later during the formulation of the fiscal year 2010 budget. It is important to note that NASA continues to disposition Apollo-era property at a low level even today, thirty-two years after the last flight of an Apollo vehicle.

The in-year resources (i.e., those from fiscal year 2006–10, the end of the Space Shuttle Program) for Transition and Retirement (T&R) activities are already incorporated in the Space Shuttle Program budget line. The out-year costs (i.e., those from fiscal year 2011–15) for T&R activities are being generated now as part of the formulation of the fiscal year 2010 President's Budget request. The budget projection will benefit from trade studies and "what-if" exercises conducted since the development of the fiscal year 2009 request, and will reflect an increasingly mature understanding of Constellation Program requirements. Every time NASA has projected out-year T&R costs, the numbers have decreased. Thus, the Agency didn't want to prematurely commit to a firm set of out-year numbers, since data and trends indicate that transition and retirement costs will be lower than the estimate from 2007. In not "locking in" higher projections, NASA hopes to incentivize people to find the best methods and approaches for the Agency.

Question. What are your observations on the Chinese space program and what does it mean for our Nation?

Answer.

Assessment of Chinese Capabilities to Mount a Human Lunar Mission

Chinese space officials have openly discussed plans to conduct spacewalking demonstrations next year, orbital rendezvous and docking operations by 2010, and a robotic lunar landing mission by 2012. Based upon a careful review of open source information concerning the capabilities of the Shenzhou crew vehicle and the planned Long March 5 rocket, it is my considered judgment that, although China's public plans do not include a human lunar landing, China will have the technical wherewithal to conduct a manned mission to the surface of the moon before the United States plans to return.

While initial Chinese mission(s) to the moon would not have the long-term sustainability of our own plans for lunar return, I believe China could be on the moon before the United States can return.

China is prosecuting a fully indigenous program of human spaceflight development. They have adapted the design of the Russian Soyuz vehicle to create their own Shenzhou, which is more spacious, more capable, and better suited for long duration space missions than its Russian antecedent. China plans to conduct its first spacewalks and orbital rendezvous operations in 2008 and 2010, and to build a small space station in the next few years. All of this has been openly announced. Their accomplishments so far give me no cause to doubt their ability to carry out these plans.

With the first manned Shenzhou flight in October 2003 China surpassed by itself the accomplishments of all six U.S. Mercury missions in the early 1960s. The second Shenzhou flight in 2005 demonstrated most of the accomplishments of the first three U.S. Gemini missions in 1965. They will soon demonstrate the rendezvous and docking capabilities pioneered by the United States in the Gemini program in 1966, by docking a Shenzhou spacecraft with another Shenzhou, or with an orbital module left by a prior mission.

These examples illustrate a fundamental difference between the development of the Chinese human spaceflight program, and that of the United States and Russia. Because China can follow established technical paths, they do not have to verify the basic feasibility of their approach. They need only to demonstrate that their systems work as designed to accomplish tasks which are by now well understood. Thus, each step in space can take them to a new capability plateau, eclipsing the equivalent of several pioneering but tentative steps in an earlier era. The United States required twenty-one human spaceflights to reach the moon in the 1960s. China should not need so many.

The second major initiative for which the Chinese have demonstrated significant progress is the development of the Long March 5 launch vehicle. They have conducted several rocket engine tests over the past two years, and plan to conduct demonstration flights in 2008–11. The Chinese have advertised its capability as 25 metric tons (mT) to low Earth orbit (LEO), rivaling or surpassing the largest expendable launch vehicles available today, which have a capacity of approximately 20 mT, or slightly greater. I believe that China's concerted, methodical approach to the Long March 5 development, along with recent construction of a new launch facility on

Hainan Island, puts them on track to bring the Long March 5 online by 2013–14, their stated intention. NASA's Ares I rocket, which will have similar capabilities, will not be fully functional until March 2015, according to current plans.

Third, China has developed and demonstrated a dual launch processing capability. This capability, together with the 25 mT-to-LEO capacity of the Long March 5, allows China to reach the "tipping point" critical to executing a manned mission to the Earth's moon. As one possible approach, this can be done by means of two dual-launch sequences.

The first Long March 5 would place, in Earth orbit, a lunar lander similar in size and mass to the Apollo Lunar Module, about 14 mT, together with a lunar orbit injection (LOI) stage weighing 6 mT. With a second Long March 5 launch, the lander and LOI stage would be joined in Earth orbit by a 25 mT Trans-Lunar Injection (TLI) stage. The two payloads would rendezvous and dock automatically, as the Russian Soyuz and Progress vehicles do at the International Space Station today. After docking, the TLI stage would send the combined payload to the moon. Injection into lunar orbit would be accomplished by the LOI stage, leaving the lander poised to wait for a few weeks—or even months if necessary—for the second launch sequence.

The second pair of Long March 5 launches would place in Earth orbit a crewed Shenzhou vehicle and LOI stage with one launch, and a TLI stage with the other. As in the earlier sequence, the Shenzhou would rendezvous and dock with the TLI stage, which would send the combined stack to the moon. The LOI stage would decelerate the Shenzhou into lunar orbit, where it would then dock with the waiting lander. The Shenzhou would differ from today's Earth-orbital version in two respects. It would require larger propellant tanks to allow it to depart lunar orbit for the return to Earth, and it might require a thicker heat shield to withstand atmospheric entry upon return from the moon. Neither of these modifications presents a significant challenge. The lunar version of Shenzhou would weigh about 11 mT, considerably less than the 14 mT lunar lander, so the delivery of a lunar-capable Shenzhou to lunar orbit presents no difficulty.

After rendezvous, the Shenzhou crew would transfer to the lander, land on the moon's surface, remain for several days, depart, rendezvous again with the Shenzhou, and return to Earth. (Parameters and assumptions for this scenario are summarized in the attached Technical Notes.)

What is fundamentally different about the dual-launch capability that the Chinese have demonstrated, and could well develop for the Long March 5, is that it enables human lunar missions without requiring a 120 mT class vehicle like the Apollo-era Saturn V, or our planned Shuttle-derived Ares V. This technique is not particularly cost-effective and is not easily scaled to a sustainable operation, but it does offer a path to "boots on the moon" without the development of a heavy-lift launch vehicle.

Apart from the lunar lander itself, this approach requires for its implementation only modest developments beyond the existing Shenzhou and the Long March 5 vehicles. The new elements for a lunar mission are the TLI and LOI stages, which would be essentially the same aside from the size of the propellant tanks employed, and which would utilize the upper-stage engines from the Long March 5, with modest improvements. This is a minor developmental excursion from Long March 5 technology.

China has not announced any intention to develop a human lunar lander. However, I note that China recently launched its first robotic lunar orbiter mission, and has announced plans for a robotic lander by 2012 and a robotic sample return mission in the 2017–2020 timeframe. The developments in communications, tracking, guidance, navigation, and control required to execute robotic lunar orbital and lander missions are identical to those for a manned system, irrespective of whether or not the lander itself is scaleable to human missions. Inasmuch as the design parameters of the Apollo lunar lander are widely known and well within today's state of the art, the development of a similar vehicle by the Chinese should not present a significant problem.

Pending development of a Chinese manned lunar lander, a fly-by or orbital mission around the moon could easily be executed with the Shenzhou spacecraft and a single pair of Long March 5 launches, as outlined above. Indeed, as a matter of prudent engineering development, I would fully expect China to execute such a mission prior to a lunar landing. This would be completely analogous to the inspirational Apollo 8 mission during the Christmas season of 1968.

Question. What do you think we need to do to maintain our advantage in space exploration and innovation?

Answer. NASA should continue to take all steps necessary to retire the Shuttle, which is planned for the end of fiscal year 2010. Retirement of the Shuttle is a critical step in enabling a smooth transition to NASA's exploration program. Full funding of NASA's fiscal year 2009 budget request for Constellation is needed so that we can continue successful transition between the Shuttle and the Orion and Ares I. The fiscal year 2009 budget request supports Orion IOC in March 2015 at a 65 percent cost confidence and full operational capability (FOC) in fiscal year 2016, though NASA is working to bring this new vehicle online sooner. Budget stability in fiscal year 2009 is crucial to maintaining IOC. There is minimum flexibility through fiscal year 2010, so Congressional support for budget stability is critical.

QUESTIONS SUBMITTED BY SENATOR MARY L. LANDRIEU

NASA OPERATIONS AT THE MICHOUD ASSEMBLY FACILITY (MAF)

Question. Given the vast amount of room in the MAF and the green space outside the facility, are there any expected transfer business opportunities from other NASA facilities to Michoud in the next year?

Answer. Since 2006, NASA has been actively supporting diversification of work being performed at the Michoud Assembly Facility (MAF) for NASA and other organizations, and the Agency will continue to do so. Today, MAF is transitioning from being a single-project (External Tank), government-owned, contractor-operated facility, to one being used for manufacturing by several human space flight projects for the Constellation Program. As part of this transition, Ares I Upper Stage and Instrument Unit work is planned for MAF, as well as Orion Crew Exploration Vehicle manufacturing and Launch Abort System work. After completion of the Space Shuttle manifest in 2010, MAF's major use will be the production of the Ares V heavy lift rocket for Constellation.

For the next year, NASA work at MAF is focusing on: continued External Tank production; initial start-up of Constellation Ares I Upper Stage and Orion manufacturing equipment installations; transitioning to a new base operations contractor; and investigation of "enhanced use lease" opportunities by non-NASA entities.

During calendar year 2008, NASA is conducting the competition to select a new "base operations contractor" to operate and maintain MAF for NASA and non-NASA users. The contractor should be selected during fiscal year 2009. One reason NASA has made the change to the way the facility is operated now, prior to the last Space Shuttle External Tank being completed, is to facilitate the goal of enabling diversification of the work being performed at MAF before the last External Tank is completed. This should partially mitigate the workforce disruption at the end of External Tank production.

NASA continues to refine Constellation plans this year, including plans for Ares V launcher design and development. It is possible that these refinements may accelerate Ares V work at MAF into fiscal year 2012 or fiscal year 2011. If so, NASA will inform the Committee.

Question. How about any in the next 5 years?

Answer. NASA is currently investigating the possibility of adding Ares V manufacturing technology demonstrations to MAF over the next three years, prior to the start of full production of Ares V projects at MAF. These assessments will be conducted incrementally over the next two years, and may or may not result in manufacturing technology work assignments, based on budget availability and conflicts with work already at MAF. If work is added, NASA will inform the Committee.

Layouts for NASA floor space at MAF in the fiscal year 2013–2014 show that the great majority of MAF floor space will be used for manufacturing equipment installation for Ares V Core Stage and Ares V Earth Departure Stage (EDS) production. NASA floor plans show MAF floor space utilized at a very high percentage once Ares V development begins. Because MAF utilization is projected as being high for Ares V, and given the cost to programs of changing equipment locations once established, NASA is not currently considering major but temporary (~two years) allocations of production work from other projects to MAF prior to Ares V development.

NASA is currently refining plans to close out Space Shuttle External Tank production after the last Space Shuttle mission in fiscal year 2010. Work to dispose of materials and tooling no longer required for Space Shuttle production and unneeded for Constellation production will be conducted by a subset of the existing MAF contractor workforce. These plans are expected to be completed by October 2008. When these plans are completed and the amount and duration of work to dispose of External Tank manufacturing equipment is understood, NASA will inform the Committee.

Question. Will you commit to do a thorough review of possible transfer opportunities which may help "bridge" employment at the Michoud Facility? (Yes/no)

Answer. As stated in response to the previous question, NASA is currently conducting a competition to select a new "base operations contractor" to operate and maintain MAF for NASA and non-NASA users. The contractor should be selected during fiscal year 2009. One reason NASA has made the change to the way the facility is operated now, prior to the last Space Shuttle External Tank being completed, is to facilitate the goal of enabling diversification of the work being performed at MAF before the last External Tank is completed. This should partially mitigate the workforce disruption at the end of External Tank production.

NASA is also exploring the potential of "bridge" employment at our impacted facilities, which may take the form of cross-training key Shuttle personnel to work on Constellation projects and/or early builds of some Constellation hardware. Also, in preparation for next year's budget submission to Congress, NASA is undertaking several programmatic trade studies for how best to plan and organize Constellation work, including the post-2010 flight test program, with an eye toward enhancing our test program and mitigating workforce impacts as we retire the Space Shuttle and transition to new Constellation Systems.

It should also be noted that the first NASA Transition Workforce Report, submitted to the Committee on March 31, 2008, likely overstated the reduction in local employment at MAF because of the assumptions and caveats listed in that report. NASA continues to refine Ares V development planning, including short term manufacturing demonstration tasks, and these refinements may modify internal government estimates of contracted work to be conducted at MAF from fiscal year 2010 to fiscal year 2015. If there are internal estimate changes, these would be reflected in the next update to the NASA Transition Workforce Report in September 2008.

FUNDING FOR CONSTELLATION PROGRAM

Question. How much in additional funding would have to be added to the fiscal year 2009 NASA budget to close or essentially close the gap between Space Shuttle retirement and the start of the Constellation Program?

Answer. Full funding of NASA's fiscal year 2009 budget request for Constellation is needed so that we can continue successful transition between the Shuttle and the Orion and Ares I. The fiscal year 2009 budget request maintains Orion initial operational capability (IOC) in March 2015 at a 65 percent cost confidence level and full operational capability (FOC) in fiscal year 2016, though NASA is working to bring this new vehicle online sooner. In order to accelerate the Ares I and Orion IOC, and provide for a 65 percent cost confidence level for a September 2014 IOC instead of March 2015, an additional $350 million in fiscal year 2009 and an additional $400 million in fiscal year 2010 would be required.

The Agency is considering a number of options for minimizing the period between Shuttle retirement and the availability of a new U.S. crew transport capability, including maintaining an aggressive development schedule for Orion/Ares I. However, keeping the Space Shuttle flying past 2010 is simply not a credible way to address this issue. The Agency cannot continue flying the Space Shuttle while simultaneously and aggressively developing the next-generation exploration systems under the Constellation program. Maintaining even a minimal capability to launch two Shuttle flights per year after fiscal year 2010 would require nearly the same infrastructure and vendor capabilities we have today, at a cost of approximately $2.7–$4 billion per year, which would likely come at the expense of Constellation development. In addition, the Constellation architecture is designed to take advantage of Space Shuttle infrastructure, production capabilities, and workforce once they are no longer needed for flying the Shuttle. If the Shuttle were kept flying past 2010, these capabilities could not be released for Constellation's modification and use. As a result, keeping Shuttle flying past 2010 would only compound the problem of getting Constellation into service and would not reduce the period between Shuttle retirement and the availability of a new U.S. crew transport capability.

SMALL/DISADVANTAGED BUSINESS UTILIZATION EFFORTS

Question. The Marshall Space Flight Center in Alabama currently has a U.S. Small Business Administration (SBA) Procurement Center Representative (PCR) which assists with small business procurement and technical assistance in that area. It is my understanding that this PCR is responsible for Michoud in New Orleans. Please provide information on the specific duties of this PCR.

Answer. Ms. Barbara (Bobbie) Jenkins is the resident SBA PCR assigned to the Marshall Space Flight Center (MSFC), and is the liaison PCR and provides coverage for: the Stennis Space Center, MS, and NASA Shared Services Center (NSSC), which is located on the same campus as Stennis Space Flight Center, MS; Space and Missile Defense Agency in Huntsville, AL; Anniston Army Depot in Anniston, AL, Fort Rucker, AL, the Naval Facilities Engineering Command PWD Mid-South in Millington, TN, and the Corp of Engineers in Memphis, TN.

Following is a listing of principal duties of this SBA PCR.

The SBA PCR is responsible for representing the SBA at the foregoing assigned installations on all matters pertaining to procurement policy or operations that affect SBA's programs or small business concerns, interest in, or doing business with, these installations. The PCR reviews procurement plans and programs of the installation with the head of the installation or director of procurement. She evaluates their impact on small business and recommends changes to enhance small business participation. She develops individual plans of operation for each installation which will ensure adequate consideration of small business and a fair share of awards to small business.

The SBA PCR takes appropriate action to resolve policy and/or procedural deviations which have significant adverse impact on contract awards to small business anticipated or made by the installation. The PCR reviews types and classes of items to determine which ones can be set-aside for small businesses.

The SBA PCR reviews all significant procurements not set-aside by class action or unilateral action on the part of the installation and takes appropriate action to facilitate individual set-aside action on procurements on which research indicates the expectation of sufficient small business competition.

In some cases, the PCR may also review procurements that have been set-aside for small business to see if they might be suitable for the 8(a) Program or for HUBZone, service-disabled veteran-owned, or women-owned small business; and, if so, the PCR takes appropriate action on a case-by-case basis to facilitate a more targeted set-aside.

As required by Section 8(d) of the Small Business Act (Public Law 95–507), the PCR reviews pre-award proposed subcontracting plans submitted by apparent successful bidders and offerors. The PCR advises the contracting officer if plans provide maximum practicable opportunities for small business in accordance with the statute and regulations. If not, the PCR negotiates with contracting officer to resolve differences.

The SBA PCR develops technical data on specifications and specialized equipment necessary to produce items on which there is limited or no small business competition so as to provide small firms with the opportunity to compete. The PCR reviews local regulations and instructions which have an impact on small business concerns to ensure conformity with the Federal Acquisition Regulations (FAR) and brings deviations that are harmful to small business to the attention of proper procurement officials for correction.

The SBA PCR appeals unwarranted rejections or withdrawals of set-asides to the commanding officer or to the head of the installation, and suspends procurement until the set-aside issue is resolved. If not resolved at the installation level, the PCR prepares and documents files for set-aside appeals to the Agency headquarters level by the SBA Administrator.

The SBA PCR personally develops small business sources for procurements on which such competition is needed or initiates action for other SBA offices to develop such sources. The PCR takes action to assure that competent small business concerns are included on the source list for negotiated procurement.

The SBA PCR studies the history of sole source procurement and recommends specific components for direct competitive purchase by the Government, either through component breakout or breakout under the high dollar spare parts procedures. The PCR studies individual sole source procurement and recommends that complete specifications and drawings be obtained from the sole source contractor when the Government has purchased the rights to them, that competitive procurements be made, and that sources furnished by SBA be given the opportunity to compete.

The SBA PCR conducts interviews with representatives of small business concerns and advises them how and where to sell their products to the Government. She directs them to the cognizant purchasing offices, and, when appropriate, arranges for these firms to contact the proper SBA representative, Certificate of Competency Specialist, Commercial Market Representative, Size Specialist, or Small and Disadvantaged Business Specialist.

The SBA PCR participates in the establishment of small business award goals at installations for which the she is responsible. The PCR evaluates the rationale on which goals are based and negotiates with procurement officials for the raising of targets when data warrants such action.

The SBA PCR conducts periodic seminars for interested small businesses, either alone or with other Federal agencies, to provide an update for the small business community in the area regarding changes in procurement regulations and/or policies which affect them.

The SBA PCR is responsible for the screening, identification, and referral of all procurements to be used in the 8(a) programs nationally at the installations covered.

Question. Does this PCR also cover the Stennis Space Flight Center in Mississippi?

Answer. Yes, as noted above, Ms. Jenkins also covers the Stennis Space Flight Center.

Question. Please provide information on the status and whether there is any demonstrated success of current Michoud small business utilization efforts.

Answer. The attached chart contains the actuals of the two major contracts currently being performed at Michoud Assembly Facility by the Lockheed Martin Corporation. As reflected in the chart, on the External Tank contract, Small Businesses are receiving 21 percent of the total contract value, which equates to $471.2 million, and on the Facility Operations contract, Small Businesses are receiving 21.3 percent of the total contract value, which equates to $42.3 million. Lockheed is exceeding the negotiated small business goals for both of these contracts.

LOCKHEED MARTIN CORPORATION MICHOUD ASSEMBLY FACILITY EXTERNAL TANK AND CONSOLIDATED FACILITY CONTRACTS

	Awarded to SB of total award		Facility NNM04AA02F	Percent Achieved
	Amount	Percent		
Current Contract Amount	$2,247.7		$98.4	
Small Business	$471.2	21.0	$42.3	21.3
Small Disadvantage Business	$109.3	4.9	$22.5	11.3
Woman Owned Small Business	$71.5	3.2	$2.6	1.3
HUBZone			$.4	.2
Veteran Owned Small Business			$14.8	7.5
Small Disadvantage Veteran Owned Small Business			$.2	.1

Note: The external tank contract is NAS8–00016, and the facility contract is NNM04AA02F. Lockheed Martin provides this support to MSFC at the Michoud Assembly Facility in New Orleans. These are MSFC contacts.

ENHANCED USE LEASE AUTHORITY

Question. Describe the estimated workforce impact of the expanded Enhanced Use Lease authority on the ability to provide additional employment opportunities at Michoud over the next five years.

Answer. Enhanced Use Leasing (EUL) will support NASA's efforts to develop underutilized real property at the Michoud Assembly facility (MAF), offsetting job losses from the sunset of the External Tank project. EUL will provide a benefit that will assist in marketing and developing new tenants. It will also allow NASA more flexibility in using the income to help reduce the cost of maintaining this national asset.

MAF is playing a major role in the Constellation program including the manufacture of the Orion Command Module structure, the Service Module structure, and the Ares I Upper Stage at MAF. Starting in 2012, manufacturing of Ares V Boost Stage, and Ares Earth Departure Stage are planned for MAF as well. There is significant potential and incentive for private entities to locate on the site to take advantage of common pursuits. Enhanced Use Leasing can support and provide a vehicle for these pursuits. Commercial use of the space, by tier 2, 3, or 4 Space program suppliers is expected. The proximity of suppliers can increase their understanding of NASA program requirements and ease product delivery, expanding the skill base and workforce pool needed to execute NASA's next generation of vehicles.

While it is too early to project workforce estimates, NASA's keen interest in preserving the talented workforce at MAF will be key to EUL developments. Enhanced Use Lease will allow MAF to either reduce or avoid increases to its facilities overhead burden and to develop revenue streams for sustaining certain facilities and infrastructure.

NASA MAF has met with other Federal and NASA EUL implementers, such as the Department of Energy Oak Ridge National Laboratory, to discuss their business model for developing their science and technology park. MAF has specific, unique capabilities which can be utilized or expanded by EUL partners. These capabilities include extensive infrastructure for design, manufacturing, and testing of extremely large aerospace structures; their transportation and handling including a deep-water port; and the specialized environmental permits, wastewater treatment capability, and compliance management for large vehicle manufacturing.

Question. Does NASA recommend any additional steps that can be taken by the State of Louisiana to take full advantage of this expanded authority at Michoud?

Answer. As the Senator is aware, MAF hosts the National Center for Advanced Manufacturing (NCAM), a Federal, State, and University sponsored partnership. The NCAM is currently involved in discussions with the State to assess workforce retraining and benefit strategies to make sure the current MAF workforce can have full access to proper training to attract potential new tenants.

ADDITIONAL BRIDGE EMPLOYMENT EFFORTS

Question. I would be interested if NASA could provide some specific recommendations for priority areas that Congress and the State of Louisiana can work with NASA to provide significant "bridge" employment to help retain workers at the Michoud facility.

In particular, are there any other Federal government programs, such as those at the Economic Development Administration, the Small Business Administration's Historically Underutilized Business Zone (HUBzone) Program, or Department of Labor assistance programs which could help the economic impact of workforce reductions at the Michoud Facility?

Please provide any additional areas that the Congress and/or State of Louisiana could help provide bridge employment at the Michoud facility.

Answer. NASA does not have a recommendation at this time. Lockheed-Martin, the prime contractor at the Michoud Assembly Facility (MAF) for the Space Shuttle Program External Tank, is investigating employee placement and potential new "within the company" work assignments to MAF as a facility user following the end of External Tank production. NASA will continue to investigate alternate business opportunities for the MAF workforce skill types and identify these to the Committee and Lockheed-Martin when known. NASA will investigate, during fiscal year 2009, assistance from other Federal Government programs to affect economic impact from MAF work changes.

QUESTIONS SUBMITTED BY SENATOR DIANNE FEINSTEIN

Question. The Western United States depends upon information collected by the thermal infrared instrument (TIR) on the NASA Landsat satellite to measure and monitor water supply and use. However, I understand that you have stated that building the TIR will delay the launch schedule for Landsat 8. Other than funding, are there any other factors that would preclude you from building the TIR and including it on Landsat 8 without delaying the scheduled launch?

Answer. There are no substantial technical challenges associated with adding a thermal infrared (TIR) instrument to the Landsat Data Continuity Mission (LDCM). The challenges are in cost and schedule. TIR is not in the LDCM cost baseline, as the LDCM conceptual design did not include a requirement for thermal imaging. The schedule challenge arises from the risk of lengthening the potential data gap between Landsat 7 and LDCM, although NASA's current schedule projections for LDCM regardless of whether it flies a TIR indicate that the mission will not be ready for a July 2011 launch as originally planned.

Question. NASA facilities and contractors in California are helping to develop and build the Orion Crew Exploration Vehicle for the Constellation Program; and many key components for the Space Shuttle program. The current shuttle fleet is scheduled to be retired in 2010, leaving the United States without domestic capacity for manned space flight. What level of funding is needed to restore NASA's manned space flight capacity before 2015?

Answer. Full funding of NASA's fiscal year 2009 budget request for Constellation is needed so that we can continue successful transition between the Shuttle and the Orion and Ares I. The fiscal year 2009 budget request maintains Orion initial operational capability (IOC) in March 2015 at a 65 percent cost confidence level and full operational capability (FOC) in fiscal year 2016, though NASA is working to bring this new vehicle online sooner. In order to accelerate the Ares I and Orion IOC, and provide for a 65 percent cost confidence level for a September 2014 IOC instead of March 2015, an additional $350 million in fiscal year 2009 and an additional $400 million in fiscal year 2010 would be required.

The Agency is considering a number of options for minimizing that gap, including maintaining an aggressive development schedule for Orion/Ares I. However, keeping the Space Shuttle flying past 2010 is simply not a credible way to address this issue. The Agency cannot continue flying the Space Shuttle while simultaneously and aggressively developing the next-generation exploration systems under the Constellation program. Maintaining even a minimal capability to launch two Shuttle flights per year after fiscal year 2010 would require nearly the same infrastructure and vendor capabilities we have today, at a cost of approximately $2.7–$4 billion per year, which would likely come at the expense of Constellation development. In addition, the Constellation architecture is designed to take advantage of Space Shuttle infrastructure, production capabilities, and workforce once they are no longer needed for flying the Shuttle. If the Shuttle were kept flying past 2010, these capabilities could not be released for Constellation's modification and use. As a result, keeping Shuttle flying past 2010 would only compound the problem of getting Constellation into service and would not reduce the period between Shuttle retirement and the availability of a new U.S. crew transport capability.

Question. The United States faces an imminent gap in both cargo and crew carriage to the International Space Station after retirement of the Shuttle in 2010. If NASA were to pursue domestic carriage through the exercise of the COTS Capability D (manned) option, how quickly could this occur, how much would Capability D cost over what period of time, and when is the soonest date that a domestic, commercial provider could become available?

Answer. NASA estimates that industry would require a development period of between 3–6 years until a fully operational Capability D for crew transportation and rescue services would be available. Even if Capability D becomes operationally available during this timeframe, NASA will still need to purchase Russian Soyuz crew transportation and rescue services to fill any gap between Shuttle retirement and the projected Capability D operationally available date. NASA prefers to purchase U.S. commercial crew transportation and rescue services once they have been demonstrated rather than purchase Russian Soyuz services.

Credible industry proposals for Capability D would need to take into consideration an extended development period, major financial investments, and high infrastructure costs. In order for NASA to initiate the first phase of a Capability D option, funding on the order of a few hundred million dollars per partner would have to be made available through the development period. NASA estimates that an industry partner would have to spend well over $1 billion in the development of Capability D, either from company reserves or from outside investments in addition to the NASA funding. NASA believes that a co-investment approach would appropriately balance the government's contribution with the desire to stimulate the market and ensure commitment from industry for a follow on procurement of demonstrated crew transportation services. This approach would be consistent with the current funded Space Act Agreements with SpaceX and Orbital Sciences Corporation for development and demonstration of cargo delivery.

Question. Are you confident that the Joint Dark Energy Mission that results from NASA's competition will be within the range of all of the explicit scientific objectives and expectations laid out by the National Research Council in its report on "Beyond Einstein" missions?

Answer. Yes. From the National Academies' National Research Council's major findings, a Joint Dark Energy Mission (JDEM) mission will set the standard in the precision of its determination of the distribution of dark energy in the distant universe. By clarifying the properties of 70 percent of the mass-energy in the universe, JDEM's potential for fundamental advancement of both astronomy and physics is substantial. A JDEM mission will also bring important benefits to general astronomy. In particular, JDEM will provide highly detailed information for understanding how galaxies form and acquire their mass.

NASA will use the National Academies' National Research Council's report and other related reports in preparing the Announcement of Opportunity (AO) for JDEM science investigations. Potential to meet JDEM science objectives will be a principal selection criterion. NASA continues to work with ESA and others to prepare for future missions such as LISA and Con-X to meet additional objectives of NASA's Physics of the Cosmos program which include the Beyond Einstein science.

Question. The proposed budget transfers the space communications networks from Science to Space Operations. What is the purpose of this transfer and will funding for these activities be fully maintained after the transfer?

Answer. The consolidation of the Agency's Space Communications and Navigation (SCaN) activities under a single management organization will move NASA away from individual solutions, providing instead an integrated, efficient and effective approach to meeting NASA's evolving SCaN needs. As part of this consolidation, NASA transferred all budgetary matters related to SCaN to this new organization, presently known as the SCaN Program Office (within the Space Operations Mission Directorate). The SCaN Program Office will draw on the commonality in the hardware, software and operations in the existing networks to integrate all of these networks under a single architecture, capable of meeting all of NASA's growing SCaN needs. The efficiency that NASA can achieve from this integration will provide the Agency with more effective SCaN services into the future and will enable the leveraging of cost savings into upgrading and modernizing the aging SCaN infrastructure. NASA anticipates that all existing activities will not only be maintained, they will also be enhanced to more effectively enable NASA's spaceflight and exploration missions.

SUBCOMMITTEE RECESS

Senator MIKULSKI. The subcommittee stands in recess until April 10 when we will take testimony from the Attorney General. Thank you very much.

[Whereupon, at 11:05 a.m., Thursday, April 3, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2009

THURSDAY, APRIL 10, 2008

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Leahy, Feinstein, Shelby, and Alexander.

DEPARTMENT OF JUSTICE

ATTORNEY GENERAL

STATEMENT OF HON. MICHAEL B. MUKASEY, ATTORNEY GENERAL

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Good morning, everyone. The Subcommittee on Commerce, Justice, and Science will come to order.

Today, the subcommittee will take testimony from the Attorney General of the United States, Mr. Mukasey. We welcome him for his first appearance here and look forward to a very straightforward, candid conversation.

We have been informed that at approximately 11 o'clock, there will be a series of votes on budget issues affecting our housing foreclosure situation.

We're going to do our best to finish the hearing in the next hour. To that end, I'm going to ask unanimous consent that my full opening statement be in the record. I'll say a few remarks, turn to my able colleague, Senator Shelby of Alabama, who, too, has responsibilities on the floor this morning. We understand our colleague, Senator Alexander, is offering an amendment in 15 minutes on the Senate floor and we know he wants to pose a question to the Attorney General and get an answer in writing from the Department.

This morning is a hearing on the budget for the Department of Justice (DOJ). It is a very important hearing because this year's appropriation, when we pass it, will be the operating budget for the first year of the next president.

We need to understand that the fiscal year begins October 1. We'll get a new president on January 20. That new President will inherit what we present to him in the operating budget of the Department of Justice.

To that end, we have to be very clear on what our national priorities are. We have to do all we can to work with the Attorney General in restoring the integrity of the Justice Department, improving morale at the Justice Department, and at the same time meeting our very serious domestic responsibilities of: fighting violent crime, protecting women, protecting children, and making sure that the grassroots law enforcement is a partner with the Federal Government. This is what our focus of our hearing will be.

We'll also look at accountability at the Justice Department and make sure that we are stewards of the taxpayers' dollars. We know that the Justice Department has faced many challenges over the last several months. There's been the torture memos, the firing of U.S. Attorneys, the FBI's national security letters being mismanaged and problems with the terrorist watch list, and the reforms called for in the 9/11 Commission report have not been fully implemented.

We're also deeply concerned about the overall budget at the Justice Department. The Justice Department has been cut by 2 percent. That doesn't sound like a lot but when we look at the responsibilities of the Justice Department, we see they have responsibilities ranging from enforcing our antitrust laws to enforcing our civil rights laws as well as the role the Justice Department is supposed play by offering grants to State and local governments.

Number 1, to fight violent crime where there is a terrible surge in violent crime. Violent crime is up, murders, rapes, and other heinous activity continue to rise. We need to make sure local law enforcement is partner with us and we're a partner with them. We're deeply concerned about the slashing cuts to the COPS Program and to the Byrne JAG program.

Then we look at those crimes that are just despicable. Despicable crimes are crimes against children. As a former child abuse worker, I feel very passionate about this. Sexual predators stalking our children, child abuse, and attacks on women continue to plague our communities. So, we do not cut these important programs as the President proposes—we're very concerned about the drastic cuts and the elimination of programs like Adam Walsh, and the Violence Against Women Act proposed by the President.

We note that the YWCA is here, as they always are, standing up for women. We wear our colors with you today in solidarity.

You can applaud but just know that we and the good men up here are in solidarity with you.

We also want to be accountable and we want to look at the grant programs to make sure that every dollar we have counts. No more $4 Swedish meatballs. We're going to make sure that when we issue those grants, that they are done in a timely manner and subject to rigorous peer-review process.

There are many issues that I will raise in my questioning, but I think it's time now to move to the substance of our hearing and I would turn to Senator Shelby.

STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you, Madam Chairwoman, and Mr. Attorney General, thank you for joining us here today to discuss your budget with the Department of Justice.

The total Department of Justice budget for the fiscal year 2009 is $22.9 billion. This is $500 million or 2 percent decrease below the fiscal year 2008 level.

While the Department of Homeland Security request from the administration has grown seven to 10 percent each year since its inception, the Justice Department request continues to shrink by 2 to 3 percent each year.

The chairwoman and I are concerned about the Justice Department continuing to be the world's premier law enforcement entity with these continuous decreasing budgets.

As I've said in the past, the budget constraints placed upon us will once again force us to make touch decisions. The chairwoman has covered most of the budget in her opening statement, so I won't repeat all that, but I do have a number of issues I think we need to discuss here today.

First, I want to recognize and extend my appreciation to the men and women of the Justice Department who protect this country from terrorism and crime each and every day. We all owe them a debt of gratitude.

As in past years, the administration continues to propose eliminating State and local law enforcement programs which is troubling. These programs are the lifeblood of police departments throughout the Nation. I will join with the chairwoman in rejecting the proposals.

The U.S. Marshals Service, regional fugitives task force, track down and apprehend the dangerous fugitives on our streets. The fugitives are some of the worst of the worst, usually averaging more than four prior arrests per fugitive.

The six regional task forces arrested approximately 95,000 felony fugitives last year. These task forces are proven and multiply. The Marshals Service may be the smallest Federal law enforcement agency but they have arrested more fugitives than all other Federal agencies combined, yet there are no new resources for their efforts in the budget.

The National Center for Missing and Exploited Children, which Senator Mikulski mentioned, estimates there are currently more than 100,000 sex offenders who have failed to register as required under the Adam Walsh Act. These predators are working, attending school, and living in proximity to our children unbeknownst to the parents and law enforcement officials.

The Marshals Service is the lead agency in the enforcement of the Adam Walsh Act. The Congressional Budget Office conservatively estimates it would cost $220 million over a 5-year period for the Marshals Service to hire 350 new deputy marshals as required by the law, to locate and hunt down these unregistered sex offenders.

John Walsh said the following after the signing of the act, and I quote, "Legislation without the resources to back it up is nothing more than a photo op and yet the Department has requested no new resources for 2009 to reduce the number of sex offenders from our streets."

Is this giving sex offenders a free ride? What kind of message does this budget send? The administration also proposes to task the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) with additional Southwest border responsibilities, highlighting cross-border arms trafficking, yet only a paltry $948,000 out of $100 million is requested to carry out this mission.

This means that the ATF agents investigating violent crime, arson and gang-related activities will be relocated to the border. The baseline request in this budget doesn't even support the existing missions of the law enforcement agencies in the Department of Justice.

There's no doubt we have a crisis on the Southwest border. Fund the Southwest border enhancement at the levels requested will remove the Drug Enforcement Administration (DEA), ATF, the Federal Bureau of Investigation (FBI) and U.S. Marshals Service from our communities. These communities are already stretched in dealing with increased crime and receive less fiscal support from the Department of Justice.

Mr. Attorney General, it's been brought to my attention that individuals in the National Institute of Justice (NIJ) have attempted to derail the 2006 report language that we requested directing the National Academy of Sciences to conduct an independent forensics study.

Once completed, this study will produce an unbiased and, we hope, independent assessment of the present and future needs of the forensics community, providing a roadmap of best practices.

Current and former employees of the National Institute of Justice, along with lobbyists and contractors, have attempted to undermine and influence the National Academy study. On December 17 and 18 of this past year, the Deputy Director of the National Institute of Justice even convened a counterproductive forensic summit here in Washington. Many of the attendees deemed the summit a huge waste of more than $300,000 in taxpayers' funds.

Also while investigating this matter, our staff discovered potential conflicts of interest, unethical behavior and a serious void of transparency where lobbyists, including former DOJ employees, were contracted to NIJ to conduct policy-forming studies and surveys. These same lobbyists, while writing these unbiased policies for the Department of Justice, are also representing clients whose business success depends on the results of the studies and surveys that lobbyists conducted.

I'm not so sure the seriousness of this matter has the full attention of the leadership of the Department of Justice. I hope and encourage you to check into this matter.

I would be remiss if I did not express my dismay at the Department's position or lack thereof on the recent passage of the Second Chance Act. In what will be a year of tough budget decisions, numerous re-entry, recidivism prevention, and prisoner education studies and programs were created.

Most of the programs and studies already exist, yet the Department of Justice was silent throughout the process. A lot of us are troubled by section 231 related to prisoner re-entry procedures that “ensure that priority is given to the re-entry needs of high-risk populations, such as sex offenders and career criminals.

To a degree, I believe in re-entry and any recidivism programs, but in a tight budget year when we have to make choices, I think we should prioritize and ensure that the needs of victims and law enforcement officers are supported before giving any consideration whatsoever to the welfare of criminals.

There are currently more than 70 programs at DOJ. Each program has its own constituency, you know. This legislation provides more welfare and career counseling by pedophiles and career criminals on our bill than we give to victims and most of our children.

Sex offenders, a lot of people believe, cannot be rehabilitated, yet this bill would give them priority in receiving Federal taxpayer assistance to reintegrate into our neighborhoods.

The Department should be extremely proud of its personnel stationed overseas. The ATF, FBI, DEA, Marshals Service, and U.S. attorneys all play vital roles in protecting our country.

I understand the chairwoman has endorsed the efforts to provide Byrne State and local law enforcement funding in the upcoming emergency supplemental bill and Senator Mikulski knows we all have our support.

Last, Mr. Attorney General, you have a lifetime appointment as a Federal judge in the Department of Justice. Since your arrival, morale has risen and we’re seeing signs that you’re having success in the rising shift. I commend you for that and congratulate you for your efforts and your commitment.

Thank you for appearing before us today.

Senator MIKULSKI. Thank you, Senator Shelby. We are not having opening statements by other members, but we want to get to their points quickly, Mr. Attorney General, but we note that Senator Alexander has to leave at 10:20 to offer an amendment on the Senate floor.

Senator, I know you want to just ask your question and that way, it will ensure that your question gets asked, but we’ll save the answer when the Attorney General gets the answers to questions.

Senator ALEXANDER. Thank you very much, Madam Chairman, and thank you for your service, Mr. Attorney General.

I can pose my question in 2 minutes. This is the 1-year anniversary of Nashville’s participation in the 287(g) program whereby local law enforcement officials are trained to identify illegal immigrants. The number identified has risen from 150 to 3,000. The majority of those are transported to Oakdale, Louisiana, through Perry, Alabama, for their bond hearing.

My question is: Given the increase from 150 to 3,000, and given the fact that it would save Federal tax dollars not to transport them to Oakdale, Louisiana, where they have a 26-hour bus ride home, and given the fact that we’d like to process illegal immigrants more speedily, and as an element of fairness to the defendants who have to pay for their own bus ride home, would you be willing to seriously consider placing an immigration judge in Nashville where there are 400 vacant beds in the metro jail and all this could be done more quickly?

I thank the chairwoman for her time and I’ll look forward to a written answer.

Senator MIKULSKI. Thank you very much, Senator Alexander.

Mr. Attorney General.

Attorney General MUKASEY. Good morning, Chairwoman Mikulski, Ranking Member Shelby, Senator Leahy, Senator Feinstein, Senator Alexander, other members of the subcommittee.

I'm here to present the president's fiscal year 2009 budget for the Department of Justice. I was advised both before the hearing and during the chairwoman's remarks that this will be a somewhat abbreviated hearing and so I'm going to try to abbreviate my own introductory remarks on the fly as I give them so that I don't use up an inordinate amount of time.

But I do want to say that since my nomination was approved by the Senate and I arrived at the Department, I've confirmed what I hoped and expected to find, namely men and women who are talented, who are hard working, who are dedicated to fulfilling the Department's historic mission. As you're aware, the Department is charged with defending the interests of the United States, according to the law, ensuring public safety against threats, both foreign and domestic, and seeking just punishment for law-breakers, assisting our State and local partners and ensuring fair and impartial administration of justice for all Americans.

I have looked for opportunities during my tenure to work with Congress to ensure that the Department is provided the statutory tools and the necessary resources to fulfill those important mandates and I'm here to continue to do that.

The Department relies on funding from this subcommittee to pursue our mission and enhance our efforts in the areas that need it, and I thank you very much for your continued support of the Department.

I very much look forward to continuing to work with each of you this year to advance the budget that will help achieve that mission.

My written statement addresses in detail the Department's budget. Obviously I'm not going to go into the detail that's addressed in that statement.

The total request is $22.7 billion. Those funds will allow us to accomplish our broadbased mission and to focus on several of the priorities that I've had occasion to discuss in other settings. Those priorities include national security, violent crime, immigration and border security as well as public corruption.

Now, we've advanced enhancements. First, the proposal to increase the resources dedicated to the national security in counterterrorism by $492.7 million, which includes resources that are necessary to improve the counterterrorism programs that are contained in the National Security Division and the Federal Bureau of Investigation.

Second, the budget dedicates an additional $100 million to the Southwest Border Enforcement Program. Those funds will provide essential resources, personnel and infrastructure that are required to address illegal immigration, drug trafficking, gun smuggling across the Southwest border.

Third, the budget requests funds to support essential Federal detention and incarceration programs that provide the infrastructure necessary to the Department's law enforcement personnel and prosecutors to carry out those responsibilities. I believe the enhancements there total approximately $67 million.

As programs, such as Project Safe Neighborhoods and the Southwest border initiative, investigate and prosecute dangerous criminals, the Department has to be ready to keep those individuals in a safe, secure and humane environment that also assures the safety of our staff in those prisons.

And finally, the budget fully funds the base and reflects the Department's strategy to work in partnership with State and local and tribal authorities and to target funding to address the most significant needs in each of our communities. It's our collective obligation to ensure that those resources, whether spent on Federal efforts or in support of our State and local partners, are used wisely and in a way that's calculated to achieve the most significant impact.

Thank you for the opportunity to present this budget, and I thank you for inviting me to be here today. I'm going to try to answer any questions that you might have, including the questions that were posed by Senator Alexander before he had to leave.

[The information follows:]

IMMIGRATION JUDGES IN NASHVILLE

The Department of Homeland Security (DHS) is responsible for the detention and transportation of aliens within their custody. Immigration judges are part of the Department of Justice, Executive Office for Immigration Review (EOIR). Immigration judges adjudicate cases of aliens who are placed in removal proceedings by DHS and charged with violations of the immigration laws.

The volume, nature, and geographic concentration of immigration judge caseload is tied directly to initiatives undertaken by DHS. In general, however, not all cases identified under 287(g) programs are cases that necessarily result in a hearing before an immigration judge. In appropriate cases, DHS may elect to use alternatives, such as reinstatement of removal orders against aliens who had previously been ordered removed.

With respect to the location of hearings before an immigration judge, EOIR holds immigration hearings in over 50 immigration courts and numerous other hearing locations. For cases involving detained aliens, immigration hearings can occur at certain federal, state, and local correctional facilities and DHS detention facilities. When the caseload does not support the opening of a full-time, independent court, EOIR works with DHS to maximize immigration judge resources by use of video or telephone conferencing at various hearing locations or scheduling traveling immigration judges to appear on a routine basis.

In fiscal year 2007, over 9,100 cases were received and completed in the Oakdale Louisiana Immigration court, a significant increase over previous fiscal years. Most individuals who are detained for immigration violations in Nashville and who need to go before an immigration judge are ultimately transported by DHS to Oakdale, based on DHS's regional processing plan.

Currently, Tennessee has an immigration court in Memphis with two immigration judges. Cases received in Memphis are adjudicated in a timely manner and include cases of aliens primarily from Tennessee and Arkansas. Individuals detained in Nashville, Tennessee who seek bond hearings may file in the Memphis court for a telephonic hearing. Should DHS begin detaining aliens in Nashville, the Department of Justice would work with DHS to identify the appropriate immigration judge resources needed to adjudicate the cases.

Attorney General MUKASEY. Thank you very much.

Senator MIKULSKI. Thank you very much, Mr. Attorney General.

[The statement follows:]

PREPARED STATEMENT OF MICHAEL B. MUKASEY

Good morning Chairwoman Mikulski, Ranking Member Shelby, and Members of the Subcommittee. It is my pleasure to appear before you today to present the President's fiscal year 2009 budget for the U.S. Department of Justice (Department). Before I begin, I would like to thank you for your continued support of the Department's mission and your recognition of the important work that we do.

The Department is charged with defending the interests of the United States according to the law; ensuring public safety against threats both foreign and domestic; seeking just punishment for lawbreakers; assisting our state and local partners; and ensuring fair and impartial administration of justice for all Americans. The Department's ability to pursue this mission is dependent on the funding that supports our operations and allows us to enhance our efforts in the areas that need it.

The President's budget request for the Department in fiscal year 2009 is $22.7 billion, which will allow us to accomplish our broad-based mission and provide a particular focus on the following critical areas: national security, violent crime, immigration and border security, and public corruption. More specifically, the President's fiscal year 2009 budget request:

—reflects a 6 percent total increase over the fiscal year 2008 enacted budget for law enforcement and prosecution programs;
—increases the resources dedicated to national security and counterterrorism efforts by $492.7 million;
—enhances the Department's capacity to address violent crime through a strategy to target grant funding to the places and problems that need it most;
—dedicates an additional $100 million for the Southwest Border Enforcement Initiative to enforce federal laws, including immigration laws, along the border; and
—continues the Department's focus on prosecuting public corruption.

During a time of limited resources and tough decisions, I am grateful that the Committee continues to support the Department's mission and these priorities.

Understanding that our time together is limited, my testimony today highlights key budget priorities that support our efforts to enhance national security and protect our homeland. Although we have a number of key priorities for which we are requesting enhancements, I want to emphasize that one of our goals is also to fund base operations for the Department and its missions. I will also discuss the Department's proposal to target state and local funding in a way that supports these priorities and leverages our limited resources.

First, since the devastating attacks of September 11, 2001, the Department has mobilized its resources to help protect the Nation. In that time, this Committee has strongly and repeatedly shown its support of the Department's efforts in the war against terror. The President's fiscal year 2009 proposal asks this Committee to continue its support by providing the Department with the resources necessary to expand and improve the counterterrorism programs of the National Security Division and the Federal Bureau of Investigation.

Second, the budget seeks funds to improve the Department's ability to combat crime along the Southwest Border. This budget request takes into account the full range of essential resources, personnel, and infrastructure required to address illegal immigration, drug trafficking, and gun smuggling across that border.

Third, the budget requests funds to support essential federal detention and incarceration programs that provide the infrastructure necessary for the Department's law enforcement personnel and prosecutors to carry out their responsibilities. As programs such as Project Safe Neighborhoods and the Southwest Border Enforcement Initiative investigate and prosecute dangerous criminals, the Department must be ready to segregate those individuals from the general population in a safe and secure environment.

Finally, the budget reflects the Department's strategy to work in partnership with state, local, and tribal authorities and target funding to address the most significant needs in those communities. It is our collective obligation to ensure that our resources—whether expended on federal efforts or in support of our state and local partners—are used wisely and in a way calculated to achieve the most significant impact.

NATIONAL SECURITY: PROTECTING THE AMERICAN PEOPLE BY PREVENTING TERRORIST ACTS

As I testified during the Department's oversight hearings earlier this year, since the terrorist attacks of September 11, 2001, the first priority of the Justice Department has been to protect Americans from the threat of international terrorism. All aspects of what the Department does, from budget, to allocation of resources, to policy development and legislative priorities, must continue to reflect this critical aspect of our mission and the reality of the world in which we live. According to the National Intelligence Estimate released last summer, al Qaeda has "protected or re-generated key elements of its Homeland attack capability" and continues to look for "prominent . . . targets with the goal of producing mass casualties . . ." As a result, the Department must continue to work aggressively to investigate and prosecute terrorists, and we must do so effectively and efficiently. To that end, the Department has expended substantial time, energy, and resources in improving and streamlining the organization and operations of its counterterrorism assets. In just two years, the Department has created and brought into full operation the National Security Division (NSD), which is dedicated to centralizing and improving the Department's ability to carry out its primary national security functions. Similarly, the FBI has dramatically improved and, in some instances, completely recreated its counterterrorism and intelligence collection activities. These improved efforts have allowed the Department to utilize its resources and its expertise to investigate, thwart, and prosecute terrorist conspiracies more swiftly and more effectively.

The importance of the Department's national security efforts is reflected in the President's fiscal year 2009 budget, which requests an additional $492.7 million to improve the Nation's counterterrorism capabilities to investigate, identify, track, and dismantle terrorist cells operating in the United States and abroad. Although these funds are allocated for numerous programs and policies, I would like to discuss three particular priorities in the national security realm: (1) providing the National Security Division with the resources it needs to continue its successful and critical operations; (2) providing the FBI with necessary funding; and (3) creating a critical wireless network for law enforcement operations.

National Security Division

The Department created the National Security Division (NSD) in 2006 to combat terrorism and other national security threats more effectively. NSD has been critical to coordinating the Department's law enforcement, prosecution, and intelligence functions in the fight against terror. As a result of the nature of its work, the Division's successes are not always public. But some efforts are, for example the trial and conviction of Jose Padilla in the Southern District of Florida, and the indictment and conviction of several individuals who sought to profit from illegally providing sensitive national security information to China. To ensure the continued viability of this important contributor to the Department's counterterrorism efforts, the President's fiscal year 2009 budget requests $84 million in total resources to maintain the operations of the National Security Division.

Federal Bureau of Investigation

The men and women of the FBI have provided a visible and vital role in protecting the Nation's security. Since the attacks of September 2001, the FBI has implemented a comprehensive plan that has overhauled the FBI's counterterrorism operations, expanded its intelligence capabilities, begun to modernize its technology, and improved its coordination with federal, state, local, and tribal partners. The more than 30,000 agents and professional staff of the FBI work tirelessly to protect this country. They do so from 56 domestic field offices and 60 additional locations around the globe. In recognition of the broad scope of the FBI's role in protecting the American people, the fiscal year 2009 President's budget requests $7.1 billion for the FBI, an increase of 6.77 percent. An investment of $447.4 million will support the FBI's intelligence and counterterrorism programs, improve surveillance capabilities, guard against and respond to incidents involving weapons of mass destruction, protect the security of the Nation's cyber systems, and add 280 new agents and 271 new intelligence analysts.

Investigations, intelligence, and surveillance are the key tools in the fight against terrorism. The fiscal year 2009 President's budget recognizes the importance of the investigative and intelligence arms of the FBI with an enhancement of $235.5 million slated for operations focused on identifying and analyzing national security and criminal threats. This amount includes resources for national security investigations; cyber security detection and prevention; and foreign intelligence gathering and operations. To meet the expanding demands to produce and use intelligence to protect the Nation from threats, an additional $43.4 million will be used to strengthen the FBI's professional workforce to ensure that it has the critical skills, competencies, and training to fulfill the FBI's mission. To support surveillance technology, an additional $88.5 million is requested to sustain operational requirements, including physical and electronic surveillance and collection processing exploitation, analysis and reporting.

Promoting partnerships both here and abroad is critical to the success of many initiatives. Since September 11, the Department of Homeland Security has supported the establishment of approximately 35 operational fusion centers. These fusion centers foster information-sharing between local, state, and federal partners to identify and assess emerging threats to the United States. The Department of Justice has been an integral partner in these efforts and has dedicated personnel and resources to the fusion centers. Together, we have been able to leverage existing information-sharing tools and resources. The FBI request includes funds to provide secure connectivity to fusion centers. Further, our partners in the war against terror extend beyond our borders and enhancements totaling $5.7 million will not only provide resources for the fusion center program, but also to expand the Legal Attaché program overseas.

Finally, the fiscal year 2009 budget seeks additional funds to improve the FBI National Academy, one of the premier training facilities for law enforcement. An enhancement of $9.8 million is requested to augment architectural and engineering services, construct roads, and install a new substation to handle an increase in electrical power loads. These improvements will address the training facility's maintenance issues and allow the FBI Academy to focus on its core responsibility of training.

Improved Communications Capabilities

All of our law enforcement components—especially those involved in national security efforts—need wireless communication capabilities that will enable them to fulfill their responsibilities. The current DOJ radio systems used nationwide are, on average, between 15 and 20 years old. We must modernize this technology, even though doing so is complicated and expensive. When I visited the border in January, I was shown how smugglers have better radio equipment than we provide to our federal agents. For example, these criminals have deployed car-battery operated surveillance equipment to listen to, and track the movement of, our law enforcement agents. Such practices put the lives of our brave men and women in great danger.

To date, our funding has essentially just repaired and maintained our legacy systems. The fiscal year 2009 budget requests $43.9 million for the creation of an integrated wireless network (IWN) in the Washington, D.C. area. This network will allow the Department to begin modernizing communication technology so that we can effectively and securely communicate across the law enforcement community. The IWN will provide new equipment, better security, an improved range, and better interoperability among the many jurisdictions that protect the National Capital area. The Department intends to implement the IWN on a nationwide basis over the next several years.

SOUTHWEST BORDER INITIATIVE

Enforcing the Nation's immigration laws and reducing violent crime are two of the Department's significant priorities. Earlier this year, I had the opportunity to meet some of the prosecutors and law enforcement officers who work every day to secure our borders. For those who work along the Southwest Border, their job is particularly challenging. In addition to functioning as the point of entry of many illegal immigrants coming into this country, the Southwest Border is an access point for smuggling drugs into, and guns out of, the United States.

Reducing crime along the Southwest Border requires a wide variety of personnel, resources, and infrastructure, spanning a number of Department components, including the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), the U.S. Marshals Service (USMS), the Drug Enforcement Administration (DEA), and the U.S. Attorney's Offices (USAO). Investigators and law enforcement personnel are necessary to police the borders and identify and prevent criminal activity, to detain those who are arrested, and to prosecute those who have violated the law. Moreover, resources are needed for the immigration courts that hear a substantial percentage of the matters arising out of the Southwest Border. Each element of this chain is essential to preventing crime along the Border. Without adequate funding for all of these activities, the other activities will suffer. In recognition of the continuing importance of securing our Southwest Border, the President has requested an enhancement of $100 million for the Department's enforcement and prosecution efforts.

To combat criminal activity on the Southwest Border, the Department will invest resources to prosecute criminals and immigration violators as well as to combat drug and gun traffickers and gangs. The Department is requesting an enhancement of $20.4 million for the DEA that includes funding for 30 additional agents. DEA has long played a central role in the counternarcotics strategy to combat the violent drug trafficking organizations along our border with Mexico. DEA's strong partnership with Mexico has led to success in drug seizures, money laundering, arrests, and extraditions. This budget request will allow DEA to add investigative and support personnel in locations in close proximity to the Southwest Border for purposes of targeted enforcement operations in the arrival zone. It will also provide funding to support two additional foreign-deployed Advisory and Support Teams (FAST) and Operation All-Inclusive, the enforcement arm of DEA's Drug Flow Attack Strategy.

The President's budget also requests an enhancement of nearly a million dollars for the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) to address firearms trafficking on the Southwest Border. The impact of firearms related violence has already been felt on both sides of the border in Laredo, Texas and Nuevo Laredo, Mexico. To address such threats, 12 positions are requested to expand ATF's ability to provide oversight in the region and to implement a focused inspection program to identify straw purchasers, traffickers, and non-compliant licensees that are often the source of illegal firearms used by violent criminals. ATF agents have reported that weapons are flooding into Mexico each week from the United States, with a notable percentage linked to drug trafficking organizations. This enhancement to ATF's budget will help control the current illegal firearms trafficking along the Southwest Border.

Increased enforcement operations will likely lead to an increased number of detainees. More detainees means a greater burden will be placed on the U.S. Marshals Service, which apprehends fugitives, transports and manages prisoners, protects witnesses, serves court documents, manages seized assets, and protects federal judges and courts. In just one fiscal year, from fiscal year 2006 to fiscal year 2007, the U.S. Marshals Service prisoner operations along the Southwest Border increased by 9 percent, compared to a 2 percent increase in the other districts. The President's fiscal year 2009 budget requests an additional $12.7 million for 79 new positions, including 58 Deputy U.S. Marshals to handle the increased workload expected on the Southwest Border.

An increase in detainees also means an added responsibility for the Office of the Federal Detention Trustee (OFDT) to provide more detainees with housing, medical and hospital care, guard services, transportation and other detention-related services. It is anticipated that in fiscal year 2009 OFDT will house more than 200,000 detainees in both Federal and non-federal facilities. To accommodate this anticipated increase, the President's budget requests an additional $37.6 million for OFDT.

Another $10 million in enhancements will provide much needed IT equipment for the Executive Office for Immigration and Review (EOIR)'s immigration courts. This new IT equipment will improve court hearing records and will support the Immigration Review Information Exchange System, which will allow mission critical information to be shared with the Department of Homeland Security and other federal agencies. This new digital recording system itself will significantly improve the audio quality of immigration court hearings and will also allow the immigration judges to operate the system through desk-top computers.

With an increase in detainees and immigration court hearings, comes the need for additional prosecutors. To meet this need, the President's fiscal year 2009 budget requests an additional $8.4 million for the U.S. Attorneys to support 83 new positions, including 50 Assistant U.S. Attorneys who will prosecute cases along the Southwest Border. Prosecutors will be focused on human smuggling, drug smuggling, homicide, robbery, immigration, hostage taking, money laundering, and immigration violation cases. To support the additional attorneys, paralegals will also be hired to help keep pace with the mounting workload which is expected to significantly increase over the 12,000 felony cases filed in fiscal year 2007. This increase is attributed to more Border Patrol agents who are expected to generate an estimated 24,000 criminal immigration cases during the next two years.

The remaining Department enhancements for the Southwest Border Initiative includes support for the Criminal Division's efforts to reduce gang violence; the Office of Justice Programs to provide funding for local prosecutor offices in the four Border States (California, Texas, Arizona, and New Mexico); and the Organized Crime Drug Enforcement Task Force to improve its IT infrastructure and increase attorney resources along the Southwest Border.

SUPPORTING ESSENTIAL FEDERAL DETENTION AND INCARCERATION PROGRAMS

Since the beginning of this Administration, the Department has successfully increased its enforcement efforts in several key areas. These enhanced enforcement efforts have led to significant increases in the federal detention and prison populations. For example, through the Project Safe Neighborhoods (PSN) initiative, the Department has doubled the number of prosecutions for federal firearms crimes over the past seven years. As a result of programs such as PSN, the Federal government has taken on defendants who would have been prosecuted and imprisoned by state and local authorities, resulting in harsher penalties. To enable the Department to continue its focus on programs such as PSN, the Department requires additional funds to support adequate infrastructure to hold those who are arrested and successfully prosecuted. The President has requested $67.1 million for the fiscal year 2009 budget in order to respond to this need.

I would also like to take the time to thank the Subcommittee for working with the Department so quickly to address the Bureau of Prisons' fiscal year 2008 funding needs. There is still more work to be done, and your continued support is appreciated.

Last fiscal year, 7,436 inmates were added to a Federal Prison System that was already above rated capacity. As a result, the Department needs to increase prison capacity to house the growing prison population. The President's fiscal year 2009 budget requests an enhancement of $50 million and 16 positions to add 4,000 beds in contract facilities to house low security inmates in fiscal year 2009.

The Bureau of Prisons (BOP) confines offenders in controlled environments of prisons and community-based facilities to help protect society from those who violate the law. As a result of tighter enforcement along the Southwest Border and an increase in conviction rates, BOP estimates that more than 13,000 inmates will be added to the federal prison system between fiscal year 2008 and fiscal year 2009. To prepare and care for these new inmates, an additional $17.1 million is requested to meet the managed costs of providing security, food, medical care, clothing, utilities, unit management, education, records and maintenance. Health care costs alone have risen from $9.16 per inmate per day in fiscal year 2001 to $11.91 in fiscal year 2007 for the more than 200,000 inmates in the Federal Prison System system, which includes 114 minimum, low, medium, and high security facilities.

The request also includes additional funds to recruit, train, and employ essential staff for these facilities. Research has shown that when the inmate-to-staff ratio increases so does the number of serious assaults. The current BOP inmate population exceeds capacity by 37 percent. While BOP has increased the number of beds and improved architectural designs in newer facilities to take advantage of improved technology and security measures, this has not been enough to keep pace with the increasing population. In addition, the ratio of staff to inmates keeps widening. As a result, filling staff positions that have direct contact with inmates is a critical priority.

It is not only the inmate population that has increased, but also the number of pre-sentenced detainees housed in detention facilities. The President's fiscal year 2009 budget, as part of the Southwest Border Initiative, requests $37.6 million for the Office of the Federal Detention Trustee (OFDT) to handle this increase of pretrial detainees.

SUPPORTING OUR STATE, LOCAL, AND TRIBAL PARTNERS IN THE FIGHT AGAINST CRIME

The Nation's safety depends on the combined work of law enforcement personnel acting at the federal, state, and local levels. The Department significantly values the partnerships it has forged with state and local authorities to investigate and prosecute serious crimes, including matters of national security. We also understand that these partnerships, in some cases, require additional funding to support local participation.

In an effort to utilize its resources and target them effectively to the areas of greatest need, the Department proposes consolidating 70 grant programs into four new competitive grant programs: (1) Violent Crime Reduction Partnership Initiative; (2) Byrne Public Safety and Protection Program; (3) Child Safety and Juvenile Justice Program; and (4) Violence Against Women Grants. Through these combined grant programs, more than $1 billion will be available in discretionary grant assistance for state, local, and tribal governments.

The President's budget requests $200 million to fund the Violent Crime Reduction Partnership Initiative to provide necessary funding to those communities who need assistance in responding to violent crime. Many communities continue to struggle with violent crime. To assist our local partners, last fall the Department invested $75 million in 106 jurisdictions to combat violent crime through multi-agency and multi-jurisdictional partnerships that include at least one federal law enforcement agency. The flexibility to meet the needs of those 106 communities came from the 2007 Joint Resolution, which gave the Department discretion in administering crime fighting funds.

In order to build on the success of that $75 million investment, the President's fiscal year 2009 budget requests $200 million for the Violent Crime Reduction Partnership Initiative. The Initiative will address violent crime through multi-jurisdictional law enforcement partnerships like those funded this past fall and will use competitive grants to combat a jurisdiction's specific violent crime problems. The program is designed to address crimes that range from drug trafficking to gang activity and to address the crime problems of both large and small communities. In addition to providing necessary funds to those localities that need assistance, the program is designed to retain the flexibility to adjust to changing trends in criminal behavior.

In fiscal year 2009, the President has requested $200 million for a competitive grant program entitled the "Byrne Public Safety and Protection Program." This grant program will address several critical concerns that confront many law enforcement agencies and the jurisdictions they serve, including reducing violent crime; addressing substance abuse; enhancing law enforcement information sharing efforts; improving the capacity of law enforcement to use forensic evidence and reduce the DNA evidence backlogs; addressing human trafficking; expanding prisoner re-entry initiatives; and improving services to victims of crime. Both government and non-government entities will be eligible to apply for the fiscal year 2009 Byrne program.

With the advent of new technology, we have seen a devastating increase in the number of children that are exploited through the Internet. In order to help address this problem, the Department is proposing the consolidation of several juvenile justice and exploited children programs into one new grant program entitled the "Child Safety and Juvenile Justice Program" for which the President has requested $185 million. This new grant program will be both flexible and competitive and will focus on reducing incidents of child exploitation and abuse through cybercrimes, improving juvenile justice outcomes, and addressing school safety needs.

The fourth new program is entitled "Violence Against Women Grants" and $280 million has been requested for this initiative. Like the other grant programs, this one also consolidates existing programs to allow grantees to request funding through a single application to support activities previously authorized under multiple grant programs. Whereas the other three grant programs I mentioned will be administered by the Office of Justice Programs, this one will be administered through the Office on Violence Against Women (OVW). This new grant program will continue to emphasize OVW's focus on enhancing collaboration, measuring effectiveness, and maintaining a sustainability focus related to ending domestic violence, date rape, sexual assaults, and stalking.

In addition to these four consolidated grant programs, the President has also requested funds for the Regional Information Sharing System (RISS); the Crime Victims Fund, the Bureau of Justice Statistics (BJS); and the National Institute of Justice (NIJ).

CONCLUSION

Chairwoman Mikulski, Senator Shelby, and Members of the Subcommittee, I want to thank you for this opportunity to present the President's fiscal year 2009 budget. As you know, my tenure in the Department to date has been brief, but over the past several months my knowledge of, and respect for, the men and women who are protecting and serving this country has only grown. And it is with your continued support that they can continue to do their jobs to ensure that justice is served.

Today I have highlighted critical areas that require attention and resources so that the Department can fulfill its mission to enforce the Nation's laws and help protect national security. I hope you agree that these are worthy investments for fiscal year 2009. As always, we are aware that there are tough decisions and challenges ahead and I look forward to working with you as we move forward.

Once again, thank you for inviting me to be here today. I would be pleased to answer any questions you may have.

TERRORIST WATCH LIST

Senator MIKULSKI. There are many questions related to national security and also the role of the Justice Department in writing certain legal memos related to everything from wire-tapping and surveillance to torture.

We note that the chairman of the Judiciary Committee is here and we're sure that he's going to have a robust set of questions about these issues.

I have one question related to the investigations surrounding the events around 9/11 and it goes like this. After 9/11, we found out that terrorists came into this country because of the failure of the watch list. The watch list failed because there were too many of them and they didn't talk to each other, so that if you were a watch list, you essentially were a dysfunctional situation.

Now, 6 years after 9/11, the inspector general recently reported unacceptable errors in the terrorist watch lists. I, the Attorney General, this isn't Senator Mikulski speaking, said DOJ law enforcement agencies do not have a functional system for reporting names to the terror watch list, for taking names off that are inadvertently placed on there or have a similar or identical name to someone we have to keep an eye on. The report notes that the FBI is delayed in reporting names to the watch list by up to 4 months.

Now, we're part of the DNI's coordinating team, the Director of National Intelligence. Would you tell us what role your leadership is playing in ensuring that we have a functional watch list system?

Attorney General MUKASEY. Well, we're playing two roles. One is in attempting to address the concerns that were addressed in the inspector general's report that you mentioned; that is, getting people on the watch list that belong there and getting people off who don't.

The difficulty, as you mentioned, has to do in part with the way names are placed on the watch list and the way names are formulated. There are numerous variations in the spelling and formulations of particular names.

Without getting into details, there are various ways of spelling a particular name. Each of those may have to be entered on the watch list. Each of those may then have to be removed. This is not an easy process, but it's one which we are addressing, both in getting names on the list as well as——

Senator MIKULSKI. But, Mr. Attorney General, I'm just going to jump in here. It's been 6 years since 9/11, 6 years. We've also had tremendous breakthroughs in technology. We understand the difficulties. It's the same difficulty that always existed.

What are we doing to end the difficulty and what are we doing—do you have a set of—do you have a methodology for resolving this problem? Do you have time tables for fixing this problem? Do we have the right people solving this problem?

Every time we turn around, we hear about how hard it is to do it. We know it's hard. If it would have been easy, it would have been done.

Attorney General MUKASEY. The DNI is the principal person who is addressing it. He's the principal person with whom I've had conversations.

It's my understanding that there's an attempt to try to infuse technology to address this, but the fact is that because names are spelled in various ways, it is a difficult thing to make sure that we get everybody on that belongs on and then when somebody has to get off, get all the various formulations of his name off.

They're trying to use technology to the extent that it can be used, but the variations in spelling of the same name which may add up to 6, 7, 8, or 10 variations accounts for the size of the list and accounts also for the difficulty of getting names off.

Senator MIKULSKI. Well, in other words, you say it's the DNI's job. The DNI says that's the FBI's role and then we're back to where we started.

I really do believe that there has to be a very high-level decision with the DNI, you as the Department of Justice, and the FBI and Homeland Security to really get these watch lists undertaken.

VIOLENT CRIME

But, listen, I have a short amount of time. I want to talk about violent crime in our communities. Violent crime continues to plague our communities. More than ever, State and local governments need help putting more cops on the beat. Yet, when we look at the Department of Justice's budget, though there's an increase for Federal law enforcement, particularly the FBI, this has essentially been funded by restructuring State and local law enforcement and also eliminating those programs that are important to juvenile justice, the Adam Walsh bill, the Violence Against Women Act.

Fiscal year 2009 eliminates the COPS Program which has been used to put more cops on the beat and better prepare them. It also restructures and eliminates the Byrne grants.

Could you tell us, number one, what is the rationale in eliminating Byrne grants and eliminating the COPS Program which is the cops on the beat, and with the elimination of those programs, then how does the Department of Justice want to be a partner in fighting the surge in violent crime?

We seem to be good at fighting the surge in Baghdad. I'd like to fight the surge in Baltimore.

Attorney General MUKASEY. There have been spikes in violent crime, but I think violent crime generally over the last several years is down, thanks to a focused effort using task forces to address violent crime issues, and we have tried to do that in as focused a way as we can.

What we've tried to do with State and local grants is to put them essentially into four categories: violent crime reduction, public safety and protection grants generally, child safety and juvenile justice, and violence against women, and there's been $200 million allocated to violent crime reduction, Byrne public safety and protection, a $185 million for child safety and juvenile justice, and $280 million to violence against women.

Those are only the grant programs. Our own efforts in that area—and you mentioned enforcing the Adam Walsh Act. We continue to enforce the Adam Walsh Act at the same level at which it was enforced before.

You're correct in pointing out that the budget contains no enhancement for it, but I would point out that it's continuing to be enforced at the level it was before. This is the kind of effort that was addressed by it; that is, enforcing laws that inhibit and restrict and punish exploitation of children. It's something we were doing before the passage of the Adam Walsh Act. There are designated deputy U.S. Marshals in each district to coordinate Adam Walsh Act enforcement, so that potentially those deputy U.S. Marshals in each district can be brought to bear on the program as it may exist in that district. That's the way we're trying to approach it.

Senator MIKULSKI. Well, my time is up. I want to turn to Senator Shelby. I fundamentally disagree with these premises. I think we need a COPS Program, we need a Byrne Program. Last year, we funded violence against women at $400 million. It has now been reduced.

Fundamentally, we need to have more people and also one of the great ways to deal with violent crime is through these intervention efforts like we have in the Juvenile Justice Block Grant Program.

I'm going to come back to my questions, if there's time before the vote, but let me turn to Senator Shelby.

EXPLOSIVES DATABASE

Senator SHELBY. Thank you, Madam Chairman. Mr. Attorney General, the establishment of the Office for Bombing Prevention was created under the jurisdiction of the Department of Homeland Security to address terrorist explosive threats and for other purposes.

This proposal contains language that would provide yet another explosives database. The Department already has two databases with the ATF and the FBI. If the Department of Justice already has, and we do, two databases, you do, why is it necessary to create yet another explosives database? It seems to be duplication there.

What will the Department of Homeland Security system provide that the Department's current systems do not? I guess basically how many computer databases with similar information do we need before we have so many, because you have two now and you're talking about creating another one. Are you familiar with that?

Attorney General MUKASEY. Well, I'm familiar with the fact because you mentioned it. I can't speak too precisely what would be addressed by the DHS database.

I will say that the ATF and FBI databases, which you mentioned, are vital.

Senator SHELBY. They're very important.

Attorney General MUKASEY. And we appreciate your particular efforts to focus those and to center them in a facility that will enable us to really exploit the information that they gather.

As you know, they are housed in what might perhaps be described, not very charitably, as an enhanced garage in Quantico and they're going to be moved to a suitable facility in Alabama when that's ready and we're deeply appreciative of that because they help not only with explosives analysis here but also improvised explosive devices (IEDs) that we get sent from Iraq and Afghanistan.

Senator SHELBY. Absolutely.

Attorney General MUKASEY. They're very helpful with that.

Senator SHELBY. Well, the FBI's working with the Army on a lot of that, are they not, and the ATF, on a lot of these explosives and provides explosive devices?

Attorney General MUKASEY. We want to continue that and obviously if there's anything that's added by DHS, we're happy to accept it. We think the principal effort should be where it is, namely with ATF, which does a terrific job, and the Bureau.

Senator SHELBY. Will you get your staff to see what they're doing there, and if this is duplication, we need to know?

Attorney General MUKASEY. I certainly will.

[The information follows:]

Proposed Creation of a Database Under the Jurisdiction of the Office for Bombing Prevention/DHS With Information on Explosives

The Department supports a multi-layered defense to adequately defend against the threat presented by explosives, with each layer reducing the ability of terrorists to acquire and use IEDs. Training is an important component in ensuring a successful defense against IEDs. The Department is not aware of DHS' specific IED training curriculum and cannot comment. State and local agencies also offer varied curriculums on IED training.

Department of Justice bomb databases located at ATF and the FBI are targeted toward investigation of bombing and analysis of explosives cases and forensic information.

ATF's Bomb Arson Tracking System (BATS) is a case management system used by federal, State, and local agencies investigating arsons, bombings, and other explosives incidents. ATF developed BATS to allow law enforcement agencies to solve arson and bombings crimes by tracking and sharing information on these cases and to determine national trends and patterns. The system provides law enforcement and fire service officials with access to information collected in ATF's U.S. Bomb Data Center (USBDC), the repository for all domestic bombing incidents. The USBDC, with an information management system containing more than 140,000 arson and explosives incidents, provides intelligence to ensure the highest degree of investigative coordination throughout the law enforcement community. The USBDC also supports ATF Certified Explosives Specialists (CESs) and Explosives Enforcement Officers (EEOs) who are assigned to the Department of Defense Combined Explosives Exploitation Cells (CEXC) in Iraq.

EXPeRT is the FBI's document management system and electronic reference library for organizing and making available for future reference all the documents, reference material, photos, and other information related to explosives forensic examinations conducted by the FBI Lab Explosives Unit and the Department's Terrorist Explosive Device Analytical Center (TEDAC). The EXPeRT systems contain searchable tables of information on explosives components such as detonators or detonating cord, evidence chain of custody data, or other tables of information that can be linked to the documents and photos in the system based on case ID or other user established criteria. EXPeRT is used within the FBI to share case data and reference material that support forensic exams and investigations, within TEDAC in the DOJ/DOD/INTEL Community to share information.

The DHS Office for Bombing Prevention (OBP) database referenced in proposed legislation already exists as the National Capability Database (NCAD). The DHS database collects and shares information about federal, state, and local law enforcement and emergency service capabilities including bomb squad, dive teams, explosives detection canine teams, and SWAT teams. State and local planners use NCAD to identify gaps and apply "best practices" to improve their security posture and develop multi-jurisdiction plans to respond to emergencies.

ADAM WALSH ACT

Senator SHELBY. Thank you. The Adam Walsh Act, Mr. Attorney General, as you know, was enacted on July 27, 2006. The act directs the Attorney General, you, sir, to use the resources of Federal law enforcement, including the U.S. Marshals Service, to assist jurisdictions in locating and apprehending sex offenders who violate sex offender registration requirements.

The act also deems as a fugitive any sex offender who violates a sex offender registration requirement.

The President's budget that I mentioned earlier does not appear to sufficiently request Marshals Service funding specifically for implementation of the Adam Walsh Act and this is troubling to a lot of us.

Based on the President's budget request, should this subcommittee be concerned that the Department is inadequately prioritizing the need to identify and apprehend absconders from the sex offender registry, given that the risk of recidivism among the pedophiles and sex offenders is so high?

Attorney General MUKASEY. I think, given the Department's historic commitment, which really antedates the Adam Walsh Act, to enforcing crimes of violence against children, as well as the presence in each district of coordinating deputy U.S. Marshals, should provide some reassurance to the subcommittee. I agree that we have to be vigilant about the use of resources to make sure that, to the extent the function of the U.S. Marshals Service is to apprehend fugitives and that's part of the mandate, that they address the fugitives from this registration program and fugitives who commit child molestation offenses generally. That's a scourge and that's always been a priority of the Justice Department historically and will remain so.

Senator SHELBY. How committed are you as the Attorney General, and you head up the Justice Department, to use Federal law enforcement, including the Marshals Service, of course, to apprehend sex offenders?

Attorney General MUKASEY. Senator, I visited the National Center for Missing and Exploited Children in Alexandria and I recommend that to anybody who hasn't seen it because it's a life-changing experience.

We have deputy U.S. Marshals there full time who receive information and get it out to the law enforcement authorities who can use it to apprehend these people. We are and remain very committed and we're happy for your support because we share that concern.

Senator SHELBY. There are a number of Adam Walsh provisions expiring in fiscal year 2009 and they include the following. Given the landmark importance of the Adam Walsh Act and its many provisions, has the Department at this point contemplated a legislative plan regarding these expiring provisions and, if not, will you and will you get back with us?

Attorney General MUKASEY. I will get back to you. I am not particularly familiar with those. I know that we're trying to fund the ongoing ones and to make sure that our deputy U.S. Marshals address the problem that you mentioned.

[The information follows:]

ADAM WALSH ACT

Below is a list of the expiring provisions of the Adam Walsh Act. At present the Department is still evaluating the necessity (utility?) of each and anticipates working with authorizing and appropriations committees to ensure that all relevant (necessary?) provisions remain in force before they expire.

Expiring sections of the Adam Walsh Act:

—§126—Sex Offender Management Assistance (SOMA) Program
—§142—Federal assistance with respect to violations of registration requirements
—§621—Pilot program for monitoring sexual offenders
—§623—Sex offender apprehension grants; juvenile sex offender treatment grants
—§625—Grants to combat sexual abuse of children
—§631—Jessica Lunsford Address Verification Grant Program
—§632—Fugitive safe surrender

Senator SHELBY. Thank you.

Senator MIKULSKI. Thank you very much. It was a whole line of questioning that I had hoped we would ask. It's a very serious issue.

Senator Leahy, also the chairman of the Judiciary Committee.

Senator LEAHY. Thank you very much. Attorney General, good morning.

Attorney General MUKASEY. Good morning.

VIOLENT CRIME

Senator LEAHY. Beginning with your immediate predecessor, Attorney General, we have seen the rate of violent crime go up during the past 2 years.

Senator Mikulski has already gone into this to some extent, but I, too, am thinking about this because last month Senator Specter and I had a field hearing in Rutland, Vermont, about small cities and towns and rural crime, and the impact of drugs and violence on them. These are cities and towns that can't fight such kind of crime. It's totally different than what they're used to. We have Federal programs that funded State and local enforcement—the COPS Program, Byrne-JAG Program, Crime-Free Rural States Program—that brought down crime considerably.

The administration has tried to dismantle these, to eliminate them. You announced earlier this year $200 million in new Federal assistance for State and local law enforcement. That didn't even begin to make up for the billions that are being cut.

I have a difficulty explaining to people in Vermont why we can spend over $20 billion on the Iraqi Police Force and then we don't even know what happened to their weapons, we don't know where much of the money went, but we have to cut money for a police force in America to pay for a police force in Iraq. And what do I say to them? Are we going to find monies that are going to come back to our own police forces, this money that's been cut, or do we have to just continually send it to the Iraqi Police Force?

Attorney General MUKASEY. I can't address the question of whether money in Iraq is being used effectively or not being used effectively.

What I can say is that we——

Senator LEAHY. Trust me, it's not from every hearing we've had, but go ahead.

Attorney General MUKASEY. I don't know about that. I've visited Iraq, and I saw the rule of law efforts that are being made by our people there and by their people there.

Senator LEAHY. We still can't find a whole lot of the handguns we sent over there. We have no idea what happened to them.

Attorney General MUKASEY. It's a war zone, and I understand that things happen in a war zone that don't happen in a peace——

Senator LEAHY. We have found some of them and they've been used against us, against our forces. Go ahead.

Attorney General MUKASEY. The—we continue to believe in the use of the task force approach toward fighting crime, particularly toward fighting methamphetamine, which is an increasing scourge, particularly in our rural areas, and we've had great success with that.

We believe that organizing the grant allocation program the way that I described initially is the best way to make use of scant resources. We're not pretending that less money is more money, but we're trying to use it as intelligently as we can.

Senator LEAHY. Well, let us work together and work with members of both sides of the aisle here because we've found success in the COPS Program and other programs like that, because with them crime did come down. They are now being cut out and crime's going up. I think there's more than a corollary.

I would also hope that all these inquiries being made, by whether this committee or the Judiciary Committee, that are not being answered, will be answered. We've had no answers to questions we asked after a hearing weeks ago.

MONITORSHIP PROGRAMS

I'll tell you one I'm especially interested in. I asked months ago about the lucrative no bid contracts awarded to former political appointees at the Justice Department for monitoring compliance with settlements and deferred prosecution agreements in criminal cases.

According to press reports, these contracts include one funneled by former New Jersey U.S. attorney, Christopher Christy, to his former boss, Attorney General Ashcroft's consulting firm, worth somewhere between $28 million and $52 million. The story on the front page of yesterday's New York Times suggests that the Department could use these agreements in the subprime mortgage investigations. Many are concerned that that's nothing more than a get out of jail free card for corporations.

Any chance that I might get an answer to the questions I asked 3 months ago about who got these contracts, their amounts, and how they were rewarded and implemented?

Attorney General MUKASEY. Well, I'm aware of your correspondence and it will be responded to, but I can answer some of your questions now in the order in which you asked them.

[The information follows:]

NO-BID CONTRACTS

On May 15, 2008, the Department submitted a letter to Senator Leahy in response to his letters of January 10 and February 26, 2008. The May 15 letter addresses the issues raised in this question, including the process by which monitors are selected. In particular, as noted in the May 15 letter, the current policy governing the selection and use of corporate monitors is set forth in a memorandum dated March 7, 2008, from Acting Deputy Attorney General Craig S. Morford, entitled "Selection and Use of Monitors in Deferred Prosecution Agreements and Non-Prosecution Agreements with Corporations" (the "Monitor Principles"). Section II of that memorandum describes key aspects of monitor selection, including oversight. Among other things, monitor candidates must be considered by a committee, and the Office of the Deputy Attorney General must approve the monitor.

The Monitor Principles are designed to ensure that the monitor selection process produces a high-quality and conflict-free monitor. Political and personal favoritism have no place in this process. Toward that end, the Monitor Principles require, among other things, that (a) Government attorneys must be mindful of their obligation to comply with existing conflict-of-interest guidelines; (b) the Government must create a committee in the Department component or office at issue to consider monitor candidates; (c) United States Attorneys and Assistant Attorneys General may not make, accept, or veto the selection of monitor candidates unilaterally, and (d) the Office of the Deputy Attorney General must approve the monitor.

Attorney General MUKASEY. The issue of grants to monitorship programs was addressed in a March memorandum to all United States attorneys setting forth best practices. It includes a requirement that the Deputy Attorney General monitor who is appointed by a United States attorney. These are—I should add that the compensation under a monitorship program comes not from public funds but comes from the corporation that's being monitored.

Senator LEAHY. I understand that. Mr. Attorney General, I think we're going to have to have another hearing on this because people are losing their pension funds, they're losing their homes and they're losing their investments, and we want them to know that somebody's not being given a sweetheart deal. That's why I urge you to answer.

My time is virtually up, but I would like to ask one more question and feel free to answer what you want on this.

PRE-9/11 PHONE CALL

You recently gave a speech at the Commonwealth Club, at which you made reference to a pre-9/11 phone call from Afghanistan to the United States. Here's what you said. This was an open meeting. "That's the call we didn't know about. We knew there'd been a call from someplace that was known to be a safe house in Afghanistan, and we knew that it came to the United States. We didn't know precisely where it went." You indicated the failure to intercept this was responsible for the deaths of more than 3,000 people on September 11. You also suggested that we didn't intercept this phone call because the Foreign Intelligence Surveillance Act prevented it.

I've gone back through the 9/11 Commission report. Nobody else seems to have known about this call you made or that——

Attorney General MUKASEY. I didn't make the call.

Senator LEAHY. Hmm?

Attorney General MUKASEY. I didn't make the call. I mentioned it.

Senator LEAHY. No, you mentioned the call, but nobody else seems to know about this.

So, can you tell me what the circumstances were on that and why somebody would have stopped it because nobody else seems to know about this call from Afghanistan? You talked about it.

We do know about the Department of Justice failing to even listen to their own FBI agents who told them about these hijackers were learning to fly—Agent Bill Kurtz, among others—have said so—and were told we've got this under control. We know that the Department of Justice wanted to cut the budget on counterterrorism on September 10. We know that a lot of those signals were missed, but nobody seems to know about this phone call you talked about.

Attorney General MUKASEY. The phone call I referenced in—by the way, it was not in the speech. It was a question and answer session following the speech, relates to an incoming call that is referred to in a letter, dated February 22 of this year, from the DNI and me to Chairman Reyes of the House Intelligence Committee, with copies to principal members and the chairman of the Senate Intelligence Committee.

The underlying reference is contained in a joint intelligence report of the House Intelligence Committee and a Senate Intelligence Committee. I'm happy to provide you with a copy of that reference.

Senator LEAHY. Would you, please?

[The information follows:]

INFORMATION REGARDING A TERRORIST PHONE CALL

The Department has previously clarified the details of the intelligence collection discussed by the Attorney General and provided additional information in a letter dated April 10, 2008 from Principal Deputy Assistant Attorney General Brian Benczkowski to Chairmen Conyers and Scott, a copy of which was sent to Chairman Leahy, among others. A copy of that letter and associated attachments is attached for the Committee's review:

DEAR CHAIRMEN CONYERS, NADLER, AND SCOTT: This responds to your letter of April 3, 2008, in which you discuss press reports regarding a question and answer session following a speech on public corruption where the Attorney General, in response to a question, discussed the Administration's effort to work with Congress to modernize the Foreign Intelligence Surveillance Act of 1978 (FISA).

In his remarks, the Attorney General discussed a pre-September 11, 2001, intelligence collection under Executive Order 12333 of communications between a terrorist facility abroad and one of the 9/11 hijackers. The Attorney General and the Director of National Intelligence have discussed this particular intelligence collection before, in a joint letter they sent to Chairman Reyes on February 22, 2008. In that letter, which is enclosed for your convenience, the Attorney General and the Director of National Intelligence (DNI) explained that because of the nature of the collection, the Intelligence Community missed the opportunity to identify the domestic end of the communication prior to September 11, 2001. This episode is also referenced in the report of the Joint Inquiry by the Senate and House Intelligence Committees into the 9/11 attacks. Some of the confusion regarding the Attorney General's remarks may have arisen from the details provided by the Attorney General of the nature and location of the terrorist facility. We note that while the Attorney General referenced a communication between a 9/11 hijacker and a location in Afghanistan, he was, in fact, referring to communication between a 9/11 hijacker and a terrorist facility located in a different country. Apart from your questions concerning the particulars of the response the Attorney General provided at the Commonwealth Club, your letter appears to question the very premise for the joint congressional and executive branch effort over the past year to modernize FISA. We believe there is a broad bipartisan agreement among Members of Congress that FISA has become outdated in large part because of changes in communications technology and the nature of national security threats facing the country in the past thirty years. This mutual understanding led to the passage of the Protect America Act last year and underlies the continued bipartisan effort to place HSA modernization on a long-term footing. Your letter, for instance, asks whether a FISA order could have been required in 2001, to intercept a communication with a terrorist suspect overseas. Prior to the passage of the Protect America Act, our intelligence officials were frequently required to seek a court order based upon probable cause to target the communications of terrorists located overseas; indeed, this requirement, which was discussed extensively both in public hearings and in closed session, was the primary impetus for the Executive Branch's efforts to modernize FISA. As the Attorney General and the Director of National Intelligence explained in their letter of February 22:

. . . HSA's requirements, unlike those of the Protect America Act and the bipartisan Senate bill, impair our ability to collect information on foreign intelligence targets located overseas. Most importantly, FISA was designed to govern foreign intelligence surveillance of persons in the United States and therefore requires a showing of "probable cause" before such surveillance can begin. This standard makes sense in the context of targeting persons in the United States for surveillance, where the Fourth Amendment itself often requires probable cause and where the civil liberties of Americans are most implicated. But it makes no sense to require a showing of probable cause for surveillance of overseas foreign targets who are not entitled to the Fourth Amendment protections guaranteed by our Constitution. Put simply, imposing this requirement in the context of surveillance of foreign targets located overseas results in the loss of potentially vital intelligence by, for example, delaying intelligence collection and thereby losing some intelligence forever. In addition, the requirement to make such a showing requires us to divert our linguists and analysts covering al-Qa'ida and other foreign threats from their core role—protecting the Nation—to the task of providing detailed facts for FISA Court applications related to surveillance of such foreign targets. Our intelligence professionals need to be able to obtain foreign intelligence from foreign targets with speed and agility. If we revert to a legal framework in which the Intelligence Community needs to make probable cause showings for foreign terrorists and other national security threats located overseas, we are certain to experience more intelligence gaps and miss collecting information.

We are also enclosing public testimony from a senior Justice Department official explaining why FISA, prior to the passage of the Protect America Act, often required a court order to surveil overseas intelligence targets.

Your letter also inquires why FISA's emergency provisions were not an adequate substitute for the authorities the Government has obtained under the Protect America Act (Public Law 110–55). This issue has also been repeatedly addressed by the Executive Branch, most recently in the February 22 letter:

You imply that the emergency authorization process under FISA is an adequate substitute for the legislative authorities that have lapsed. This assertion reflects a basic misunderstanding about FISA's emergency authorization provisions. Specifically, you assert that the National Security Agency (NSA) or the Federal Bureau of Investigation (FBI) "may begin surveillance immediately" in an emergency situation. FISA requires far more, and it would be illegal to proceed as you suggest. Before surveillance begins the Attorney General must determine that there is probable cause that the target of the surveillance is a foreign power or an agent of a foreign power and that FISA's other requirements are met. As explained above, the process of compiling the facts necessary for such a determination and preparing applications for emergency authorizations takes time and results in delays. Again, it makes no sense to impose this requirement in the context of foreign intelligence surveillance of targets located overseas. Because of the hurdles under FISA's emergency authorization provisions and the requirement to go to the FISA Court within 72 hours, our resource constraints limit our use of emergency authorizations to certain high-priority circumstances and cannot simply be employed for every foreign intelligence target. The fact is that not every threat meets the emergency exception because many do not appear to be emergencies until it is too late. Indeed, the job of the Intelligence Community is to obtain intelligence information that permits us to act before an emergency arises, and our intelligence professionals should be authorized to obtain intelligence information in an expeditious and efficient manner. Given the catastrophic nature of the threats we face from foreign terrorists abroad, the Government should not be forced to wait for an emergency before it can take steps to gather information needed to prevent these terrorists from creating such an emergency. It is quite easy to say, after the fact, that the Government could have or should have used FISA to conduct surveillance of a particular overseas intelligence target. If the Government had the requisite probable cause before the fact and could have met the remaining legal requirements of FISA (and known that this particular target among numerous others would turn out to be so important), that might have been possible. But doing so comes at the price of diverting analysts from their primary purpose of tracking terrorist and other foreign threats to drafting probable cause determinations every time they become aware of a new target or that target acquires a new method of communication. Considering the sheer volume of foreign intelligence targets abroad and the speed and agility with which the Intelligence Community must react, this process—as we have learned from experience—is simply not sustainable. This, of course, begs the policy question currently before the Congress: namely, why would we willingly impose these requirements, which impede and at times can prevent effective intelligence collection, on the government when it targets foreigners overseas? As discussed in the letter to Chairman Reyes quoted above, although the probable cause findings required by FISA make a great deal of sense when we target people in the United States, they do not with respect to foreigners in foreign lands. We hope that this letter and the enclosures are responsive to your recent letter and help you understand the critical need for FISA modernization. The passage of legislation to modernize FISA—like the bipartisan bill passed overwhelmingly by the Senate—will help ensure that the Intelligence Community has the tools it needs to protect the Nation.

Sincerely,

BRIAN A. BENCZKOWSKI,
Principal Deputy Assistant Attorney General.

Attorney General MUKASEY. One thing—the one thing I got wrong was the geography. It did not come from Afghanistan. I got the country wrong. But other than that, it was spot on, and I will be happy to provide you with the page.

The point to be made there was not that we could not have monitored their visa but rather that no visa application should have been necessary to monitor a foreign target in a foreign country. I was speaking generally to the desirability of getting a bill passed. As you know, we've had a lot of trouble with that.

But I'd be happy to get you the reference. You're right. It's not in the 9/11——

Senator LEAHY. We don't need visas to monitor foreign source.

Attorney General MUKASEY. We shouldn't need it.

Senator LEAHY. We didn't need it then and we don't today. Thank you, Madam Chairwoman.

Senator MIKULSKI. Thank you very much. Senator Feinstein.

CUTS TO STATE AND LOCAL LAW ENFORCEMENT

Senator FEINSTEIN. Mr. Attorney General, I just want you to know I totally agree with what Senator Mikulski said. In 13 years on this committee, 15 years in the Senate, have never had more letters from local law enforcement in the State of California of deep concern and here is why.

Your budget cuts local and State law enforcement by 65 percent and since 2002, the administration has slashed the grant programs for State and local law enforcement by 85 percent or $3.2 billion.

This is enormous. I am having chiefs of police throughout the State of California tell me they're unable to fill the FBI's investigative gap. It's a very serious situation.

In California, 22 drug task forces are going to end if this budget is pursued, and I think not to fund, to slash, to cut out both COPS and Byrne-JAG is an impossible situation for local law enforcement, and this cannot be left to stand.

So, clearly, we've got our job to do in this area, but I want to ask you a question about John Mew's OLC memos.

OFFICE OF LEGAL COUNCIL'S MEMO

On April 1, 2008, the DOJ released a March 2003 Office of Legal Counsel (OLC) memo written by John Mew. That memo asserted that President Bush had unlimited power to order brutal interrogations to exact information from detainees. The memo references, on page 8, footnote 10, another OLC memo written by John Mew in October 2001. In this memo, the OLC concluded that the Fourth Amendment had no application to domestic military operations. To date, your Department has refused to declassify and release this memo.

Is the October 2001 OLC opinion still considered binding by the Department of Justice?

Attorney General MUKASEY. That opinion was withdrawn 9 months after it was issued. It is not.

Senator FEINSTEIN. So it is not?

Attorney General MUKASEY. Correct.

Senator FEINSTEIN. It is not operative?

Attorney General MUKASEY. Correct.

Senator FEINSTEIN. Since when has it not been operative?

Attorney General MUKASEY. Since December 2000—you say this is the March 2003 memo?

Senator FEINSTEIN. This is a March 2003 memo.

Attorney General MUKASEY. Has not been——

Senator FEINSTEIN. It's the—it's basically the October 2001 memo.

Attorney General MUKASEY. I can't speak to the October 2001 memo, but the March 2003 memo was withdrawn 9 months after it was issued.

We are aware of Congress' ongoing interest in this matter and oversight interest in this matter and proper interest in this matter and we're looking for ways to meet Congress' legitimate interest and our own regard for both the equities of other agencies that are involved with these memos as well as preserving a deliberative process within the Department that doesn't result in every piece of advice becoming the subject of public debate.

We're trying to work with Congress to arrive at ways to meet your legitimate oversight which we recognize with the release of the 2003 memo.

Senator FEINSTEIN. If you'll excuse me, this isn't a question of oversight. I'm just asking you, is this memo in force, that the Fourth Amendment does not apply to the domestic military?

Attorney General MUKASEY. The principle that the Fourth Amendment doesn't apply in war time is not in force.

Senator FEINSTEIN. It—no. The principle that I asked you about, does it apply to domestic military operations? Is the Fourth Amendment today applicable to domestic military operations?

Attorney General MUKASEY. I don't know of any domestic military operations being carried out today.

Senator FEINSTEIN. I'm asking you a question. That's not the answer. The question is, does it apply?

Attorney General MUKASEY. I'm unaware of any domestic military operations being carried out today. In order for me to——

Senator FEINSTEIN. You're not answering my question.

Attorney General MUKASEY. The Fourth Amendment——

Senator FEINSTEIN. Is this memo binding today?

Attorney General MUKASEY. The Fourth Amendment applies across the board, regardless of whether we're in war time or war peace time. It applies across the board.

Senator FEINSTEIN. Thank you. Appreciate that. Thank you, Madam Chairman.

Senator MIKULSKI. That's a pretty important answer.

Senator FEINSTEIN. Yes, it is, bearing in mind what the history of this is.

Attorney General MUKASEY. With due respect, I don't think it's—there's anything new about the answer because the discussion of which that was a part goes to the suggested inapplicability of the Fourth Amendment as an alternative basis for a finding that searches discussed there would be reasonable.

But in any event,——

Senator FEINSTEIN. But Mr. Mew's contention was that the Fourth Amendment did not apply and that the president was free to order domestic military operations.

Attorney General MUKASEY. Without regard to the Fourth Amendment?

Senator FEINSTEIN. That's correct.

Attorney General MUKASEY. That's not my under——

Senator FEINSTEIN. And you're saying that is not operative?

Attorney General MUKASEY. That is not——

Senator FEINSTEIN. That is not binding?

Attorney General MUKASEY. To my understanding, that is not applicable.

Senator FEINSTEIN. Thank you very much. That's what I wanted to know.

Thank you, Madam Chairwoman.

Senator MIKULSKI. Well, that's something. We're glad to hear you say that. That's something somebody should have told Mr. Rumsfeld.

Attorney General MUKASEY. Respectfully, I don't think it's news.

Senator MIKULSKI. Well, Senator Feinstein and I are also on the Intelligence Committee and Senator Shelby also once chaired it as well as membership and I'm on it now, and there's a lot of issues related to that which we believe now have come to an end, but we're deeply troubled by.

Senator FEINSTEIN. Madam Chairman, if this is true, I have a hard time understanding why the Department of Justice will not declassify that memo.

Senator MIKULSKI. Did we ask for it?

Senator FEINSTEIN. We have asked for it. Chairman Leahy has asked for it on several occasions and we can't seem to spring it loose.

Attorney General MUKASEY. And that was one of the memos that was the subject of my statement that we are trying to figure out ways of making sure that portions of the memos are provided in a way that allows the oversight needs and equities of Congress to be served and yet recognizes the equities of other agencies that may be involved here, wholly apart from the Department, as well as our interests in preserving the deliberative processes, such that people can give us the benefit of their thinking without having their thinking then become the subject of the congressional hearings simply because they offered an idea.

Senator FEINSTEIN. I think we appreciate that. If I may just, Madam Chairman, this memo becomes a linchpin. It's a very important memo and in Intelligence, we've been unable to obtain it. In Judiciary, we've been unable to obtain it.

I appreciate that you're trying to do it and I hope the decision will be forthcoming shortly.

Attorney General MUKASEY. And by trying to do it, I mean actively trying to do it. I don't mean it's down in some pile of papers. It's at the top. It's a priority of mine.

Senator FEINSTEIN. Well, may I ask this? When might we receive it?

Attorney General MUKASEY. When people asked me when I was a judge when a case is going to be decided, my usual response was if I knew that precisely, I would already have decided it. I'm going to try to do it as quickly as I can and I recognize that there's a degree of urgency about this. I have a great deal of urgency about it. I am not—my interests are not served by having this drag on.

Senator FEINSTEIN. Thank you. Thank you, Madam Chairman. I appreciate it.

Senator MIKULSKI. I have a few questions. Mr. Attorney General, I have a few more, and I don't know if my colleagues do before the vote begins.

DEPARTMENT OF JUSTICE FUNDING

Let me tell you the intent of the subcommittee working this all on a bipartisan basis. We're going to need your help with the Office of Management and Budget (OMB). First of all, when we pass our bill, we want to be sure that there's adequate funds to operate the Department of Justice with the highest level of personnel, not only in terms of volume but in terms of quality, and also to acknowledge what we call the worker bees at the Justice Department, those faithful people, those professional civil servants that every day are implementing the antitrust laws, the civil rights laws, issuing grants, et cetera.

Second, we want Federal law enforcement to be adequately funded. That's the FBI, DEA, the Marshals Service, and the ATF. Senator Shelby has raised issues about the Marshals Service. We know the FBI does very well. We're concerned about the adequacy of DEA and the ATF.

Then there's also the other pillar in local, which is our relationship with State and local law enforcement, and their involvement with the community.

Now, that means that we really want to restore the funding to the Byrne grants and the COPS Programs. We really do want to do that, and it has wide bipartisan support. I've received numerous letters from senators asking us to do that.

Where senators do ask for earmarks, it's usually around fighting gangs, fighting meth, and more technology to make them more effective. That's what the earmark is and usually they go to earmarks because the grants didn't work.

Then there are those other issues related to either prevention or response. That's the juvenile justice block grants and then it is the violence against women which is not only to respond to sexual assault and domestic violence. Those two things are in and of themselves crucial, but it's also the prevention program, the kinds of things that must go on at so many levels, particularly against girls, which goes on in schools, which young boys often in communities where there's no father, no constructive male role model, need to occur, and it's unique.

I remember when the wall came down and new emerging democracies came, they wanted to see how a national justice department worked with the community because they were used to KBG-type stuff. This was fantastic.

So, this brings us to what we need to do. I met with a group called Surviving Parents. These are parents of children who endured the most heinous of crimes. These were children that were kidnapped, bullishly abused and in some instances murdered.

Now let me tell you what they asked for. They asked for, first of all, U.S. Marshals to track down predators. Senator Shelby has just been a stalwart supporter in us working together on that. The other thing that they asked for was this. This was the lapse in technology when DOJ transfers sexual predator technology to a new system.

SEXUAL PREDATOR TECHNOLOGY

Let me go to my question because, in addition to more marshals to go after the predators, technology is our friend and we understand there's been a very creative and effective program in Wyoming, actually very cost effective, that has been used to identify over 500,000 unique computers that are involved in the trafficking of repugnant movies and images of children, and I don't even want to identify the crimes against the children. They're just too despicable for civilized conversation.

Essentially what we're worried about is DOJ's going to get a new technology system. Wyoming has been working well and we want to be sure that no child or no microchip falls between the cracks.

So, my question to you, because Wyoming has such a great program and has been working so well and was developed in such a cost-effective way, can you promise me that the Wyoming-based system will be fully supported and funded until such time as an equal or better system is in place, so that no matter what, we've got this technology working with local law enforcement to protect against the trafficking against images which in and of themselves, the images, the photographs taken all indicate the most vile, the most vile of child abuse?

Attorney General MUKASEY. I want to respond both to your question and to one point in your preliminary comments.

As far as the Wyoming project, what we are trying to do is transfer that highly innovative technology which is terrific to what's called the RISS System, which is a national system that allows intercommunication between and among various law enforcement agencies. So what we are trying to do is to get that very good innovative technology that was developed in the Wyoming project transferred to a national system and we hope to try to do that.

Senator MIKULSKI. But in the meantime, are we going to keep Wyoming, the Wyoming model going, both operational and funded?

Attorney General MUKASEY. We are going to try to do that and try to——

Senator MIKULSKI. Try, try, try, try. Pardon me. We appreciate the effort, but can we have your word that this, the Wyoming model, will stay operational until such time as the new model moves online?

Attorney General MUKASEY. I have no reason to believe that it won't and you have my word that it has my priority. Those you have.

Senator MIKULSKI. Well, I accept your word. We want to continue to work with your staff. The third—yes, sir? Did you want to comment?

JUSTICE DEPARTMENT EMPLOYEES

Attorney General MUKASEY. One comment about the general quality of people of the Justice Department. I can't lose an opportunity to point out that the quality of the people at the Justice Department is, person for person, the highest of any group of lawyers that I've ever worked with. That's true of the career people. That's true of political appointees as well and that's what keeps us and me going.

Senator MIKULSKI. What keeps you going?

Attorney General MUKASEY. Their ability and their commitment.

Senator MIKULSKI. Right. Well, we don't dispute that. We want them to have the resources that they need. What we're concerned about is that the bean counters at OMB to fund FBI, which FBI should be funded, they've got really swell programs and eliminated them, and we're running a zero sum gain all to play let's pretend that we're going to balance the budget. That's what we're concerned about.

We believe in the Justice Department in the sense that we believe in those folks, just like we believe in these programs. These aren't programs. We're not for the program. We're for the outcome of the program and it's how to do it. We were very, very, very disturbed last year when we had done an absolutely bipartisan bill to run into the President's veto threat. So, we had to meet a veto gun. We had to cut $3 billion out in this subcommittee. That's where we shave funds from things like weed and seed and juvenile justice block grants. We're for your Department. We wish OMB was. We really do and that's not laying it at your doorstop. You've come in. You're righting the ship. You're trying to do a good job. We have a great deal of respect for you, Mr. Attorney General, but OMB has to believe in this Department as much and we're very frustrated about it and that's what we're trying to get to.

Senator Shelby, did you want to say something?

Senator SHELBY. I just have another question for the Attorney General.

RADIOS

In March 2007, the inspector general reported that of the 30,000 Department of Justice radios, 79 percent are not airwave compliant, 95 percent lack federally mandated security, and 73 percent are obsolete. That's troubling.

The report found that this failure to upgrade the Department of Justice's components and antiquated communications represent an unnecessary risk to the safety of agents, among other things.

I've heard cost estimates to seriously address this issue are in the $20 billion range, which seems high but it's a lot of money.

Do you have any idea or do you have any numbers on what it would cost to upgrade the Department and make it compliant?

Attorney General MUKASEY. What we're asking for in the budget is $70 some odd million to do the, frankly, spit and bailing wire repair on the current system.

Senator SHELBY. Just keep it going?

Attorney General MUKASEY. Keep it going. But we've also asked for roughly $45 million for new interoperable radios that allow us to communicate in an encrypted way so that the bad guys aren't listening in on police band radios, so that we can do it in an effective way.

We're on to the problem, and we've—that's the funding that we've asked for to help us to at least begin doing that.

Senator SHELBY. Are current communications, Mr. Attorney General, are the systems in compliance with the presidential narrow band mandate and the National Institute of Standards and Technology security guidelines?

Attorney General MUKASEY. I can't speak to that. I'll get back to you on that.

[The information follows:]

COMPLIANCE OF CURRENT COMMUNICATION SYSTEMS

No. The DOJ Inspector General's report on IWN from March of 2007 estimated that 21 percent of the Department's radios are compliant with presidential narrowband mandates and 5 percent are capable of meeting NIST security guidelines. Since March of 2007, the limited funds have been prudently used to improve narrowband compliance to 30 percent and NIST security compliance to 15 percent.

Senator SHELBY. And is the IWN, I-W-N, Seattle pilot project a feasible model for the future?

Attorney General MUKASEY. We believe it is a feasible model and that's the one that we're asking to have funded.

Senator SHELBY. Will you get us some information again on that?

Attorney General MUKASEY. I will get you as much information as I can. That's the one we've been working on. That's the one we want.

[The information follows:]

INFORMATION REGARDING THE INTEGRATED WIRELESS NETWORK

The Seattle Blaine pilot is a feasible model for major metropolitan areas with high federal agent user densities. Areas of high user densities typically coincide with scarcity of spectrum resources. While the relative spectral efficiency of trunking radio technologies can be debated in remote or low-density rural areas, high user-density areas always benefit from the implementation of trunking technologies.

A few design criteria from the Seattle Blaine pilot have been re-evaluated and probably would not be implemented nationwide. The criteria include radio tower site improvements and backhaul redundancy. While overall system reliability in a trunked system is improved, nationwide implementation may be too costly. Selective application of redundancy at the most vulnerable system nodes, and site improvements commensurate with the equipment being installed would be the two major deviations from the Seattle Blaine model.

The differences in ease-of-use between conventional and trunking radio are substantial. The WMO continually receives positive feedback from users on the Seattle Blaine IWN system regarding usability and roaming capabilities. The use of trunking technologies is not an explicit stated requirement for IWN, however, we feel the minimal incremental cost (estimated to be 30 percent) is well worth the significant improvement in radio usability and roaming capabilities for many areas, especially in urban settings.

Senator SHELBY. Mr. Attorney General, I know you'd be concerned, but in the event of another attack, absent communications interoperability, which is so important, how will the Federal law enforcement officers communicate with each other? There's got to be—that's got to be a high priority for you.

Attorney General MUKASEY. Only with great difficulty.

Senator SHELBY. So this—to make the interoperability and modernize the whole communications system is a high priority with the Department?

Attorney General MUKASEY. It is a very high priority.

Senator SHELBY. Okay. Thank you, Madam Chair.

Senator MIKULSKI. As always, you're very insightful, Senator Shelby. I mean, it's 7 years after 9/11. We should at least be able to talk to each other.

Senator SHELBY. Absolutely.

ADDITIONAL COMMITTEE QUESTIONS

Senator MIKULSKI. Just like the watch list. Well, if there are no further questions this morning, Senators may submit additional questions for the subcommittee's official record. We request the Department's response within 30 days.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

CORRUPTION IN IRAQ

Question. You recently traveled to Iraq in February to view first hand the Justice Department's efforts at establishing the rule of law in that country. According to press accounts, you said, and I quote: "I'm encouraged by the work that's being accomplished here . . . My assessment is that the Iraqis are firmly committed to the notion of the rule of law."

But I recently chaired an Appropriations Committee Hearing on fraud, waste, and abuse in Iraq, and the testimony at that hearing made it absolutely clear that corruption in Iraq is rampant, and corruption remains among the most serious obstacles to progress in that country. At the moment, there are more than three thousand pending corruption investigations in Iraq, involving more than $18 billion lost to fraud, yet the Iraqi government has passed laws and taken other legal actions to immunize its public officials from prosecution and protect those engaged in corruption.

The Special Inspector General for Iraq Reconstruction, the Jones Commission, and the Baker-Hamilton Commission have all been critical of the Administration's lack of effort to improving the Iraqi justice and police system, yet you say you are "encouraged" by what is being accomplished in Iraq.

Do you believe that corruption persists as a very serious problem in Iraq and undermines the rule of law there?

Answer. We do believe that corruption persists as a serious problem in Iraq and that corruption of any kind undermines the Rule of Law.

The Prime Minister and other senior Iraqi officials have publicly announced their determination to tackle this problem. Corruption is a hidden crime in which individuals in positions of power or influence are able to extract for themselves benefits that should be reserved for the public. It is no secret that during the Saddam regime, corruption was a way of life for Saddam himself, his family, and favored officials under him. These practices are inconsistent with a democracy and with the Rule of Law because they deny the law the opportunity to govern all actions of the state. Instead, they relinquish that power to those willing to pay. This impropriety is obviously true when a corrupt official's action violates the law, but it is equally true when the corrupt official takes an action that would otherwise have been permitted by the law.

For example, current Iraqi law requires amnesty for many Iraqi prisoners who have been convicted of or charged with certain crimes. We have heard widespread allegations that at some local police stations, processing the necessary paperwork would only happen if the detainee's family produced a substantial bribe. The corrupt act, of course, is not releasing the prisoner, which the law permits and requires; it is delaying that action and making it contingent on private payment, when the law guarantees it as of right. By contrast, the Iraqi government has recently made some high-level arrests in which the evidence suggests that officials released individuals under the guise of the amnesty statute when, in fact, their crimes were so serious that the law did not authorize their release.

The Rule of Law (not to mention the security of the Iraqi people and our troops) is undermined when criminal justice matters proceed in any way other than according to the law itself. The same is true for run-of-the-mill corruption matters, such as no-show jobs at ministries or the diversion of government resources to friends or family of officials. In these cases, as well, self-interest rather than the law is what governs the actions of the state. When the people perceive that actions of any sort are taken for these reasons, they justifiably doubt the integrity of the government, and their own commitment to obeying the law inevitably declines.

Question. Exactly what do you find to be encouraging about the current efforts to combat corruption in Iraq?

Answer. As made clear above, we certainly agree that corruption is a very serious problem and that Iraq has a long road ahead of it before it can tackle that problem. Nevertheless, we believe that it is slowly getting better, rather than worsening.

We are guardedly optimistic because the Government of Iraq, often with the assistance and encouragement of the United States, has taken substantial steps to transition to a regime in which corruption is identified and targeted. It bears repeating that under the previous regime, whose final breaths ended barely five years ago, corruption was a staple. We are all anxious that Iraq shed any remnants of that prior regime, including corruption, but as with every other problem, the Iraqi people must work their way through this one.

They appear to be engaged in this process. A few of the reasons we are encouraged include:

—The Commission on Integrity, Iraq's principal anti-corruption investigative agency, has nearly 300 investigators, all of whom have been trained by Department of Justice contract trainers and funded by the Department of State. The Commission has launched more than five thousand corruption investigations. The Commission has plans to expand the number of investigators by more than a third.

—A number of recent arrests of government officials demonstrate that investigators and judges are willing to risk even their personal safety by finding and prosecuting corruption.

—The judiciary is plainly stepping up to the plate. The well-known case against the former Deputy Minister of Health generated an acquittal in early March. The fact that the case was heard at all was an important victory for the independence of the judiciary and the message that corruption and illegal government action would be pursued. But even more significant is that the Chief Prosecutor has appealed the dismissal of the charges to the Court of Cassation.

—Police salaries have been increased, which will in turn increase professionalism and decrease perceived needs to accept illegal gratuities. The Directorate of Internal Affairs in the Ministry of Interior (MOI), which supervises the police, opened 6,652 cases in 2007 against MOI employees, and 1,112 of them were fired. Others were otherwise disciplined.

—In January, Prime Minister Maliki issued an eighteen-point anti-corruption program and has given international attention to anti-corruption efforts—for example, he highlighted them in his speech at the International Compact with Iraq meeting in Stockholm in May.

—New draft laws are pending in the Council of Representatives to better govern the chief anti-corruption entities in the Iraqi government (the Commission on Integrity, the Board of Supreme Audit, and the Directors General from the various ministries).

—At least some parts of the government appear to be taking proactive measures to reduce opportunities for corruption. Chief Justice Medhat al-Mahmoud, whom the statute made responsible for administering the nationwide system for adjudicating claims for amnesty, recognized the likelihood that detainees and their families would face demands for bribes throughout the process. He therefore crafted extraordinarily simple claims forms of only a single sheet of paper and made them widely available, allowing not only detainees but their families to obtain forms at courthouses throughout Iraq. He allowed the forms to be distributed where they would most likely reach those in need, including within prisons. From the very beginning, his view was that if the forms were readily available, they would have no value on the corruption mill. Since the completed forms were then to be given directly to the courts, another opportunity for corruption was squeezed out. Although this is only one small example, it is an encouraging sign that the government recognizes the problem and is trying to address it.

—In March the Government of Iraq signed and ratified the U.N.'s Convention Against Corruption which obligates the country to take action against corruption.

Question. Is it encouraging that the Maliki government passes laws to protect public officials from investigation?

Answer. We are not aware of any law that the Maliki government has passed with the aim of protecting public officials from investigation. There is a provision of the Criminal Procedure Code which allows Ministers to stop investigations of all types including corruption. Our Embassy continues to urge the Government to rescind this provision but it remains on the books. The Department of Justice defers to the diplomatic efforts of our Embassy in this regard.

Question. Specifically, what is the Justice Department doing to combat the corruption problem in Iraq?

Answer. The Department of Justice's efforts in Iraq are aimed at strengthening Iraq's Rule of Law institutions. The Department of State has created a separate entity at the U.S. Embassy in Baghdad, the Anti-Corruption Coordination Office (ACCO), which is charged with coordinating anti-corruption activities and policies. Anti-corruption principles are a key ingredient of any society living under the Rule of Law, so all Department of Justice employees in Iraq are fully aware that the Department of Justice mission includes assisting ACCO.

There are some specific ways in which the Department of Justice is attempting to do that. The International Criminal Investigative Training Assistance Program (ICITAP) provides capacity building, training, and technical assistance, along with equipment and specialized training for Iraq's Commission on Integrity. The Federal Bureau of Investigation investigates alleged corruption involving the U.S. government (which affects both the Iraqi and the American people) and, through its work with the Major Crimes Task Force, helps Iraqi law enforcement investigate illegal behavior of Iraqi public officials. Department of Justice personnel across Iraq work closely to help build the capacity and enhance the integrity of the courts.

BULLET LEAD

Question. More than four months ago, in a letter I sent to you that remains unanswered, I expressed my concerns that flawed bullet lead analysis done by the FBI for many years may have led to wrongful convictions. The National Academy of Sciences issued a report in 2005 discrediting bullet lead analysis, and the FBI stopped conducting bullet lead testing that same year. Over the last two years, however, the Justice Department has not taken steps to find or correct the cases where it was misused. As a former judge, I am sure you share my fear that this faulty forensic evidence may have been introduced in the estimated 2,500 cases where it was used. In my letter in November, I asked you to provide the Judiciary Committee with the list of cases where FBI bullet lead analysis was used, and to advise the Committee what steps you've taken to correct any unjust convictions resulting from bullet lead analysis.

Please state whether you have taken any action in response to my letter and explain your response.

Answer. As is discussed in more detail in the response to your November 2007 letter to the Attorney General, in 2005 the FBI sent to the National District Attorney's Association, the National Association of Criminal Defense Lawyers, the Innocence Project, and approximately 300 agencies letters outlining the FBI's decision to discontinue these examinations. The letters were sent so the recipients could take whatever steps they deemed appropriate to ensure no one was convicted based on inappropriate bullet lead testimony.

The FBI has committed to review all testimony provided by FBI Laboratory personnel in bullet lead cases that resulted in convictions in order to determine whether they testified within the scope of the science. Because the FBI performed bullet lead examinations for approximately 40 years, we cannot readily produce a list of all cases in which bullet lead analysis was performed. Because FBI laboratory personnel who conducted bullet lead examinations also conducted other types of forensic tests, the FBI has to examine all files worked by the universe of examiners who conducted bullet lead analysis. That process is ongoing. As of mid-May 2008, the FBI had identified approximately 1,270 cases (covering the period of 1975 to 2004) in which bullet lead analyses resulted in "positive" results that may possibly have formed the basis of trial testimony.

As the FBI Director has testified, the FBI will be working with the Innocence Project (IP) to ensure all appropriate parties are notified. Specifically, as the FBI identifies cases in which bullet lead analysis was performed, we will provide to the IP the FBI file number, the names of the contributor and prosecutor and their contact information, contributor and prosecutor file numbers, the FBI Laboratory examiner's name, the defendant's name, and the FBI's assessment of the appropriateness of the testimony provided. The FBI will also offer the IP copies of the transcripts received from prosecutors. By providing a dual notification track (that is, notification to both the prosecutor and the IP), the FBI is confident that appropriate notification will be made to any defendant who was or may have been adversely affected by inappropriate FBI bullet lead testimony.

Question. When can I expect a response to my letter?

Answer. DOJ is completing its response to the letter and will be transmitted to your office presently.

Question. According to press accounts, the FBI agreed in November to provide a list of all cases where bullet lead analysis was used to the Innocence Project in order to begin working to identify cases where there may be problems.

Please state whether you support this collaborative effort and explain your response.

Answer. In an FBI press release on November 17, 2007, the FBI announced that it has undertaken an additional round of outreach, analysis, and review efforts concerning bullet lead analysis. This has included joint work with the Innocence Project, which has done legal research to identify criminal cases in which bullet lead analysis has been introduced at trial.

The Department of Justice, including the FBI, takes this issue very seriously, and we are developing procedures to ensure that appropriate disclosures are made to the relevant parties. Thereafter, the parties involved can make an assessment of the effect of any potentially erroneous testimony.

Question. Has anyone in the Justice Department taken any steps to support or oppose this agreement between the FBI and the Innocence Project?

Answer. Please see the response to subpart a, above.

UNANSWERED QUESTIONS

Question. As of May last year, the Justice Department reported to the Judiciary Committee that there was only one FBI agent assigned to Iraq and one assigned to Kuwait to investigate significant contracting fraud. Since May 2007, has the Justice Department assigned more full-time FBI agents or other federal investigators to work on contracting fraud cases in Iraq and Afghanistan? If not, why not?

Answer. The FBI currently has Special Agents (SAs) deployed in Iraq, Afghanistan, and Kuwait to provide full-time support to the International Contract Corruption Initiative, which addresses major fraud and corruption in the war and reconstruction efforts in Iraq and Afghanistan. These deployments are conducted in 120-day rotation cycles and SAs work jointly with the Defense Criminal Investigative Service, Army Criminal Investigation Command Major Procurement Fraud Unit, Special Inspector General for Iraq Reconstruction, and U.S. Agency for International Development, who also have agents deployed to address this crime problem. The FBI's overseas assignments in direct support of this multi-agency initiative are as follows: one SA in Kuwait; one Assistant Legal Attaché and two SAs in Iraq; and two SAs in Afghanistan.

Question. In November, I sent you a letter expressing my concerns that flawed bullet lead analysis done by the FBI for many years may have led to wrongful convictions. As you know, the National Academy of Sciences issued a report in 2005 discrediting bullet lead analysis, and the FBI stopped conducting bullet lead testing that same year. But over the last two years, the Justice Department has not taken steps to find or correct the cases where it was misused. As a former judge, I am sure you share my fear that this faulty forensic evidence may have been introduced in the estimated 2,500 cases where it was used. Two months ago, I asked you to provide the Judiciary Committee with the list of cases where FBI bullet lead analysis was used, and to advise the Committee what steps you've taken to correct any unjust convictions resulting from bullet lead analysis. When can I expect a response to my letter? Have you taken any action in response to my letter?

Answer. Please see the response to Question 1, above.

Question. According to press accounts, the FBI agreed in November to provide a list of where all bullet lead analysis was used to the Innocence Project in order to begin working to identify cases where there may be problems. Do you support this collaborative effort? Has anyone in the Justice Department taken any steps to support or oppose this agreement between the FBI and the Innocence Project?

Answer. Please see the response to Question 2, above.

E-MAIL AND E-MAIL RETENTION

Question. Have you begun any review of the White House's policies on e-mail and e-mail retention?

Answer. No.

Question. Have you investigated whether in the implementation of those policies there has been noncompliance with laws requiring retention of White House records that belong to the American people?

Answer. We are not aware of any facts that would warrant a criminal investigation. The Presidential Records Act is not a criminal statute.

Question. Are you going to inquire as to whether there has been an intentional effort to avoid those laws and Congressional oversight?

Answer. We are aware of no facts that would suggest that such an inquiry would be warranted.

Question. At last week's oversight hearing, you would not agree with me that waterboarding an American citizen anywhere in the world is torture and illegal.

Under what circumstances or with what justifications would you consider waterboarding an American not torture and not illegal?

Answer. As the Attorney General stated during his appearance before the Committee, because waterboarding is not among the practices currently authorized for use in the CIA program, we do not believe that it would be appropriate to answer categorically questions concerning the legality of waterboarding absent a set of circumstances that call for those answers.

Question. While the Nisoor Square killings have drawn the most publicity, those shootings were not an isolated event. Blackwater forces have a documented history of shootings in Iraq where civilians have been seriously injured and killed. There were two other shooting incidents in the same month as the Nisoor square killings, where five civilians were killed and fifteen more were wounded. Since 2005, there have been nearly 200 other shootings by Blackwater guards in Iraq, and in more than 160 of those incidents, the Blackwater guards fired first. Is the Justice Department's investigation limited to the Blackwater killings in September, or will the Justice Department also investigate the other shooting incidents by Blackwater and other private security contractors in Iraq? If not, why not?

Answer. As a general matter, the Department does not comment on referrals made to it by other Departments, including State and DOD. In addition to being law enforcement information that the Department generally does not disclose publicly, referral numbers paint an incomplete picture and raise law enforcement sensitive questions that the Department is unable to answer.

Question. How many full time prosecutors and agents at the Justice Department are assigned to investigate criminal allegations against private security contractors overseas? What steps have you taken to make sure that shooting incidents by private security contractors in Iraq and Afghanistan are aggressively investigated and prosecuted?

Answer. Most MEJA cases involving private security contractors are initially investigated by the Department of Defense or the Department of State. Department of Justice agents and prosecutors do not typically become involved until those Departments refer a given case to the Department of Justice for criminal prosecution. When MEJA cases are referred to the Department for prosecution, the Department assigns agents and prosecutors as needed from the FBI, the offices of the United States Attorneys, and the Criminal Division.

The Department is committed to investigating and prosecuting criminal acts committed by private security contractors overseas. To that end, we continue to work with the Departments of Defense and State to ensure that there are clear procedures for those Departments to identify and, where appropriate, to refer for prosecution allegations of criminal misconduct involving private security contractors. We are also working with the Congress to explore legislative amendments that would increase the USG's ability to hold private security contractors accountable under federal law.

Question. According to press accounts, on January 24, 2008, a federal grand jury in Alexandria issued a subpoena to New York Times reporter Jim Risen reportedly seeking information about his confidential sources for a chapter in his 2006 book, "State of War" focusing on the CIA's alleged efforts to infiltrate and destabilize Iran's nuclear program. Mr. Risen's book also expanded on his reporting about the Administration's warrantless wiretapping for which he and another New York Times reporter won the 2006 Pulitzer Prize. Under the Department's guidelines, a subpoena to the media must be approved by the Attorney General. Did you approve this subpoena? What process was followed by the Department in considering whether to subpoena Mr. Risen?

Answer. Because Federal Rule of Criminal Procedure 6(e) imposes a secrecy requirement on all pending Grand Jury investigations, we cannot answer any questions pertaining to a specific Grand Jury subpoena or specific Grand Jury proceedings. We can say, however, that the Department's internal guidelines concerning media subpoenas, reprinted at 28 CFR 50.10, set out the specific factors to be considered before issuing a subpoena to a member of the media and require Attorney General approval before any such subpoena is issued.

Question. The Department's time-honored guidelines, set forth in the Department's "red book"—its guidebook on "Federal Prosecution of Election Offenses"—were revised under the outgoing, discredited leadership group to turn the traditional practice of not bringing last-minute investigations and actions on its head. The policies in the new "green book" provide great latitude for the Department to influence the outcomes of elections. We learned of this shift last year and were made aware of its dangers in investigating the actions of interim U.S. Attorney Bradley Schlozman, who replaced fired U.S. Attorney Todd Graves and brought election-eve indictments in a highly contested election in Missouri. What steps are you and the Department taking to make sure that there is no repeat of this type of conduct?

Answer. This question includes several components, which we address separately. As an initial matter, earlier this year, the Attorney General circulated a memorandum to all Department employees emphasizing the Department's existing policies with respect to political activities. The memorandum reiterated that "politics must play no role in the decisions of federal investigators or prosecutors regarding any investigations or criminal charges." The Attorney General has also reiterated this message personally on numerous occasions in his meetings with Department personnel.

With respect to the question, there was nothing improper about the timing of the registration fraud indictments in Missouri. Evidence submitted to the Department reflected that the subjects had submitted numerous bogus voter registrations to a get-out-the vote organization. No voters needed to be interviewed; the Department's consultation procedures for such matters were followed; and the charges did not violate the Department's policy against interfering with an ongoing election. This policy focuses on the timing of investigations of alleged voter fraud—not the timing of filing charges that have already been investigated—and discourages overt criminal investigation during the period immediately prior to an election or on Election Day in order to avoid chilling lawful voting activity or interjecting a criminal investigation into an ongoing campaign.

Simply stated, the Department's 1995 election crime manual was revised because it was out of date. The main authors of the 2007 manual are two career prosecutors in the Criminal Division's Public Integrity Section. These senior prosecutors are the Department's experts on election crimes and collectively have over sixty years of experience in the investigation and prosecution of election fraud and campaign financing crimes. The updated draft went through several revisions by its authors. After review and approval by the Section and Criminal Division, the manual was forwarded to other Department components prior to publication. Its authors received no substantive suggestions from anyone outside the Criminal Division.

The 2007 manual incorporates the landmark changes enacted by Congress in the Bipartisan Campaign Reform Act of 2002 (BCRA), and especially the enhanced criminal penalties for campaign financing crimes included in these reforms. It also incorporates the Department's renewed commitment to addressing election fraud and campaign financing crimes that is exemplified by the Department's Ballot Access and Voting Integrity Initiative. The initiative was created in 2002 to increase the Department's efforts to protect voting rights and deter and prosecute election crimes, and recognizes that it does little good to protect a person's right to vote if that person's vote is subsequently diluted or eliminated by fraud.

As in other areas of criminal law enforcement, the effect of vigorous and impartial enforcement of the federal statutes criminalizing various types of election crimes is likely to extend beyond the defendants charged in specific cases and deter others who are considering similar conduct. While this deterrence is not capable of measurement, it remains an important societal and governmental goal. Congress also has recently recognized the importance of deterring crimes. See BCRA § 314(b)(1) (mandating a new sentencing guideline for campaign financing crimes that would reflect "the need for appropriate and aggressive law enforcement action to prevent such violations"). The 2007 manual also incorporates the Department's additional enforcement experiences prosecuting election crimes over the past decade, and recognizes that there are situations where prosecution of an individual act of election fraud or campaign fraud may be warranted. Rather than providing what is in essence a blanket immunity for an individual who commits a federal crime, this approach allows prosecutive decisions to be made on a case-by-case basis, as is the case in other areas of criminal law enforcement.

Moreover, there has been no substantive change in the Department's policy regarding noninterference with elections. For over two decades, the Public Integrity Section and its Election Crimes Branch have counseled United States Attorneys' Offices against taking overt criminal investigative measures involving alleged election fraud, such as interviewing voters or issuing grand jury subpoenas for ballot documents, until the election in question has been concluded and its results certified. This policy reduces the risks of chilling legitimate voting, interfering with the administration of elections by the states, or transforming a criminal investigation into a campaign issue by appearing to legitimize unsubstantiated allegations. Rather than being "watered down" or weakened, the text was expanded in the updated manual to provide additional guidance and assistance as a result of the Department's ongoing criminal enforcement efforts in this area.

Election crimes strike at the heart of our democratic form of government and the Department is committed to the vigorous and impartial enforcement of the federal criminal statutes enacted by Congress to combat these serious crimes.

Question. One of the most disturbing features of the Justice Department in this Administration has been the complicity of the Department's supposedly independent and impartial Office of Legal Counsel in providing secret legal memoranda defining torture down to meaninglessness, excusing warrantless spying on Americans contrary to our laws and, more recently, justifying the absolute immunity of White House employees from Congressional subpoenas without reference to a single legal precedent. Jack Goldsmith, a conservative former head of the Office of Legal Counsel who found many of these opinions to be "deeply flawed and sloppily reasoned" rescinded several of the most extreme of them, only to see some reinstated in other forms after his departure. In response to questions from Senator Schumer at your confirmation hearing, you committed to this Committee that you would conduct a review of OLC opinions in several areas, including detention policies, interrogation policies, and policies relating to warrantless wiretapping. Have you conducted this review and in what areas? If not, why not?

Answer. As the Attorney General committed in his letter to the Committee, dated October 30, 2007, he has reviewed the Office of Legal Counsel's legal analysis of practices that are currently authorized for use in the CIA's interrogation program. The Attorney General has found those practices to be lawful and has found the Office's analysis and conclusions concerning those practices to be correct and sound. The Attorney General has not found it necessary to go further and to review Office of Legal Counsel opinions, or portions of those opinions, that do not address matters currently before him.

Have you determined that any OLC opinions are suspect? If so, what action have you taken?

Answer. No, the Attorney General has reviewed the Office of Legal Counsel's legal analysis of practices that are currently authorized for use in the CIA's interrogation program. The Attorney General has found those practices to be lawful and has found the Office's analysis and conclusions concerning those practices to be correct and sound.

Question. Congress cannot legislate in the dark. With this Committee, in particular, that means we must know how the Executive Branch interprets the law on critical national security issues. Yet this Administration has steadfastly refused to provide the Congress with key opinions from the Office of Legal Counsel on electronic surveillance and their interpretation of the laws on torture. Will you commit to providing this Committee, under appropriate security protections, the OLC legal opinions that we have been requesting for years and that we require in order to fulfill our constitutional responsibilities?

Answer. The Administration has made extraordinary accommodations in recent months to accommodate Congress' interest in these matters. Highly classified opinions concerning the Terrorist Surveillance Program have been made available to, among others, the Intelligence and Judiciary Committees of both Houses of Congress. As to the CIA's interrogation program, the Intelligence Committees briefed on both the classified details of and the legal basis supporting the program, and unclassified briefings also have been provided to Congress. Since the Attorney General's testimony, the Administration has further accommodated congressional interest in this subject by making available to the Intelligence Committees the classified OLC opinions on the CIA program. In addition, the Administration has made available to the Judiciary Committees three of those opinions, with limited redactions necessary to protect intelligence sources and methods.

Question. In 2004, Congress passed and the President signed the Justice for All Act. That bipartisan bill included the Innocence Protection Act, a piece of legislation I worked on for years providing important reforms to help reduce the risk of error in capital cases. A key component of that Act was a grant program for post-conviction DNA testing. The program is named in honor of Kirk Bloodsworth, the first death row inmate exonerated as a result of DNA testing. To ensure that other innocent people avoid the ordeal Mr. Bloodsworth went through and that the guilty are caught and convicted, it is crucial that states receive the funding authorized and appropriated for the Bloodsworth program. Instead, the Department of Justice has interpreted the very reasonable evidence preservation requirements that Congress included for this program so stringently, and contrary to Congress' intent, that all applications to the program have been rejected and not a dime has been awarded. This Committee held a hearing last month on this issue, and the Department's representative assured us that he would work to award the grant money that has been sitting unused these past three years. Will you make sure that the Department does everything it can this year to get the money appropriated to the Bloodsworth program out to the states that can use it for good?

Answer. Yes. In the fiscal year 2007 postconviction DNA solicitation, in accordance with section 413 of the Justice for All Act and the fiscal year 2006 and fiscal year 2007 appropriations, applicants were required to demonstrate compliance with certain stringent eligibility requirements set by section 413. Language in this year's (fiscal year 2008) appropriation has the effect of allowing the Department of Justice's National Institute of Justice (NIJ) to ease the section 413 requirements with respect to funds appropriated for fiscal year 2006-fiscal year 2008. The fiscal year 2008 solicitation—which was posted on January 22, 2008, and updated in response to concerns expressed in connection with a Senate hearing—accordingly eases the requirements of section 413, in a manner that we believe remains consonant with the policy objectives of section 413.

Question. Congress gave the Department an out in this year's appropriations bill that allows the Department to loosen the requirements for the Bloodsworth program. Will you nonetheless make sure that the Department does not ignore Congress's clear intent that states be held to reasonable standards of evidence preservation since money for DNA testing does no good if the evidence is not there to test?

Answer. The fiscal year 2008 solicitation eases the requirements in a manner that we believe remains consonant with the policy objectives of the statute. Under the fiscal year 2008 solicitation to establish eligibility, the chief legal officer of the State must certify that the State "[p]reserves biological evidence secured in relation to the investigation or prosecution of a State offense of forcible rape, murder, or nonnegligent manslaughter under a State statute, local ordinances, or State or local rules, regulations, or practices, in a manner intended to ensure that reasonable measures are taken by all jurisdictions within the State to preserve such evidence." We believe that this requirement, which includes language derived generally from section 413 of the Justice for All Act itself, calls for a meaningful certification. We will rely on the chief legal officer of each State to accurately assess whether the certification properly can be made based on the State's particular circumstances. We note that the certification template explicitly states that "I am aware that a false statement in this certification may be subject to criminal prosecution, including under 18 U.S.C. § 1001."

Moreover, the fiscal year 2008 solicitation for these funds puts States on notice that funding in future fiscal years may be contingent on the more stringent requirements regarding evidence retention established by section 413 of the Justice for All Act. In addition, through the DNA and Coverdell programs, NIJ provides significant assistance to States and units of local government to purchase equipment and other resources to provide for retention of biological evidence. Finally, NIJ is studying the extent of evidence preservation in DNA laboratories generally to identify ways to improve evidence storage practices.

Question. The Judiciary Committee's hearing last month also looked into Inspector General Glenn Fine's highly critical review of the Department's implementation of the Coverdell grant program for forensic improvements. The Justice for All Act required that states receiving money under the Coverdell program certify that they have an independent entity to investigate allegations of serious negligence or misconduct. Inspector General Fine's report found many problems with the Department's implementation of this provision. Perhaps most astonishing, he found that the Department has taken the legal position that, while agencies must certify they have an independent entity where they can refer allegations of misconduct or serious negligence by forensic labs, the agencies have no obligation to actually refer such allegations for investigation. So they need to have a process, but they do not need to use it. This is clearly contrary the bi-partisan intent of Congress in the Justice for All Act. Why would the Justice Department would take a legalistic position that is so clearly contrary to the intent of the Justice for All Act?

Answer. The Department of Justice agrees that allegations of serious negligence or misconduct in forensic programs should be appropriately investigated. In its recent fiscal year 2008 solicitation for the Coverdell program, the National Institute of Justice strongly encouraged the reporting of allegations of serious negligence or misconduct to the appropriate government entity. The Department is currently working collaboratively with the Office of the Inspector General to further clarify, in the best way possible, the grantees' responsibilities when they receive allegations of serious negligence or misconduct.

Question. Do you agree with me that the Justice Department must encourage the reporting of serious allegations of lab misconduct for investigation in order to ensure that any federally-funded forensic labs have the highest level of integrity?

Answer. Yes, the Justice Department believes that allegations of serious negligence or misconduct should be appropriately investigated. Beginning with the upcoming fiscal year 2008 solicitation, Coverdell program solicitations will strongly encourage the reporting of this misconduct.

Question. What are you proposing for rural areas and the smaller cities where crime has risen the most?

Answer. DOJ is committed to providing the technical assistance necessary to ensure that applicants need not employ professional grant writers to successfully compete for funding. But more, objective criteria such as crime rates allow communities and grantees to compete on equal footing.

This has been borne out in practice. A total of 18 sheriffs offices were funded in the fiscal year 2007 Targeting Violent Crime Initiative Program—all that applied were successful. While several large sheriffs' offices applied and were funded, many small agencies also applied and received funding (some with as few as 20 or 30 sworn staff). Awards to larger agencies often included support for smaller agencies in the surrounding areas, including sheriffs' offices (showing multi-jurisdictional character was an important factor in this program).

—Tulsa, Oklahoma—the Tulsa Police Department will partner with the Tulsa County Sheriffs Office, the local community services council, the FBI and ATF to address gang- and drug-related gun crime in the greater Tulsa area.
—Wilmington, North Carolina—this town will use TVCI funds to address a violent drug gang problem using long and short term investigative strategies and relying on a partnership with the local FBI task force.
—Moss Point, Mississippi—this Gulf Coast community (population 15,512) will use TVCI funds in addition to building on existing DEA and FBI task forces to address local violence, which appears to be drug- and gang-related.
—Redding, California—this Shasta area community will address local gang problems using TVCI funds in collaboration with federal agency support.
—Lowell, Massachusetts—this suburban community will use TVCI funds to support an analytical, intelligence-driven "Ceasefire" approach to address gun, gang, and drug violence in the community.
—Akron, Ohio—this Midwest community will broaden an anti-gang initiative with Summit County Sheriff's Office and the Greater Akron High Intensity Drug Trafficking Area project. Funds will also be used to support prevention and prosecution of crimes in that area.
—Leech Lake Tribe in Minnesota.

The Bureau of Justice Assistance within OJP also has a program of training and technical assistance designed exclusively for small law enforcement agencies (those with less than 50 sworn staff). This program provides assistance to small departments in developing anti-crime strategies, managing departments, and accessing resources such as grants. This program is administered by the International Association of Chiefs of Police.

Question. Will you commit to working with me during the regular fiscal year 2009 appropriations cycle and on the upcoming emergency supplemental appropriations bill to restore the hundreds of millions in funding cuts to the COPS Program, the Byrne grant program, and other programs that have proven effective in cutting crime?

Answer. We appreciate the support shown for the Department by the Senate Appropriations Subcommittee on Commerce, Justice and Science and pledge, consistent with the President's budget request, the Department's assistance to the subcommittee in getting the information it needs to formulate its fiscal year 2009 appropriations bill. If Congress were to pass a supplemental appropriations bill in 2008, the Department would be glad to consider supporting the request so long as it was consistent with Administration priorities.

Question. Sixteen years after Congress authorized the National Motor Vehicle Title Information System (NMVTIS), there are still major loopholes in the system that allow crooked mechanics and sellers to "wash" data from car titles that would alert prospective buyers if a car has been totaled in an accident or stolen. Consumers face dangers when they unknowingly buy improperly repaired vehicles with a history of serious damage. An article about airbag scams published last month in Reader's Digest documents several deaths due to nonfunctioning airbags in vehicles whose titles had been "washed" and whose repairs were fraudulent. Due to gaps in NMVTIS reporting, the owners did not know that their cars had been previously totaled, much less improperly repaired. They delay in full implementation of NMVTIS is the result of the Justice Department's failure to issue long-overdue rules requiring insurers and junkyards to provide data about totaled vehicles. Why, when consumer safety is at stake, has the Department failed for over a decade to issue these rules? When will the rules be issued?

Answer. The key to an effective vehicle titling system is the cooperation and participation of all of the states. Since responsibility for the National Motor Vehicle Title Information System (NMVTIS) was transferred from the Department of Transportation (DOT) to the Department of Justice, the Department of Justice has been working with the American Association of Motor Vehicle Administrators (AAMVA) to implement NMVTIS. AAMVA is a nonprofit, tax exempt, educational association representing U.S. and Canadian officials who are responsible for the administration and enforcement of motor vehicle laws. AAMVA has been acting in the capacity of NMVTIS operator since 1992, when DOT was responsible for the system. The focus of the efforts of the Department of Justice and AAMVA has been to set up a working system and to get all of the states to participate in NMVTIS. Unfortunately, many states have been slow to participate because of competing demands on their resources.

Currently, 35 states are actively involved with NMVTIS. Thirteen states are participating fully in NMVTIS, 12 states are regularly providing data to the system, and an additional 10 states are actively taking steps to provide data or to participate fully. The 13 states participating fully in NMVTIS are Arizona, Florida, Indiana, Iowa, Kentucky, Massachusetts, New Hampshire, Nevada, Ohio, South Dakota, Virginia, Washington, and Wisconsin. The 12 states providing regular data updates to NMVTIS are Alabama, Georgia, Idaho, Louisiana, Nebraska, New Jersey, New York, North Carolina, Pennsylvania, Tennessee, Texas, and Wyoming. The 10 states actively taking steps to provide data or participate fully are Arkansas, California, Delaware, Missouri, Montana, New Mexico, Oklahoma, South Carolina, Vermont, and West Virginia. States that participate fully in the system provide data regularly and make NMVTIS inquiries before issuing a new title. These states also send updates to the system when necessary. States that regularly provide data to the system do so through a batch upload process but do not check NMVTIS before issuing a new title. Currently, more than 60 percent of the U.S. vehicle population is represented in the system. The Department of Justice's goal is to have more than 75 percent of the U.S. vehicle population represented in the system by the end of 2008.

The Department of Justice has recently submitted a proposed rule to implement NMVTIS to the Office of Management and Budget. That rule is currently under review.

TELECOMMUNICATION CARRIER COMPENSATION

Question. We are engaged in a debate in the Senate about this Administration's proposal to grant retroactive immunity to telecommunications carriers who participated in secret warrantless surveillance efforts for more than 5 years in violation of the Foreign Intelligence Surveillance Act, presumably some of the same carriers that later disconnected wiretaps when the bills were not paid. What payments were made to telecom companies to compensate for their participation in surveillance efforts including that which came to know as the President's program and the Terrorist Surveillance Program?

Answer. The Senate and House Intelligence Committees have conducted extensive oversight of operational aspects of the National Security Agency activities described by the President and the 2005 Act now commonly known as the Terrorist Surveillance Program. The Judiciary Committees of both Houses have also been provided with documents, held hearings, and have been briefed on this Program. The specifics of any arrangement between the Government and a telecommunications carrier to provide classified assistance with surveillance efforts cannot be further discussed in an unclassified setting.

Question. As of May last year, the Justice Department declined to identify for the Judiciary Committee the number of civil false claims cases that have been referred to or remain pending at the Justice Department, and only identified one case where the Justice Department has joined a qui tam relator in a case involving allegations of contracting fraud in Iraq or Afghanistan. Will you provide the Committee with an update on the status of these unresolved civil false claims cases? Please identify how many false claims cases have been referred to the Justice Department for investigation, how many the Justice Department has joined, and how many cases the Justice Department has declined to join. Also, please identify any new public settlements under the False Claims Act related to allegations of contracting fraud in Iraq or Afghanistan, and briefly describe the facts of these cases.

Answer. As of June 2, 2008, fifty-three qui tam actions have been filed under the False Claims Act against private contractors that provided support for U.S. government activities in the Middle East, including Iraq and Afghanistan. Of these fifty-three cases, the Department has intervened in and is litigating one case, has settled, at least in part, three other cases, and has declined to intervene in another eighteen cases. The Department continues to investigate the remaining matters. The Department is also investigating a number of non-qui tam matters involving the Middle East that have been referred to the Department by other governmental agencies.

As noted, the Department has resolved three qui tam actions, at least in part, relating to the Middle East, which resulted in four separate settlements. Additionally, the Department has settled one non-qui tam matter under the False Claims Act involving the Middle East. These five settlements are briefly described below:

—Houston-based EGL, Inc., operating as Eagle Global Logistics, a subcontractor for Kellogg Brown and Root, settled for $4 million on August 6, 2006. The settlement resolved allegations that EGL inflated invoices for shipments under government contracts for support of military operations in the Balkans, Afghanistan and Iraq. This settlement resolved in part a qui tam case that remains sealed.

—In a second settlement arising out of the same sealed qui tam case discussed in the prior paragraph, EGL, Inc. paid the United States in June, 2007, an additional $300,000 to settle allegations that the company's local agent in Kuwait overcharged the military for rental charges on shipping containers to Iraq for the period from January through June, 2006.

—Force Protection Industry, Inc., of Ladson, South Carolina, agreed on August 23, 2006, to pay the United States $1.8 million to settle fraud claims related to the manufacture and delivery of armored vehicles for use in Iraq. These allegations were the subject of a qui tam action captioned *United States ex rel. Chomyn* v. *Force Protection Industry, Inc.*, No. 2:05–1906 (D.S.C.).

—Northrop Grumman settled a voluntary disclosure case on July 18, 2007, by paying $8 million in connection with deficient testing of night vision goggles and sniper scopes used throughout the military.

—On December 18, 2007, the Department settled with Sioux Manufacturing Corp. for $1.9 million the allegations in *United States ex rel. Kenner* v. *Spirit Lake Tribe*, No. 2–06–CV–48 (D. N.D.). This qui tam case alleged that the defendant failed to follow specifications in making protective cloth material for military helmets.

Finally, as noted, the Department is currently litigating one case relating to the Middle East. On June 11, 2007, the United States intervened in the qui tam case captioned *United States ex rel. Dye* v. *ATK Thiokol, Inc.*, No. 1:06CV39 (D. Utah). The lawsuit alleges that ATK delivered defective illumination flares used in search and rescue, and combat operations critical to the U.S. military, including operations in Iraq and Afghanistan.

QUESTION SUBMITTED BY SENATOR BYRON L. DORGAN

TRIBAL JUSTICE FUNDING

Question. The Justice Department dedicated 102 Federal Bureau of Investigations agents to investigate violent crimes in Indian country in 1998. Congress provided funding for an additional 30 agents in fiscal year 1999, and an additional 27 agents in fiscal year 2005. As a result of these appropriations, there should be 159 FBI agents dedicated to violent crime in Indian country. However, there are only 114 FBI agents dedicated to Indian country today. Can you please explain this discrepancy?

Answer. As of June 2008, there are 104 FBI Special Agents working on Indian Country (IC) matters. Of this total, 30 were appropriated in fiscal year 1997, 30 in fiscal year 1999, and 10 in fiscal year 2005 (the FBI's fiscal year 2005 appropriation included 27 positions, 10 of which were Special Agents). The remaining 34 Special Agents currently working IC matters have been assigned by their respective field offices to address specific IC issues.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

Question. Is the Department of Justice pleased with all of the DHS charges in present and past budget requests? If so, please explain why. If not, please explain why. Please list all services received from the DHS charge since its inception.

Answer. The Department of Homeland Security charges three types of security costs to the Department of Justice (DOJ): basic security charges, building-specific security charges, and reimbursable collections. Basic security charges are required for all Federal Protective Service (FPS)-protected facilities and are based on a per-square footage basis. Building-specific security charges are based on specific security needs of the building in question. The building-specific security charges are comprised of two elements: operating expenses and amortized capital costs. Building specific charges, whether operating expenses or capital costs, are distributed over all federal users by building or facility in direct proportion to each customer agency's percentage of federal occupancy. Reimbursable collections include any agency-specific requirement or requirement above the building security survey recommendation. We cannot confirm what precise building security measures the Department has in place, as it would jeopardize building security. We are happy to provide this information to you in a more secure manner, however.

DEPARTMENT OF JUSTICE AGENTS

Question. Two years ago (May 2006), the Administration's supplemental budget request included $2 billion to secure the Nation's border of which only $20 million, or 1 percent, was for the Department of Justice. Since September 11th, the Administration has increased the number of Border Patrol agents by 122 percent, from 9,000 in fiscal year 2000, to 20,000 in their fiscal year 2009 request.

Provide a detail breakout by bureau the number of agents hired and the percentage increase by each since September 11th.

Answer. The following chart indicates the authorized agent levels for the core DOJ law enforcement agencies.

DOJ Component	Fiscal year—				
	Enacted	2008 enacted	Percent 2008 over 2001	2009 President's budget	Percent 2009 over 2001
FBI	11,375	13,027	14.5	13,313	17.0
DEA	6,080	5,838	−4.0	5,868	−3.5
ATF	2,671	2,482	−7.1	2,482	−7.1
USMS	2,671	3,412	27.7	3,570	33.7

Reflects direct and reimbursable authorized agent positions.

OTHER

Question. Concerns have been raised with the Subcommittee that S&E funds have been used for construction projects at DEA. Has DEA used any S&E funding for anything other than its intended purpose, without notifying Congress, in the past three years?

Answer. DEA has not used any S&E funding for anything other than its intended purpose, without notifying Congress in the past three years.

Question. Last year, DEA used the term hiring freeze while soliciting increased funding over the Presidents requested budget. Was anyone hired at DEA last year? Does the Attorney General agree that DEA had an actual hiring freeze? If anyone was hired at DEA, please explain how this is a hiring freeze. If the Attorney General agrees that DEA was in the midst of a hiring freeze and DEA had hired, please explain the Attorney General's position. If the Attorney General disagrees with DEA saying it was a hiring freeze, please explain that position.

Answer. DEA did not fill positions that were funded through its base Salaries and Expenses Account. However, DEA did not have to limit hiring for positions funded through the Diversion Control Fee Account. DEA was able to hire a limited number of positions in the Salaries and Expense Account due to funding provided by Congress specifically for new hires. The fiscal year 2007 Joint Resolution included funding for 57 new DEA positions to support the Intelligence Community. Congress also provided funding in the fiscal year 2007 GWOT Supplemental, which allowed DEA to fill 184 positions.

DEA lost 663 employees through attrition (including 251 Special Agents) from August 2006 through December 2007. Over the same time period, DEA hired 281 new employees (including 96 Special Agents), resulting in a net reduction of 382 employees (including 155 Special Agents).

The Department of Justice remains fully informed of DEA's progress in hiring over the past year and a half. The Department has been engaged from the beginning in dialogue with DEA to ensure that the managed hiring initiative is implemented appropriately.

SOUTHWEST BORDER ENFORCEMENT

Question. Two years ago (May 2006), the Administration's supplemental budget request included $2 billion to secure the Nation's border of which only $20 million, or 1 percent, was for the Department of Justice.

Thousands of new Border Patrol agents have placed a tremendous strain on the federal criminal justice system and significantly increases the workload of the Department of Justice. The end result is that DOJ agencies must further sacrifice its limited resources to respond to fiscal and human resource pressures created by other federal agencies. Do you really think $100 million is enough for the Department of Justice when the Border Patrol alone is asking for four times that amount at $442 million?

Answer. The Attorney General has requested $100 million in new funding as a part of the fiscal year 2009 budget for the Administration's Southwest Border Enforcement Initiative. If funded by Congress, the new resources will better enable the United States to combat the flow of illegal immigration, drugs, and weapons across our Southwest Border, and to arrest, detain, prosecute, and incarcerate violent criminals, drug offenders, and immigration violators along the Southwest Border. These funds will support the full range of law enforcement operations along our Southwest Border. The requested funds for fiscal year 2009 included enhancements to the Bureau of Alcohol, Tobacco, Firearms, and Explosives, the Drug Enforcement Administration, Interagency Crime and Drug Enforcement, the U.S. Marshals Service, the Office of the Federal Detention Trustee, the Executive Office for Immigration and Review, and the border U.S. Attorneys' Offices. As that list indicates, the issues associated with border enforcement are multifaceted and involve many entities, not only in the Department of Justice but across the Executive Department, as well as the Judiciary. Any legislative responses to issues associated with border law enforcement need to address the system as a whole.

FUGITIVE APPREHENSION PROGRAM

Question. Provide background on the OIG review on Adam Walsh. In December 2007, the USMS was notified that the Office of the Inspector General was initiating a review of the Department of Justice's efforts to implement the Sex Offender Registration and Notification Act (SORNA), Title 1 of the Adam Walsh Child Protection and Safety Act of 2006. What is the status of this investigation?

Answer. It is an inspection (rather than an investigation) being conducted by the Evaluation and Inspections Division of the Office of the Inspector General (OIG). The purpose of the review is to determine the status of the Department's efforts to prevent convicted sex offenders from committing additional crimes by locating, apprehending, and prosecuting fugitive sex offenders. This inspection is currently in progress.

Question. What other agencies in Justice were asked to participate?

Answer. The following offices were asked to participate: The Office of Justice Programs' Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART); the Federal Bureau of Investigation's National Crime Information Center (NCIC), Crimes Against Children Unit, and Integrated Statistical Reporting and Analysis Application (ISRAA); the Criminal Division's Child Exploitation and Obscenity Section (CEOS); and the Executive Office for United States Attorneys' Transactional Informational Government Accounting System (TIGAS).

Question. Who at the Department is coordinating this effort for the Federal Government?

Answer. Paul Price, Assistant Inspector General for Evaluations and Inspections, Office of the Inspector General, is coordinating this inspection at the behest of the Department of Justice's Inspector General, Glenn A. Fine.

Question. Provide the statistics on the number of shootings the DEA, ATF, FBI and USMS had in fiscal year 2007 versus the number of fugitives apprehended.

Answer. The USMS apprehended or cleared 75,812 federal fugitives and cleared 84,944 state and local fugitive cases in fiscal year 2007. The USMS had 20 shooting incidents in fiscal year 2007 during fugitive apprehensions. Shooting statistics involving other law enforcement agencies must be obtained directly from DEA, ATF, and FBI.

Question. Does the USMS have a plan for the expansion of the USMS Foreign Field Offices and does the Department of Justice support that expansion?

Answer. The USMS has a five-year plan for the expansion of the USMS Foreign Field Offices which was approved by the Director in July 2005 and by a previous Attorney General.

Question. What is the long term plan for the International Fugitive Apprehension Program?

Answer. The USMS International Fugitive Apprehension Program five-year plan proposes the establishment of country-specific and regional offices strategically placed in host countries to best address fugitive workload throughout the world. The USMS will determine the most strategic locations to expand the foreign field offices based on fugitive workload, extradition activity, political factors, and geographic location.

Since the approval of the foreign expansion plan, the Adam Walsh Child Protection and Safety Act became law. Adding the requirements of this new mission may change the order in which new foreign offices are added.

Question. The Department was directed in the 2005 conference report to submit a five year plan that included a time-line and cost estimate to open additional international offices that are critical to the USMS fugitive apprehension mission. Provide the Committee with the plan directed in the 2005 Conference report.

Answer. The USMS was directed by the Conference Report (H.R. 108–792) accompanying the fiscal year 2005 Consolidated Appropriations Act to submit a five-year plan for the International Fugitive Program. The plan was approved by DOJ and OMB on December 23, 2005 and is attached as submitted.

Question. Where is the department in implementing that plan?

Answer. The USMS currently has three foreign offices in the following locations: Mexico City, Mexico; Kingston, Jamaica; and Santo Domingo, Dominican Republic.

Question. Provide the plan for 2008 and 2009.

Answer. No new resources were included in the fiscal year 2008 enacted, but there is a pending request for one position in Mexico in the fiscal year 2009 USMS S&E President's budget request and one additional position in Mexico in the fiscal year 2009 OCDETF budget request for the USMS.

Question. How many new foreign offices will be opened by the Marshals to catch international fugitives in the 2009 budget?

Answer. The fiscal year 2009 President's budget does not include resources to open a new foreign field office.

Question. The Organized Crime Drug Enforcement Task Forces (OCDETF) is funded at $498 million this year. Most of the funding is for the 1,629 law enforcement personnel including: 1,048 DEA agents, 489 FBI agents, 53 ATF agents, and 39 Deputy U.S. Marshals. The fiscal year 2009 request seeks an additional 6 Deputy Marshals which would bring them up to 45 OCDETF Deputy Marshals. There is a memorandum of understanding (MOU) between the Marshals Service and DEA to work fugitive warrants. Under this MOU, after seven days, most DEA warrants are transferred over to the Marshals Service. No USMS warrants are transferred to DEA. If the Marshals Service is identifying and arresting DEA fugitives, why don't they get more OCDETF resources?

Answer. The level of USMS funding within the OCDETF Program is established by the ICDE Appropriations; it is not a matter of discretion for the OCDETF Program. Over the last several budget cycles, OCDETF has gradually requested and received additional resources to expand the USMS's ability to assist in the OCDETF mission. The President has not requested additional new resources, because the USMS's OCDETF resource allocation already takes into account that it will assume responsibility for unexecuted DEA warrants once investigations are completed.

The OCDETF Program provides reimbursable funding for the Drug Enforcement Administration, Bureau of Alcohol, Tobacco, Firearms and Explosives, Federal Bureau of Investigation, United States Marshals Service, United States Attorneys, and the Justice Department's Criminal and Tax Divisions. OCDETF funding augments the direct budgets and appropriations of the participating agencies and these funds are restricted to OCDETF program expenses. The allocation of OCDETF resources among these participating agencies takes into account the level of resources needed to fulfill each agency's role in the handling of OCDETF drug cases. Each OCDETF agency, including the DEA and the USMS, has unique capabilities and expertise that are deployed in individual cases to maximize productivity and avoid duplication of effort. The USMS's contributions, while critical to the success of the mission, are typically more limited than the DEA's in scope and expense. In most OCDETF cases, the DEA's role is to investigate the drug trafficking organizations, and the USMS's role is to find and arrest the traffickers who escape the first round of arrests. Recently, with the addition of new USMS resources, the OCDETF Program has begun using the USMS in a more proactive basis during the initial arrest and take-down process to limit the number of traffickers who become fugitives. The agencies' respective OCDETF funding levels take into account that division of labor and expertise. Warrants are not moved from USMS to DEA as that is not DEA's role in the OCDETF Program.

OCDETF funding allocations developed annually during the regular budget process are included in the President's budget request to Congress each February. The OCDETF resource requests that are submitted are developed within the overall National Drug Strategy and constraints provided by the Department of Justice and the Administration. During this process all aspects of each of the OCDETF components are reviewed with regard to the task force's mission. As the budget environment has become more restricted, only the highest priority budget increases have been approved. Over the last few years, in recognition of the need for the USMS's unique capabilities and expertise, the OCDETF Program has made it a priority to request increases for the USMS. In fiscal year 2005, OCDETF requested and received 28 new deputies, an increase of 215 percent. The current fiscal year 2009 President's budget includes a request for 6 new deputies, a 17 percent increase including the first full-time deputy who will be assigned to a foreign duty station. The OCDETF Program will continue to request additional deputies until the appropriate balance between investigations, prosecutions, and fugitive apprehensions has been met.

Question. How much money has been provided to the Marshals from OCDETF for extraditions?

Answer. The OCDETF Program does not specifically designate any of the funding provided to the USMS. Historically, the USMS has not designated any of its OCDETF funding for returning extradited fugitives to the United States and instead has focused its OCDETF funding on its highest priority of identifying, locating and apprehending fugitives, including those that have fled the country. Shifting resources to support the administrative and logistical costs associated with extraditions would greatly diminish fugitive apprehension efforts.

Question. Can the USMS use OCDETF funding to support the expansion of the USMS Foreign Field Offices?

Answer. Yes. The USMS can use OCDETF funding to help the expansion of USMS foreign field offices. The fiscal year 2009 OCDETF President's budget contains a request for one position for the USMS to expand violent narcotics case fugitive apprehension in Mexico. This is in addition to the aforementioned Mexico position in question right before this one.

Question. Can't OCDETF money be used to augment the Foreign Field Office in Mexico City, Mexico and Bogotá, Colombia? If not, why not? Be specific.

Answer. Yes, OCDETF money could be used to augment the foreign field offices. There were no program enhancements in fiscal year 2007 and the USMS OCDETF budget decreased in fiscal year 2008. The fiscal year 2009 OCDETF President's budget contains a request for one USMS position to expand violent narcotics case fugitive apprehension in Mexico. The USMS is in the process of initiating a temporary duty assignment to Bogotá, Colombia using OCDETF resources, in conjunction with the Drug Enforcement Administration, to assess the USMS in-country capabilities on fugitive apprehension and extradition efforts. The temporary duty start date is scheduled for the Summer of fiscal year 2008.

Question. How many narcotics related or narco-terrorism related extraditions does the USMS do each year?

Answer. In fiscal year 2006, 301 narcotics/narco-terrorism related extraditions were completed costing $1,068,728. In fiscal year 2007, 347 narcotics/narco-terrorism related extraditions were completed costing $1,166,500.

Question. Can funding be utilized from the Organized Crime Drug Enforcement Task Force (OCDETF) to support narcotics related extraditions?

Answer. Yes. The USMS has requested $100,000 in the fiscal year 2009 OCDETF President's budget to support narcotics related extraditions. The USMS has also sought funding through the Asset Forfeiture Program and OCDETF to cover the costs incurred by the USMS for extraditing these targets and will continue to pursue future funding for this essential mission.

Question. If so, has it been used for this purpose?

Answer. The USMS has not previously used any outside funding resources for this purpose.

Question. If not please describe in detail why.

Answer. Funding was allocated to maximize performance output. Domestic OCDETF fugitive operations would have been markedly reduced by any spending priority shift to extradition funding.

Question. Isn't it true that in fiscal year 2006 and fiscal year 2007 approximately half of the extradition missions were conducted on subjects wanted in major narcotics cases, including criminal indictments filed under the Organized Crime Drug Enforcement Task Force (OCDETF)?

Answer. Yes. Please see stats in next question.

Question. Specifically in fiscal year 2006, 301 of the 685 missions completed were for narcotics, 72 of which were specifically for OCDETF violators. In fiscal year 2007, 347 of the 772 missions completed were for major narcotics violators, 51 of which were OCDETF cases. How much funding has OCDETF given to the Marshals to support these efforts from fiscal year 2004 to today? Be specific.

Answer.

	Positions	Investigators	FTE	Amount
Fiscal year 2004	13	13	13	$2,125,000
Fiscal year 2005	41	39	27	$6,345,000
Fiscal year 2006	41	39	36	$6,932,000
Fiscal year 2007	41	39	39	$8,447,000
Fiscal year 2008	41	39	41	$8,272,000
Fiscal year 2009 President's request	47	45	44	$10,221,000

Question. Provide a detailed list of all funding provided by OCDETF to support the extraditions and deportations carried out by the Marshals Service.

Answer. OCDETF does not limit the activities that USMS can use OCDETF funding for as long as the costs are related to an OCDETF fugitive. The USMS has historically chosen not to allocate OCDETF funding for the logistical and administrative costs of extraditions and deportations.

Question. Provide all of the requests since fiscal year 2005 from the U.S. Marshals Service to OCDETF for funding assistance? Be specific as to why each was approved or rejected. Be specific about all higher priorities funded.

Answer. As noted in the above response, the OCDETF Program provides the USMS funding on an annual basis through the budget process. This process allows the USMS to submit budget enhancements to the OCDETF Program for inclusion in its annual President's budget request. The details of these requests are predecisional and not releasable.

However, since fiscal year 2005, the following program enhancement requests were requested by the Administration for the OCDETF USMS Program: an additional 28 positions and $4,320,000 in fiscal year 2005 to create OCDETF fugitive apprehension units throughout the nine OCDETF regions and assume responsibility for all OCDETF fugitives; 9 positions and $2,072,000 in fiscal year 2006 to increase the capacity of the USMS to apprehend OCDETF fugitives; and an additional 6 positions and $1,714,000 for the USMS to address OCDETF fugitive apprehension by adding a Deputy U.S. Marshal to each of the border Districts; one Deputy U.S. Marshal in Mexico City, addressing the apprehension of OCDETF fugitives that are linked to CPOTs and Gatekeepers; and funding to assist in defraying the costs of extradition incurred by the USMS when bringing a fugitive out of Mexico back to the United States to face prosecution. These requests are on top of the mandatory inflationary cost requests by the Program. When compared to the other OCDETF components' requests, the USMS has grown at a significantly higher rate. Only DEA and USAs have also received enhancements during this time frame. While the USMS OCDETF budget has increased 289 percent since fiscal year 2004, the USA OCDETF budget grew 32 percent, and the DEA OCDETF budget grew only 12 percent.

In addition, during this period the OCDETF Program has relied upon reprogrammed funds from prior year balances to supply requisite funding for short-term, targeted fugitive apprehension missions, called Special OCDETF Response Teams, or SORT Operations. Nearly $1.2 million in reprogrammed monies were provided to the USMS by the OCDETF Executive Office during this time. The OCDETF Program continues to support the USMS, as they are an integral part of the Program.

Question. How much will OCDETF be assisting the marshals with funding in fiscal year 2008?

Answer. The USMS resource assistance by OCDETF in fiscal year 2008 is 41 positions, including 39 Deputy Marshals, totaling $8,272,000.

Question. Provide all requests since 2001 made by the Marshals for assistance from OCDETF, how much funding assistance was provided for each request, and the metrics used to determine what requests to support and reject?

Answer. See table below.

	Positions	Investigators	Amount
Fiscal year 2001	13	13	$1,980,000
Fiscal year 2002	13	13	$2,049,000
Fiscal year 2003	13	13	$2,095,000
Fiscal year 2004	13	13	$2,125,000
Fiscal year 2005	41	39	$6,345,000
Fiscal year 2006	41	39	$6,932,000
Fiscal year 2007	41	39	$8,447,000
Fiscal year 2008	41	39	$8,272,000
Fiscal year 2009 President's request	47	45	$10,221,000

The United States Marshals Service (USMS) plays a significant role in the OCDETF Program. The USMS is responsible for approximately 90 percent of all OCDETF fugitive investigations. Currently, there are over 7,200 OCDETF fugitives nationwide, 32 percent of which are considered leaders in their organization. In fiscal year 2007, the USMS arrested 1,449 OCDETF fugitives—an average of 42 arrests per OCDETF U.S. Marshal FTE, clearing 1,492 warrants by arrest.

When the OCDETF Program began in 1982, the Marshals received an allocation of 13 positions and this allocation remained unchanged for over twenty years. Fugitive apprehension is a critical element of the OCDETF Program's success. However, while other OCDETF member agencies increased their workforce generating many new OCDETF investigations and thereby increased the workload of the USMS, the USMS OCDETF resources remained fixed. In fiscal year 2003, a management study was done on the participation levels of the OCDETF Components which indicated that the level of participation by the USMS should be 113 positions given the current workloads. The OCDETF Program determined that this level of increase needed to be implemented in phased process. The fiscal year 2005 President's request represented the first phase of the process resulting in the USMS receiving 28 new positions a 215 percent increase. Each year since, the OCDETF Program has sought to incrementally increase the USMS to reach the ultimate goal of 113 positions.

USMS HISTORICAL OCDETF ENHANCEMENTS

[Dollars in thousands]

Fiscal year	Enhancement requests		Enhancements received	
	Positions	Funding	Positions	Funding
2005	37	$5,801	28	3,932
2006	67	13,024		450
2007	34	7,181		1,940
2008	20	8,032		(175)
2009	19	4,690	([1])	([1])

[1] Pending.

Question. What are the participation levels in OCDETF among the DOJ agencies? What are the overall percentages that each agency initiates and participates in OCEDTF cases?

Answer. Please see table below.

AGENCY PARTICIPATION IN OCDETF INVESTIGATIONS

	Fiscal year 2001		Fiscal year 2002		Fiscal year 2003		Fiscal year 2004		Fiscal year 2005		Fiscal year 2006		Fiscal year 2007		Fiscal year 2008	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
ATF	305	22.8	212	23.5	165	23.4	212	24.0	261	25.6	258	26.7	273	26.9	211	30.1
DEA	1,117	83.6	781	86.6	623	88.5	803	91.0	925	90.6	870	89.9	918	90.4	625	89.2
FBI	566	42.4	333	36.9	247	35.1	309	35.0	344	33.7	325	33.6	334	32.9	233	33.2
ICE	655	49.0	504	55.9	387	55.0	467	52.9	465	45.5	390	40.3	424	41.7	289	41.2
IRS	526	39.4	419	46.5	378	53.7	451	51.1	438	42.9	356	36.8	469	46.2	276	39.4
USCG	15	1.1	19	2.1	9	1.3	16	1.8	11	1.1	16	1.7	21	2.1	11	1.6
USMS	307	23.0	263	29.2	209	29.7	300	34.0	340	33.3	406	41.9	511	50.3	325	46.4
State & Local	1,205	90.2	806	89.4	617	87.6	768	87.1	922	90.3	867	89.6	901	88.7	647	92.3

AGENCY SPONSORSHIP OF OCDETF INVESTIGATIONS

	Fiscal year 2001		Fiscal year 2002		Fiscal year 2003		Fiscal year 2004		Fiscal year 2005		Fiscal year 2006		Fiscal year 2007		Fiscal year 2008	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
ATF	60	4.5	41	4.5	27	3.8	42	4.8	54	5.3	71	7.3	59	5.8	49	7.0
DEA	908	68.0	624	69.2	536	76.1	710	80.5	816	79.9	784	81.0	821	80.8	568	81.0
FBI	310	23.2	182	20.2	124	17.6	152	17.2	168	16.5	164	16.9	179	17.6	135	19.3
ICE	168	12.6	146	16.2	86	12.2	143	16.2	137	13.4	132	13.6	127	12.5	93	13.3
IRS	95	7.1	80	8.9	77	10.9	80	9.1	70	6.9	52	5.4	85	8.4	49	7.0
USCG	1	0.1	1	0.1	....	....	1	0.1	....	....	....	....	2	0.2	....	....
USMS	1	0.1	2	0.2	....	....	2	0.2	1	0.1	8	0.8	....	....	....	....
State & Local	163	12.2	100	11.1	81	11.5	106	12.0	153	15.0	136	14.0	140	13.8	126	18.0

Question. Do they receive adequate/appropriate funding in support of their contributions to the OCDETF program?

Answer. Yes, the USMS receives appropriate funding for its participation in the OCDETF Program. The OCDETF Program was established to ensure that an appropriate level of participation from all of its member agencies were directed at the Department of Justice/Administration's highest priority long-term and complex drug trafficking and money laundering investigations so that individual agencies could not redirect these funds to their respective short term priorities. This strategy has been hugely successful with the dismantlement of many of the infamous drug cartels from around the world who once thought they were untouchable by U.S. law enforcement.

This Departmental funding priority is carefully balanced each year during the development of the President's budget against the other priorities within the Department and the availability of new funds. This has become more difficult in recent years due to budget constraints and the war on terror. Given all of these factors, the USMS OCDETF Program has grown at a faster rate than the other OCDETF components in recognition of the increasing USMS serves within the Program.

Question. The USMS currently supports the U.S. National Central Bureau of Interpol (USNCB) with management positions in the Alien/Fugitive Division and also holds the current Deputy Director position. What funding does the USMS receive to support this participation?

Answer. The salaries, benefits, and overtime of these positions are funded by the USMS salaries and expenses (S&E) base. Over and above the position costs, the USMS receives an annual operating budget of approximately $44,000 to support the USNCB.

Question. How much does the USMS International Extradition Program cost each year and how is the program funded? Provide a detail breakout of the real costs associated with this program by fiscal year from 2006–08 and proposed for fiscal year 2009 and the money actually allocated to this program by the Department.

Answer. The International Extradition Program is funded from the operational base of the USMS S&E appropriation. The Department does not directly allocate funding for USMS extraditions. The following table shows historical extradition expenses, not including the salaries and benefits of the USMS participants:

USMS EXTRADITION EXPENSES

[In thousands of dollars]

Fiscal year	Cost of extraditions
2006	2,481
2007	2,705
2008	[1] 3,600
2009	[2] 3,600

[1] Estimate.
[2] Projection.

Question. The USMS Extradition Program has increased the number of missions completed every year since 2001. Has there been any comparable increase in personnel to support the increase in workload over that same period of time? Provide a detail list of workload increase and the number of positions increased for this program.

Answer. The USMS has the statutory responsibility for conducting all extraditions to the United States from foreign countries, as well as supporting extraditions to foreign countries from the United States. This includes all individuals ordered extradited and/or surrendered, regardless of whether they are wanted by a federal, state, or local jurisdiction. As crime and wanted fugitives become more global, and the efforts of the USMS Domestic and International Fugitive Programs become more successful, the numbers of international fugitives apprehended and extradited to face justice has and will increase. Currently the USMS International Branch is responsible for coordinating all extraditions with the Department of Justice, State Department, and foreign governments. The International Branch has two full-time employees in the Extradition Program: an Extradition Program Manager, and one Extradition Specialist—a position that was initially created in the early 1980's. Personnel who conduct the actual extraditions are most often provided by the local district office where the extradited fugitive is being returned or is being held pending surrender to a foreign authority. The additional cost of the program is primarily due to the travel expenses of the prisoner and the USMS escorts dispatched to conduct the mission.

USMS EXTRADITION HISTORY

Fiscal year	Total extraditions and deportations
2002	340
2003	521
2004	541
2005	653
2006	685
2007	772

Question. What is the impact on the USMS Extradition Program when extradited subjects charged with "extra-territorial" narcotics or terrorism statutes (i.e., 21:959 or 21:960) are returned to the United States?

Answer. The primary use of USMS-contracted dedicated flights in the past two fiscal years have been fugitives charged under 21 USC § 959, or "959" indictments. They must be brought back to the United States under escort directly to the demanding jurisdiction. If the U.S. Port of Entry is a location other than the charging district, the subject must be tried in the district of formal entry to the United States. This causes great concern to the Department and U.S. Attorneys as their prosecutors, case preparation, files, agents, and witnesses are usually in the charging district and substantial resources would be needed to move the case to another district. The USMS faces several challenges in performing these extradition missions. For example, if no commercial flights exist from the country of origin, a contracted dedicated flight is the only option. If international flights can be identified from the country of origin, or a country will grant the USMS transit authority for a connecting flight, the USMS will utilize the most cost effective means. Since most of the individuals extradited on "959" indictments are high-level drug traffickers or individuals associated with narco-terrorism, security for the prisoner and escorts is always a concern. These complicating factors increase the average cost of these "959" fugitive extraditions, especially if chartered aircraft are the only option available to support the mission, to an average of three times the cost of a non-959 extradition. The total cost of all "959" indictments completed in one fiscal year has risen from $53,040 in fiscal year 2004 to $688,450 in fiscal year 2007.

Question. In fiscal year 2007, 53 missions were completed at a direct cost to the USMS of $688,450 or approximately 25.8 percent of the total extradition budget what is the Department doing to assist the Marshals Service with these spiraling expenses? Be specific.

Answer. The Department takes increasing costs into account in determining priorities regarding law enforcement missions.

Question. How will the implementation of the new Adam Walsh Child Protection and Safety Act of 2006 affect the USMS International Extradition Program?

Answer. The number of extradition missions generated as a result of the Adam Walsh Child Protection and Safety Act (AWA) investigations is expected to drastically affect the Extradition Program. It is believed that many child predators travel internationally in pursuit of the child sex trade. Many of those predators are previously convicted sex offenders who are not in compliance and have failed to report that travel. They could readily retreat to familiar foreign locations once they are the focus of federal apprehension.

Question. What is the estimated number of sex offenders who travel internationally to pursue and engage in illegal sex activity?

Answer. There is no mechanism at this time to capture how many sex offenders (compliant or non-compliant) travel abroad. The DOJ Child Exploitation and Obscenities Section and the Sex Offender Management Apprehension Research and Tracking (SMART) office are working on guidelines to address the issue.

Question. What are we doing to encourage our international partners to increase their commitment to assist us with non-compliant sex offenders who will be charged and eventually located internationally in countries such as Costa Rica, Thailand, Cambodia, the Philippines, and other Far East locations that cater to the underage sex business?

Answer. In 2005, the USMS formulated a 5-year plan to expand the number of foreign postings that would help facilitate assistance with pursuing non-compliant sex offenders overseas. Currently, the USMS has a strong relationship with entities such as INTERPOL, NCMEC, and the Department of State that provides a framework to track and apprehend sex offenders traveling abroad. The USMS will work closely with these departments to create the National Sex Offender Targeting Center (NSOTC). NSOTC will assist law enforcement in tracking sex offenders both domestically and internationally.

Question. What is the Justice Department doing to ensure that the Marshals Service has the resources and the manpower in these countries to assist in the hunting down of these predators?

Answer. As stated above, the Justice Department works closely with partner agencies to apprehend these individuals overseas and supports the plan developed by the USMS to expand overseas presence to facilitate assistance in the pursuit of non-compliant sex offenders.

Question. The Congressional Budget Office (CBO) conservatively estimates that the Marshals Service would need to hire at least 350 new Deputy Marshals to take a lead role in executing a significant number of additional warrants for unregistered sex offenders. CBO estimates it would cost $25 million year one and $220 million over a five-year period, including costs for space training, supervision and support staff. What new resources are requested by the Department in fiscal year 2009 to reduce the number of sex offenders from our streets?

Answer. USMS actively assists state, local, and tribal territories in tracking and apprehending non-compliant sex offenders. No new resources have been requested for fiscal year 2009 for additional Deputy Marshals in the execution of this mission.

Question. If the answer is zero what kind of message does this send?

Answer. The USMS wants to send the message that we take our role that is outlined in the AWA very seriously. We want to ensure that the entire law enforcement community is aware that we will assist them in their efforts to track and apprehend non-compliant sex offenders. We want the public to be aware that we are uniting with state and local law enforcement in order to protect our children and our community from sexual predators.

Question. Is this giving sex offenders a "free ride"?

Answer. The USMS recognizes the danger of having over 100,000 sex offenders roaming our communities with no supervision. There is no toleration of sexual abuse or exploitation by the USMS. USMS actively works with all levels of law enforcement to track and apprehend sexual predators.

Question. How many DUSMs would you need to fully implement Adam Walsh?

Answer. The USMS will work with DOJ and other agencies within the Administration to determine the appropriate level of resources to address its responsibilities as assigned by the Act.

Question. How many are requested in the fiscal year 2009 budget?

Answer. USMS resource requests for the AWA were included in the fiscal year 2008 budget submission to Congress; however, it was not part of the enacted appropriation. The fiscal year 2009 USMS President's budget does not contain any additional resources for sex offender enforcement.

Question. The Presidential Threat Protection Act of 2000 authorized the Marshals Service to establish Regional Fugitive Task Forces (RFTFs) to locate and apprehend the most violent federal, state, and local fugitives. Over the years this Subcommittee has provided resources to the Marshals Service to establish six of these task forces. Results have been very impressive. Before there were RFTFs, the Marshals Service apprehended around 46,000 fugitives a year. Five years later, and with six RFTFs, the Marshals apprehended close to 95,000 felony fugitives—an increase of 106 percent. These fugitives are the "worst of the worst," averaging more than four prior arrests each. Our communities are safer because taking these criminals off the streets prevented 378,000 crimes from being committed. How many new resources are requested in this budget for this program?

Answer. The fiscal year 2009 USMS President's budget contains no enhancements to establish new RFTFs.

Question. Even though the Marshals Service arrests more fugitives than all other federal agencies combined, DOJ in this budget request fails to recognize that the Marshals Service is one of its investigating agencies. Why are requests for more investigative resources not provided in this request?

Answer. The USMS, in coordination with the DOJ, develop resource requests that reflect the Administration's priorities across all law enforcement components.

JUDICIAL SECURITY

Question. The Court Security Act gives new responsibilities to the USMS, yet no additional funds were requested in fiscal year 2009. The Act authorized $20 million each year through 2011, but no additional funds are part of the fiscal year 2009 request.

On March 11, 2008, ABC News and CNN reported that threats against federal judges and prosecutors are growing at an alarming rate. Threats against the federal judiciary and prosecutors have increased 69 percent over the past five years. Threats are on track to rise this year for the fifth straight year. The Congressional Budget Office (CBO) conservatively estimates that it would take $409 million over five years to provide sufficient resources to the USMS to provide increased court security.

If the Marshals Service is under-staffed to perform its core mission of judicial security, how will they meet this mission requirement? Will these agents be pulled from the regional task forces? Provide a detailed breakout of where these manpower resources will come from.

Answer. The USMS will continue to rely on District Security Officers (off-duty or retired law enforcement officers that the agency hires on an hourly or daily basis), overtime, and Deputy Marshals detailed from other district offices to meet mission requirements. Individual district offices are responsible for providing the staffing necessary to meet daily mission requirements; however, USMS Headquarters assists in coordinating travel for out-of-district Deputy Marshals when mission requirements exceed available resources in a district office.

As an example, in fiscal year 2007, 307 out-of-district Deputy Marshals were utilized in order to staff protection details where there was inadequate staffing in the home district. The districts providing the resources then used Detention Enforcement Officers, District Security Officers (who work under personal services contracts), and overtime to meet their individual mission requirements.

Deputy Marshals assigned to a district office may also be pulled as needed from any task force duties, including a Regional Fugitive Task Force, in order to staff critical judicial security missions. Deputy Marshals permanently assigned to Regional Fugitive Task Forces are pulled from their task force duties only in rare or exceptional circumstances, such as post-Hurricane Katrina duties in Mississippi and Louisiana.

Question. The Committee understands that the Secret Service has 140 people who analyze threats made against 40 officials. The Marshals Service has 35 people to analyst threats made against 7,700 judges and federal prosecutors. How do you address this disparity?

Answer. The USMS Office of Protective Intelligence (OPI) presently has 25 people to analyze threats made against the 7,700 judges and prosecutors. Both the USMS and the U.S. Secret Service (USSS) proactively investigate threats and inappropriate communications directed at their protectees by conducting protective investigations. The USSS assigns full-time protective details for all of their protectees; however, the USMS does not assign full-time protective details to 7,700 individuals.

If a judge or prosecutor is threatened, the USMS conducts a protective investigation to assess the severity of the threat. If required, a protective response is initiated and a protective detail assigned. Prior to and during the protective response, a Deputy Marshal conducts a protective investigation to mitigate the threat and any danger to the protectee. Judges are protected primarily only when they are at a U.S. Courthouse.

Question. Without resources to improve the timeliness of threat assessments, how will you effectively predict who the next attacker is or who the next judicial victim will be?

Answer. The USMS uses a behavior-based approach in conducting investigations. Predicting exactly who the next attacker or victim will be is difficult. USMS relies on statistical analysis to identify probable attackers. Studies have shown that individuals who pose a threat often do not communicate a warning in advance of their actions. Based on these studies, a methodology has been developed to look at a subject's behavior rather than strictly at the substance of what they may be communicating to the protectee or to law enforcement. The methodology includes an analysis of what actions they have taken to carry out an attack, statements they have made to others around them, a subject's individual criminal history, history of approaching possible victims, possession of weapons, and any life-changing experiences the subject may have undergone. When a subject comes to the attention of the judiciary or the USMS, proactive protective investigations pay attention to these indicators in their threat assessments.

Identification of the next attacker or victim can be aided through enhancements in information technology. The threat management database currently used by the USMS was primarily designed for fugitive investigations rather than protective investigations, and as such the search capability and the automated analysis tools specific to protective investigations are limited. Four of the recommendations by the

2007 DOJ Office of Inspector General's (OIG) review of the USMS Judicial Security Process related to improving the threat assessment process and the databases that identify and track potential threats.

An additional information technology tool that is used in the identification of potential attackers or victims is link analysis. The USMS has acquired a link analysis tool to interface with and search numerous USMS databases. A subsequent phase could expand the search capabilities of this analysis to include searches of other agencies' databases, court records, and open source data to aid in the investigation and identification of potential attackers.

Question. How many DUSMs would you need to fully implement the Court Security Act?

Answer. The USMS will work with DOJ and other agencies within the Administration to determine the appropriate level of resources to address its responsibilities as assigned by the Act.

Question. How many are requested in the 2009 budget?

Answer. The fiscal year 2009 request does not include any increases for the Court Security Act, but instead anticipates that the USMS will continue to rely on District Security Officers (contract guards with prior law enforcement experience), overtime for existing employees, and Deputy Marshals detailed from other districts to meet the requirements of the Act.

Question. What challenges do you face in court security based on the fiscal year 2008 funding levels?

Answer. The greatest challenge faced by the USMS is to provide a minimum standard of protection for judges, prosecutors, the court family and the public. Limited resources to address the constant pressure to produce and house more prisoners, investigate and apprehend more fugitives and sex offenders, and investigate and mitigate more risks posed to protectees is a tremendous challenge.

Since 2005, the USMS has updated and appropriately raised the standards for judicial security. The USMS has changed polices and procedures related to everything from threat investigations to personal security details, re-engineering judicial security in the USMS.

To address these challenges the USMS has combined the use of JSIs and PIIs to focus expertise on judicial threat analysis and investigation.

Question. List by protectee the number of agents and vehicles assigned to each detail.

Answer. Protectee detail information is sensitive information that could reveal USMS staffing levels and lead to security vulnerabilities affecting our protective mission. Therefore, specific details are not released outside the agency. In general, the number of Deputy Marshals and vehicles assigned to a protection detail varies and is determined on a case-by-case basis. The level of protection detail, depending on the severity of the threat, can range from an escort detail of a single Deputy Marshal to a full protection detail of a dozen or more Deputy Marshals. An escort detail is the minimum level of protection and a full protection detail is the maximum level of protection for USMS protective missions.

Question. The cost of each protectee detail in 2007, to date in 2008 and the projected year end cost.

Answer. The USMS expended $1,857,000 for the operational cost of protection details in 2007 and $595,000 to date in 2008 with a projected total of $865,000 for the entire year. Totals exclude the regular payroll costs of Deputy Marshals.

Question. How many agents in each shift of each detail?

Answer. All protective details are staffed by Deputy U.S. Marshals. The number of Deputy Marshals and vehicles assigned to a protection detail varies and is determined on a case-by-case basis. The level of protection detail, depending on the severity of the threat, can range from an escort detail of a single Deputy Marshal to a full protection detail of a dozen or more Deputy Marshals. An escort detail is the minimum level of protection and a full protection detail is the maximum level of protection for USMS protective missions.

COURTHOUSE RENOVATIONS

Question. In 1997, the U.S. Marshals Service proactively designed and implemented a National Security Survey to determine how well our 400 federal courthouses measured up to security standards. Assaults and injuries in cellblocks place Deputy Marshals, pretrial and probation officers, and public defenders at grave risk. These same personnel are routinely exposed to airborne pathogens including hepatitis and tuberculosis due to improper heating and ventilation systems within cellblocks. The risk of escape is high when there are no segregated prisoner movement areas because Deputy Marshals must move prisoners through public corridors, stairwells, and elevators. Recent estimates suggest that $88 million would be needed over the next four years to renovate and remedy existing security deficiencies in cellblocks, vehicle sally ports, prisoner elevators, secure circulation areas, and holding cells. Another $30 million would be needed for cameras, alarms, and courthouse security systems.

The 2009 request provides only $2 million for construction. A $2 million request doesn't even cover the inflationary cost of maintenance and minor repairs. How will you allocate the $2 million to address what is identified as a $100 million problem?

Answer. The $2 million included in the fiscal year 2009 request will be used to help meet expenses for those construction and renovation projects that are already in progress and that have the most pressing and immediate needs.

Additionally, the 2009 budget proposes to consolidate the construction account within the larger salaries and expenses account. This proposal will increase the USMS flexibility to reprogram funds to address emergent construction needs and better prioritize funding.

Question. Is the safety of the federal judiciary and all its participants a priority?

Answer. Yes, it is the primary role and mission of the USMS to protect the Federal judiciary (28 U.S.C. 566(a)). The USMS Director's priority to "Enhance Judicial Threat Management and Analysis" fully supports the Department of Justice Strategic Goal 3.1.1 to "Protect judges, witnesses, and other participants in federal proceedings, and ensure the appearance of criminal defendants for judicial proceedings or confinement."

Question. Is the health and safety of the federal agents who handle these prisoners addressed in this budget request? If the answer is yes explain why.

Answer. The $2 million included in the fiscal year 2009 request will be used to help meet expenses for those construction and renovation projects that are already in progress and that have the most pressing and immediate needs.

Additionally, the 2009 budget proposes to consolidate the construction account within the larger salaries and expenses account. This proposal will increase the USMS flexibility to reprogram funds to address emergent construction needs and better prioritize funding.

Question. When the Administration requests only $2 million for construction each fiscal year, how long will it take to make sure that all courthouses are up to the latest security standards?

Answer. At $2 million per year to renovate courthouse facilities, USMS-occupied space will continue to raise National Security Survey scores, which have significantly improved between 1999 and 2007. In 1999, only 21 facilities met minimum standards. In 2002, 65 facilities met minimum standards. In 2006, 94 facilities met minimum standards. This improvement was the direct result of increasing funding in the Construction Appropriation and the S&E funding designated for courthouse security systems. Security scores for USMS facilities increased 4 percent-10 percent in many areas between the 2002 and 2006 surveys. Security scores increased 15 percent-22 percent in major categories between the 1999 and 2006 surveys. The USMS utilizes a National Security Survey (originally developed in 1997 and refined every three years) to prioritize construction and renovation projects.

SOUTHWEST BORDER ENFORCEMENT

Question. Two years ago (May 2006), the Administration's supplemental budget request included $2 billion to secure the Nation's border of which only $20 million, or 1 percent, was for the Department of Justice.

When DHS ICE agents raid a plant and hundreds of illegal workers are detained, who is responsible for transporting these aliens to holding facilities?

Answer. USMS does not participate in the detention of workers charged with administrative violations. However, upon arrest for Federal criminal offenses, DHS ICE agents transport detainees to holding facilities and to their initial court appearances. At the initial appearances, the judge remands detainees to USMS custody after which USMS Deputy Marshals perform all prisoner transports.

Question. Why has DOJ not actively pursued reimbursement from DHS entities who summon the U.S. Marshal Service to transport mass amounts of illegal aliens who are detained?

Answer. The USMS will work with DOJ and the affected DHS components to ensure that the proper funding mechanism is in place to fulfill the USMS responsibilities.

Question. Are you unaware of the Border Patrol's enforcement efforts? Why does the Department not receive full reimbursement for all Border Patrol arrests that are then handed over to DOJ custody?

Answer. The USMS is aware of the Customs and Border Protection's enforcement efforts that are conducted on the Southwest Border. The USMS will work with DOJ and the affected DHS components to ensure that the proper funding mechanism is in place to fulfill the USMS responsibilities.

The USMS and Customs Border Protection (CBP) are exploring options to integrate the DHS IDENT automated booking system with the DOJ JABS automated booking system. Rather than establish a reimbursable agreement involving funding, the hope is that CBP would provide personnel to work alongside USMS staff on a temporary duty basis to integrate the systems. Providing CBP personnel (both government and contractors) to assist the USMS may be a way to improve interoperability without a establishing a reimbursable agreement.

Question. ICE is requesting $30 million more for worksite investigations in areas no where near the Southwest Border. ICE arrests those who violate workforce rules involving document fraud, illegal workers, drug and human smuggling, as well as violent crime. These people are being prosecuted in federal court, which places further strain on DOJ resources and personnel and creates an immediate infrastructure crisis. What new resources are requested in this budget to address this?

Answer. None. At the time the USMS was preparing its fiscal year 2009 budget submission, the scope of ICE worksite enforcement efforts was unknown. The $12.7 million requested in the fiscal year 2009 budget was based on Southwest Border initiatives alone.

Question. When will the Department request resources to respond to other immigration-related enforcement initiatives that are not on the border?

Answer. The USMS will work with DOJ and the Administration to determine the appropriate level of funding for immigration-related enforcement initiatives, including those impacting the interior parts of the country.

LAW ENFORCEMENT COMMUNICATIONS

Question. In March 2007, the Inspector General reported that, of the 30,000 DOJ radios, 79 percent are not airwave compliant; 95 percent lack federally mandated security; and 73 percent are obsolete. The report found that this failure to upgrade DOJ components' antiquated communications represent an unnecessary risk to the safety of agents. I have heard cost estimates to seriously address this issue are in the $20 billion range. Do you believe that $20 billion is a reasonable estimate of the cost?

Answer. No, $20 billion is not a reasonable estimate. The Department has never asked for nor estimated the size of the program to be $20 billion. The Department estimates that the implementation of the modernized Integrated Wireless Network (IWN) across the four DOJ Law Enforcement Components—Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Drug Enforcement Administration (DEA), Federal Bureau of Investigation (FBI), and United States Marshals Service (USMS)—will cost $1.23 billion over 6 years. Previously submitted estimates were well over $2 billion for a ten year implementation, but as we have briefed Appropriations staff within the last two months, we have worked with the components to streamline and simplify the implementation to cut cost estimates significantly and to reduce implementation time estimates by 40 percent.

This estimated cost would meet all security and narrowband requirements and improve existing coverage for the four components. In addition there will be operational costs (maintenance of legacy radio systems, maintenance of the modernized IWN, technical refresh, and programmatic support) of $462 million over the six year period. This O&M funding covers more than just break/fix costs, it also pays for the management of the program, site rental fees, monitoring of the network and most importantly, it covers the expenses of special events such as the Super Bowl and the political conventions.

Question. Do the DOJ components have adequate LAND Mobile Radio communications capability to carry out their core missions?

Answer. The components are carrying out core missions with existing legacy LMR equipment. However, this capability is limited by the age of their legacy communications systems. As cited in the March 2007 DOJ Office of the Inspector General Report, the majority of the Department's LMR communications systems are over 10 years old and function in an analog mode rather than a digital mode, which means they have limited functionality and diminished voice communications quality. Most DOJ legacy radio systems: Are not narrowband compliant; do not provide appropriate encryption to protect sensitive information; are no longer supported by the manufacturer; provide little to no interoperability with any other agencies; and cannot facilitate wireless data transfers.

Question. Are current communications systems in compliance with presidential narrow band mandates and/or National Institute of Standards and Technology (NIST) security guidelines?

Answer. No. The DOJ Inspector General's report on IWN from March of 2007 estimated that 21 percent of the Department's radios are compliant with presidential narrowband mandates and 5 percent are capable of meeting NIST security guidelines. Since March of 2007, the limited funds have been prudently used to improve narrowband compliance to 30 percent and NIST security compliance to 15 percent.

Question. Is the IWN [pronounced "I win"] Seattle Blaine pilot project a feasible model for the future?

Answer. The Seattle Blaine pilot is a feasible model for major metropolitan areas with high federal agent user densities. Areas with large numbers of agents typically compete for limited spectral resources. These areas would benefit from the implementation of the trunking technology solution implemented in the IWN in Seattle. The Department would like to remind the Committee that the Seattle project was a pilot and as such we expected to learn what worked and what did not work. As a result of our experience there, we now have a plan for where trunking solutions should be implemented, and where it is not cost effective.

Question. In the event of another attack, absent communications interoperability, how will federal law enforcement officers communicate with each other?

Answer. At the direction of the Congress, DOJ started the 25 Cities High Risk Metropolitan Area Interoperability Project in 2005. This effort is nearly complete and has greatly improved communications capabilities in 25 of America's largest cities. The program encourages the preparation of local communications plans for use in emergency situations, the design and implementation of shared interoperability radio channels, and the standardization of technical solutions that contribute to interoperability. Federal law enforcement officers are able to use, where they exist, the 25 Cities interoperability solutions. More information about the successful, and nearly complete, program can be provided upon request.

Short of an installed and fully functional communications system that allows for seamless interoperability between federal, state, and local users, federal law enforcement officers generally depend upon locally prepared and distributed communications procedures that describe emergency communications practices and protocols that enable, albeit and possibly in a limited fashion, law enforcement and public safety entities to interoperate. In the case of a major unplanned event, officers will generally default to their locally prepared communications plans for interoperability.

Local emergency communications plans often call for the exchange of communications devices between agencies, the setting up of shared dispatch and command centers to facilitate information exchange, the designation of common "hailing" channels, the sharing of re-designated radio channels for various types of emergency communications traffic, the use of pre-planned and/or pre-staged "patching" facilities that can be used to cross-connect radio traffic, and the use of "cached" communications devices which are held specifically for distribution during emergencies.

WIRELESS COMMUNICATION PROGRAM

Question. Are DOJ component operations and maintenance budgets clearly defined and supported equitably amongst the components?

Answer. DOJ component legacy communications systems operations and maintenance (O&M) requirements are funded through budget requests submitted to the WMO for inclusion in the overall Law Enforcement Wireless Communications (LEWC) budget submission. Component O&M budget requests are clearly delineated by specific categories. The WMO centrally manages the LEWC account and provides funding allotments to the Department's law enforcement components which are responsible for the O&M of legacy systems. O&M allotments are dispersed annually (through reimbursable agreements) by the WMO once appropriations have been received. If operating under a Continuing Resolution (CR) or if annual appropriations have not been received, the components will receive incremental allotments based on the availability of funds.

Question. Are resources allocated effectively in and amongst the DOJ WMO and the respective components? Are the components receiving adequate support considering the operational size and expense of the WMO?

Answer. Yes. The concept of creating a centralized program management office was to save on overhead and redundant expenses. The centralized WMO was conceived of and approved by Appropriations staff. We believe that significant overhead cost savings (nearly $35 million) have been realized over the past four years.

The WMO currently employs 19 Government and 39 contractor staff across the nation in support of Law Enforcement Wireless Communications (LEWC) to include the modernized Integrated Wireless Network (IWN) design, deployment, operations and maintenance (O&M). Of the numbers listed above, 1 government (Bothell, WA) and 13 contractor personnel (9—Seattle/Spokane 4—San Diego) support O&M and the Federal Bureau of Investigation (FBI) consolidated dispatch center for the modernized program.

Question. If the WMO currently invests a large portion of its budget into the Seattle Blaine IWN pilot isn't that investment at the expense of thousands of failing antenna sites elsewhere? Who makes these investment decisions about priorities?

Answer. The Department and the components manage approximately 4,400 radio sites across the country. While a number of these sites are aged and require upgrades, they are not all in danger of failure. In fiscal year 2007, 74 percent of the Law Enforcement Wireless Communications account appropriation was directed to the components for legacy O&M and special requests. For fiscal year 2008 the amount directed to the components increased to 80 percent with additional reallocations pending.

A program of this size and scope requires a solid foundation for moving forward. At the direction of Congress, we have invested a significant amount of time and effort to conduct a full and open procurement and to plan for a multi-year, nationwide system development and deployment program that efficiently leverages our existing base of legacy technologies while ensuring we continue to support ongoing law enforcement communications needs. While at the same time we must manage the major risks inherent within a large scale communications system deployment/conversion program.

The WMO reports to the Department's Chief Information Officer who is ultimately responsible for LEWC investment decisions. However, the components have significant input to the investment decisions through their wireless offices and through their CIOs. These decisions are made with full visibility to the components. In addition, LEWC investment priorities are established and reviewed by the Wireless Communications Board (WCB) which is comprised by senior executives from each of our components. The WCB evaluates the priorities established by each of the component agencies and identifies the recipient based on a consensus of what is in the best interest of the component agencies and what systems are most at risk of jeopardizing agent safety.

The funding allocated in support of the Seattle Blaine IWN pilot and Pacific Northwest Expansion has tested and validated the business goals and objectives necessary to move the program forward from a design, implementation, and operations standpoint. The Seattle Blaine IWN pilot proved the viability (and certain limitations) of the IWN design, technology, site consolidation, site build-out, and implementation process. Significant improvements in communications capabilities and system efficiencies were realized; with dramatic reductions in spectrum resources (50 percent reduction) and facilities (60 percent reduction) needed to meet law enforcement operational requirements. Additionally all of our law enforcement components now have the same (and larger) communications coverage "footprint" across the region.

The Seattle Blaine pilot has been successful and further geographic expansion and system enhancements are regularly requested by the local users. However, due to inadequate funding, we have not been able to fully support such requests. The Seattle Blaine pilot, along with the 25 Cities Program, has proven the effectiveness of federal, state, and local interoperability through the successful execution of many mission critical operations.

Question. It has come to the Committees attention that the components have identified this concern and requested reallocation of resources repeatedly. Provide all of the requests for reallocation of resources in this program and the outcome of those requests.

Answer. The WMO receives hundreds of funding requests each year from the components. Funding them all is not possible due to limited resources. Recognizing that the components receive 74 percent and 80 percent respectively of the WMO budget for O&M and special projects, the Department is very judicious in funding all component requests. Mindful of the congressional language supporting consolidation of narrowband activities within DOJ, a careful balance is struck between funding plans for the future and continuing to invest in component-specific systems. In July 1998, the U.S. House of Representatives, Committee on Appropriations Subcommittee Report on Fiscal Year 1999 Appropriations Bill stated,

"The Committee supports the consolidation of this activity under the Attorney General, as such a consolidation will ensure maximum coordination and system compatibility . . . Given the scale of the investment that may be required, the Committee believes that any Department of Justice narrowband conversion initiatives must be based a comprehensive strategy which achieves the following goals: (1) increased spectrum efficiency; (2) interoperability among all Department components, as well as Federal law enforcement agencies; and (3) maximized efficiencies and savings through shared infrastructure and common procurement strategies. The Committee is concerned that currently, the Department of Justice lacks such a [consolidation] strategy. In fact, the current approach appears to be fragmented and agency-driven, emphasizing individual agency requirements or initiatives, which may or may not accomplish the goals outlined above in the most strategic, and efficient manner. Therefore, the Committee intends that this critical initiative be coordinated and implemented by the Department, rather than through individual DOJ components."

Working with the components the Department has developed a strategy that satisfies the goals identified by Congress and demonstrated in the IWN Seattle Pilot/ Pacific Northwest Expansion and Department procurement strategies. In Seattle and the surrounding area the Department has realized a 50 percent reduction in spectrum and a 60 percent reduction in facilities. These savings have been factored into our overall cost model. The Department has also awarded a Systems Integration contract to General Dynamics to implement the program across the nation. Additionally contracts that facilitate bulk purchases of subscriber equipment (hand sets) have been extremely beneficial in achieving savings to the government.

Question. Why is the WMO program management budget two times greater than the components budgets combined?

Answer. We do not know the source of the Component budgets you refer to, but we believe a simple match of respective budgets results in an "apples to oranges" comparison. The WMO undertakes a number of network management and financial management functions on behalf of the Components, freeing them of the need to perform these tasks. In addition, the scope of WMO management responsibility spans across all the Components—something for which no individual Component has a similar function.

DOJ was tasked to establish a WMO to consolidate four separate and individually run Component wireless programs, realize operating synergies, and then plan and direct the design, development and implementation of a multi-billion dollar and multi-year advanced network solution. If one compares the WMO's size to other program management offices at other agencies, the WMO is too small to manage the nationwide deployment effort of a new advanced solution. Because of a lack of funding, the modernization effort is not moving forward at the previously planned pace. The tasks done by the WMO are very different from the tasks of the components.

The LEWC account provides a funding vehicle to manage all DOJ tactical wireless communications through a single established program management office necessary to support a large, nationwide implementation program. This office is charged with planning, implementing, and sustaining a system that replaces the existing tactical communications services operated by DOJ components in fifty states. In addition, WMO centrally manages funding allotments to the Department's law enforcement components for the O&M of Legacy Communications Systems. The LEWC Joint Program Office (WMO) currently employs 19 Government and 39 contractor staff in support of the modernization design, deployment, operations and maintenance. The component agencies have radio communication offices focused on current mission operations and technical support rather than the IWN modernization.

The components receive the majority of the Law Enforcement Wireless Communications Appropriation. In fiscal year 2007 and fiscal year 2008, this represented 74 percent and 80 percent of the funding, respectively.

Question. This budget request primarily funds O&M for TWO radio systems in San Diego and Seattle at the expense of all others. Is it true that the WMO currently employs more full time employees and contractors than three of the four components in support of Land Mobile Radio? What is the justification for this inequity that leaves the smaller component staff managing nationwide radio programs with a fraction of the budget and human resources the WMO uses to manage 2?

Answer. We're not sure of the headcount numbers you refer to, but we believe this may be another case of comparing very different organizations, responsibilities, and scope of operations. The Department indeed manages shared radio systems in San Diego and Seattle. However, the LEWC budget does more than fund two radio systems. In San Diego and Imperial County, CA there are over 7,800 DOJ and DHS radios affiliated with the system. In the Seattle/Pacific Northwest system there are approximately 1,000 radios representing DHS, DOJ, Treasury, and Commerce users. These systems accommodate a far greater number of users and have a larger footprint than individual component systems that serve only the needs of the specific component. In an effort to consolidate operations, the Department has worked with the FBI and USMS to transition the USMS onto the FBI systems around the country. This effort is 90 percent complete and provides the USMS with enhanced coverage. The remaining components have much smaller systems although deployed around the nation and use different O&M approaches (contracting out or using government FTE).

It is not accurate to compare the WMO to the component offices as they have different missions. Per Congressional guidance, DOJ is trying to streamline maintenance through a central office. Until the modernized solution is rolled out, it is unfair to compare functions of one office to the functions of the mission office. If funding is not going to be provided to modernize the radios, then the role of the WMO should be re-examined. Additionally, many (14) of the contractors in the WMO are working directly in the field for the components, especially in San Diego and Seattle.

The components receive the majority of the Law Enforcement Wireless Communications Appropriation. In fiscal year 2007 and fiscal year 2008 this represented 74 percent and 80 percent respectively. With the funds remaining, the WMO pays personnel salaries and benefits, conducts modernization planning, pays O&M for the Pacific Northwest and San Diego systems, pays NTIA fees, and manages the 25 Cities program and continues the expansion efforts in the Pacific Northwest. In addition, all funding for special events like the political conventions and the Super Bowl come from the LEWC account.

The fiscal year 2009 budget request, and past budget requests, includes much more than O&M for two radio systems. The fiscal year 2009 President's budget request totals $121,651,000, which continues support of all component legacy systems and operations across the country, including but not limited to, San Diego and Seattle. As important, the fiscal year 2009 budget request has a program increase of $43 million to (1) begin implementing IWN in the DC metropolitan area and (2) for equipment replacement to address high priority component equipment needs.

Question. Do the components have adequate LAND Mobile Radio communications capability to carry out their core missions?

Answer. The components are carrying out core missions with existing legacy LMR equipment. However, this capability is limited by the age of their legacy communications systems. As cited in the March 2007 DOJ Office of the Inspector General Report, the majority of the Department's LMR communications systems are over 10 years old and function in an analog mode rather than a digital mode, which means they have limited functionality and diminished voice communications quality. Most DOJ legacy radio systems: Are not narrowband compliant; do not provide appropriate encryption to protect sensitive information; are no longer supported by the manufacturer; provide little to no interoperability with any other agencies; and cannot facilitate wireless data transfers.

Question. Are current communications systems in compliance with presidential narrow band mandates and/or NIST security standards?

Answer. No. The DOJ Inspector General's report on IWN from March of 2007 estimated that 21 percent of the Department's radios are compliant with presidential narrowband mandates and 5 percent are capable of meeting NIST security guidelines. Since March of 2007, the limited funds have been prudently used to improve narrowband compliance to 30 percent and NIST security compliance to 15 percent.

Question. The 2007 IWN OIG audit pointed out, the majority of DOJ Land Mobile Radio Infrastructure is antiquated and failing. Does DOJ have radio communications operability?

Answer. DOJ radio communications capability is limited by the composition of the DOJ component legacy communications systems. The Department's LMR communications systems currently in use are over 10 years old and function in an analog mode rather than a digital mode, which means they have limited functionality and diminished voice communications quality. Additional legacy operability challenges faced by components include; federal-to-federal, and federal-to-state interoperability, and lack of support for over the air re-keying (OTAR) security encryption standards. The components have basic capabilities, but do need a modernized system to support their needs.

Question. What percentage of DOJ users are not NIST security standard compliant? Be specific.

Answer. Currently 86 percent of ATF radios, 91 percent of DEA radios and 84 percent of FBI radios are not compliant with NIST security standards. These percentages reflect an improvement since the DOJ OIG report of March 2007 which reported 100 percent of ATF and DEA radios and 93 percent of FBI radios were not compliant. Updated figures for the U.S. Marshals Service are not available but it is safe to assume that their percentages are similar to the other components. DOJ has consistently reported our lack of compliance in testimony and in staff briefings.

Question. Does this mean Federal Agents enforcing federal law and providing domestic security are using encryption that has been compromised and should not considered secure?

Answer. Yes. Our legacy wireless systems employ encryption technology that is out-dated and could be subject to compromise.

Question. How do DOJ communications capabilities compare to DHS?

Answer. This is a very complicated question and the Department encourages you to ask Department of Homeland Security (DHS) about their capabilities. At a high operational level, both agencies face similar mission challenges. However, there is a significant difference in how the two Departments manage their respective wireless programs. Most notably, DHS funding for its radio programs is not centrally managed by a WMO as done at DOJ. Rather, DHS law enforcement components get their radios funded at the component level, which would typically lead to the individual (and possibly separate) prioritization of investment decisions (something that we were tasked by Congress to remedy with the establishment of our WMO).

It is not clear what type of inter-operability exists between their components and with state and locals. The modernized IWN is being designed to allow for interconnectivity between DOJ assets, DHS assets and local assets.

Question. Is there a central dispatch or information center within DOJ?

Answer. As it relates to radio dispatching, the answer is no. As part of the plans for the modernized system, we envision a central network operations center to manage the backhaul networks across the country and to serve as a focal point for support to the agents (and their support staff) in the field.

Question. Does DHS have a higher level of operability than DOJ?

Answer. Yes. Many of the DHS components have modernized their radio systems in the past five years. We cannot assess how well coordinated or financially effective these investments have been. However, the average age of their typical radio unit is much lower than the typical DOJ radio.

Question. Is the IWN Seattle Blaine pilot a feasible model for the future? Is trunking technology a requirement for DOJ?

Answer. The Seattle Blaine pilot is a feasible model for major metropolitan areas with high federal agent user densities. Areas of high user densities typically coincide with scarcity of spectrum resources. While the relative spectral efficiency of trunking radio technologies can be debated in remote or low-density rural areas, high user-density areas always benefit from the implementation of trunking technologies.

A few design criteria from the Seattle Blaine pilot have been re-evaluated and probably would not be implemented nationwide. The criteria include radio tower site improvements and backhaul redundancy. While overall system reliability in a trunked system is improved, nationwide implementation may be too costly. Selective application of redundancy at the most vulnerable system nodes, and site improvements commensurate with the equipment being installed would be the two major deviations from the Seattle Blaine model.

The differences in ease-of-use between conventional and trunking radio are substantial. The WMO continually receives positive feedback from users on the Seattle Blaine IWN system regarding usability and roaming capabilities. The use of trunking technologies is not an explicit stated requirement for IWN, however, we feel the minimal incremental cost (estimated to be 30 percent) is well worth the significant improvement in radio usability and roaming capabilities for many areas, especially in urban settings.

Question. Given the lack of support from OMB for the DOJ mission can the Department continue to spend $200 million and seven years building each radio system throughout the country?

Answer. Through the IWN program, the DOJ will provision and maintain a range of secure and reliable wireless communications services, including voice, data and multimedia services that support counterterrorism, counterintelligence, law enforcement and emergency response operations. The DOJ IWN strategy will be implemented over a six year period in a series of overlapping phases. The planned six-year, four phase upgrade and replacement of legacy communications systems will include regional design and deployment of the new tactical communications systems and services focusing on urban centers. The cost summary for a six-year IWN deployment is approximately $200 million per year from 2009–2014.

For fiscal year 2009, OMB was supportive of the Department's IWN program and approved a program increase of $43 million to address priority radio infrastructure needs. The Department intends to continue working with OMB in future budget cycles to ensure that all Departmental priorities, including IWN, are discussed and addressed.

Question. To what degree do DOJ operational personnel and technical program managers influence the direction and decisions of the WMO?

Answer. Operational and program management personnel within each component agency formulate requirements and staff those requirements through the respective management chains. Senior managers from each agency participate equally in the DOJ Wireless Communications Board (WCB). All major system deployment decisions are vetted through the WCB. The WMO does not act unilaterally, and in fact takes all major program direction from the WCB, chaired by the DOJ CIO Mr. Hitch.

Question. Is there adequate input from the agents in need of the resource?

Answer. The component agency headquarter staffs coordinate with their field agents in identifying and defining IWN requirements to the WMO. However, WMO personnel also meet quarterly with local agents using IWN to discuss its status, lessons learned, and operational requirements. When in the field and opportunities arise, the WMO meets as often as possible with current and future IWN users. Also, in September 2007, the WMO hosted the first DOJ Wireless Summit attended by over 100 DOJ and component agency personnel from across the country, ranging from management to technical staff to field agents, to discuss trends in wireless technology, DOJ wireless initiatives, and the future of the IWN architecture and deployment. The summit was a success in accomplishing its objectives with future summits highly endorsed by the component agencies.

Question. Is there, or should there be operational oversight/leadership at the WMO?

Answer. The Department's Investment Review Board (DIRB) provides oversight of the WMO's investment recommendations/decisions. The DIRB is chaired by the Deputy Attorney General. In addition, the WMO executes the decisions from the Department CIO and Wireless Communications Board (WCB) based on operational priorities as defined by the component agencies and DOJ management. The WMO welcomes participation from the operational users; however, there needs to be one executive oversight body responsible for looking at the set of requirements as a whole and providing direction on what is in the best interest of the Department. The WCB is tasked with assessing Department-wide needs and requirements and making recommendations accordingly.

Question. How many operational personnel are currently employed by the WMO?

Answer. The WMO employs personnel with backgrounds in program management, budgeting, procurement, and planning. It is not designed to be operational, but it is designed to rely on the components for operational input. The WMO staff includes personnel previously employed by the FBI, DEA, DOD, military, and private industry who experience supporting operations. The WMO is an integrated program office covering all the disciplines required to support a large, nationwide implementation program.

Question. Beyond Component surveys what operational oversight of the WMO exists?

Answer. The WMO holds a project team meeting on a monthly basis to brief status of all project activities. The components send representatives to this meeting to provide insight as well as oversight on WMO progress. The WMO team reports directly to the Deputy CIO who has day-to-day oversight responsibilities. In addition, the WMO has been subjected to numerous audits from internal and external groups.

Question. What law enforcement, operational or tactical communications experience do the employees of the WMO have?

Answer. The WMO is tasked with developing a secure wireless, nationwide tactical communications network that addresses federal law enforcement requirements to communicate internal to and across agencies, allow interoperability with state and local law enforcement partners, and meet spectrum mandates and NIST security guidelines. To achieve this task the WMO actively solicits input from its law enforcement components and agents on requirements and operational missions. The WMO is staffed with the requisite experience to oversee and maintain accountability for the design and implementation of a system of systems that will meet the requirements of, and allow the law enforcement agents and agencies to accomplish mission operations.

The WMO has recruited staff from the law enforcement components and the military that have many years of direct experience with component (FBI/DEA) radio communications to include engineering, operations and spectrum management. In addition the WMO has looked outside the Department to DOD, other Departments and industry for certified Project Managers, staff with wireless industry and large scale contracting experience. The WMO also has an Administrative and Financial Staff led by a Certified Public Accountant (CPA) and former auditor to formulate budget strategies and maintain an accurate accounting structure, as well as enhance internal controls. The staff also includes an expert in the field of security certification and accreditation to ensure systems are protected to the maximum extent possible. A contracting officer is also assigned to the WMO to assist the program in executing on its acquisition strategies and procurement requirements.

Question. Do components have adequate human resources to progress into the next generation of radio communications?

Answer. The components are fully aware of the evolutionary changes taking place in the tactical communications marketplace. Since this will be a consolidated system, there will necessarily be changes in business rules and how systems are managed. All of the specific skill sets are not known at this point, but the WMO will provide training for component staff in new technologies as deployed. In the Seattle model, the WMO has hosted infrastructure training for technical staffs as well as subscriber training for the Agents.

One of the reasons for doing a major procurement with a large systems integrator was to leverage the knowledge of the contractor employees as we attempt to build the next generation of radios. Improvements in satellite and data transmission will impact the radios of the future, and therefore the design must look beyond current capabilities.

Question. What efforts are being made to leverage existing resources such as JUTNET, other governmental resources, and further consolidation?

Answer. We have evaluated Justice Unified Telecommunications Network's (JUTNET) capabilities and assessed the potential to leverage those capabilities. Unfortunately, at this time, there is little potential for JUTNET to satisfy the needs of our wireless networks. JUTNET is currently a data communications system and is not designed to support the voice requirements that would be demanded by our wireless systems. Consequently, the general scope of JUTNET and the communications needs of the modernized IWN are different and lack suitable amounts of commonality to justify re-engineering or otherwise modifying JUTNET. A major strategic goal of the Department's CIO is to effectively leverage our enterprise investments to achieve synergies across DOJ. As JUTNET evolves to support voice services, we will work closely with that management team to ensure we can further consolidate and share IT infrastructure to achieve operations and cost synergies.

To take advantage of possible cost savings while satisfying our operational requirements, the WMO is working with our DEA component to leverage a DEA-recommended Department of Defense network for communications backhaul. The solution is being implemented in the Gulf Coast region. The WMO also works with other Federal partners and, State and Locals to leverage opportunities for sharing communications backhaul and facilities where possible.

The San Diego and Seattle systems are fully consolidated and shared across the components. Our updated IWN Plan ($1.23 billion versus $2+ billion) emphasizes and requires re-use of existing radio sites to reduce costs. In the past, one component would pay rent across the street from another component's rented radio site on a downtown skyscraper. The systems use, for example, a single building, antenna system, circuit for connectivity, site license, spectrum and staff resources. With this consolidation of former DOJ component assets in San Diego and Seattle into a single consolidated "system of systems" it is far more reliable, requires fewer radio sites and less O&M is needed to maintain single systems. Wireline circuits are now installed for the benefit of all DOJ components and not the exclusive use of one.

Question. Do current cost models and modular budgets adequately address components radio communications requirements? How are radios funded for the hundreds of state and local task force agents?

Answer. At the current funding level for LEWC, we believe that the funding level for the old legacy systems and handsets is absolutely inadequate. For all the reasons stated in the questions, the old systems and handsets are at the end of their useful life and "throwing" additional money at these obsolete systems is not a long term (or even intermediate term) strategy. We are rapidly approaching the time when we will not be able to find the replacement parts and service inventory necessary to maintain these networks. A new, more modern, more secure and interoperable solution is needed. The modular budgets spread the existing funding around in an equitable manner, but the funding does not meet the needs of the agents in the field.

The WMO is not responsible nor is it funded to provide radios to task force officers at the state and local level. However, when requests for task force support are given a high priority by the submitting component and the WCB approves, we try to fund radios for use by the task force officers. If we had a modernized system, the locally procured (usually with federal grant dollars) and locally maintained handsets for the locals could work on the federal network (certain channels).

PAY AND BENEFITS OVERSEAS

Question. What efforts has the Department of Justice taken to ensure retention of its best and brightest, particularly in the enforcement agencies out in the field and those agents and employees working outside the United States?

Answer. While Department of Justice law enforcement officials working outside the United States may be eligible for certain additional pay or benefits based on the location, the retention incentives available to those employees are the same as the incentives available to those located in the United States.

The FBI continues to use the authorities it received in the 2005 Consolidated Appropriations Act, some of which expire at the end of 2009, to better compete with private industry and improve attrition rates. These authorities include recruitment, relocation, and retention incentives, student loan repayment, and the University Education Program. Recruitment bonuses allow the FBI to competitively recruit employees who possess special qualifications for hard-to-fill FBI positions, relocation bonuses increase the number of employees interested in hard-to-fill positions within the FBI by, in effect, reducing the employee's relocation costs, and retention allowances are used to retain current employees who possess high-level or unique qualifications or who fill critical FBI needs. Retention allowances may be provided on either an individual or group basis to help the FBI retain certain employees or categories of employees, such as intelligence analysts and police officers.

The FBI has also used education benefits to improve the quality and job satisfaction of our workforce. For example, in order to improve our recruitment and retention of Intelligence Analysts, the FBI repaid 359 student loans for these employees in fiscal year 2007. The FBI has also used the University Education Program to fund tuition expenses for current employees seeking to obtain certifications and academic degrees, approving payments for 679 participants in fiscal year 2008.

Question. Is danger pay provided to agents and DOJ employees actively working along the Southwest Border?

Answer. The FBI's Legal Attaché (Legat) office in Mexico maintains a presence in Mexico City, Guadalajara, and Monterrey, but does not maintain a permanent presence along the Southwest Border. Currently, neither FBI employees assigned to the Mexico City Legat nor those assigned in the United States near the Southwest Border are afforded danger pay. It is the FBI's understanding that DEA personnel working in Mexico have been eligible to receive a danger pay allowance of 15 percent of basic pay since approximately 1991. In April 2008 the FBI's Mexico City Legat asked FBI Headquarters to consider affording danger pay to all FBI personnel in Mexico based on the hostile environment in Mexico, including threats from organized crime fugitives, rebels, and terrorist groups, as well as street and residential crimes. This request is under review.

Question. How many computer databases with similar information do we need before we have too many?

Answer. Proper utilization of taxpayer funds is important and duplicative government programs should be avoided, however, the DOJ systems are not duplicative with other components/agencies.

Question. The Department has continually had problems maintaining the jurisdictional integrity of the agencies it oversees. Namely the ATF and the FBI both have and claim jurisdiction over explosive incidents.

Please explain how having yet another agency involved in explosive incidents is helpful and productive to preventing and solving a terrorist incident?

Answer. The Attorney General, in coordination with the Department of Homeland Security, Department of Defense, and others, is currently developing the implementation plan as requested by HSPD 19. While the plan has not been fully developed yet, it will address the Senate's concerns over terrorism jurisdiction and incident management. Additionally, on July 8, 2008, the Director of FBI and the Acting Director of ATF signed a Memorandum of Understanding on ATF/FBI Protocols for Response to Explosives-related Incidents which delineates the roles of each agency when responding to bombing and explosives related incidents. The Department intends to make sure the HSPD 19 implementation plan clearly identifies core Department responsibilities so that the involvement of another agency does not compromise our priorities.

Question. If ATF and FBI have trouble sharing this jurisdiction within the Department how will the Federal Government manage yet another?

Answer. HSPD 19, when fully developed and implemented, will ensure that all relevant parties within the Federal Government understand their role in explosive events relating to terrorist bombing incidents response. The policy will delineate who has jurisdictional control and the roles of the respective agencies.

Question. Be specific in how these events will be managed if both justice agencies and the approximately 22 DHS agencies show up?

Answer. HSPD 19, when fully developed and implemented, will ensure that all relevant parties within the Federal Government understand their role in explosive events relating to terrorist bombing incidents response. The policy will delineate who has jurisdictional control and the roles of the respective agencies. Also, DHS' Office of Bombing Prevention is not an operational response organization. The Department has the responsibility for operational response. We are committed to ensuring this important delineation. Therefore, response from a third party is not expected to be an issue.

Question. What will the decision process be if all three respond to an incident? Be specific.

Answer. The Department is working with the White House and DHS to develop the implementation plan for HSPD 19. When completed, the lines of authority will be clear as to who will have the lead in addressing different types of bombing incidents. At this point and time it is not possible to be overly specific about the decision process if all three organizations respond. For further explanation, see the answer to the next question. However, the Department is sensitive to and fully engaged on this issue with the White House and DHS to ensure our interests are considered and protected as the implementation plan for HSPD 19 is being developed.

Question. Identify the role of each in an example when at one incident ATF is the lead, another incident when FBI is the lead and yet another incident when DHS is the lead?

Answer. On July 8, 2008, the Director of FBI and the Acting Director of ATF signed a Memorandum of Understanding on ATF/FBI Protocols for Response to Explosives-related Incidents which delineates the roles of each agency when responding to bombing and explosives related incidents. DHS' Office of Bombing Prevention is not an operational response organization. DOJ has the responsibility for operational response. Therefore, the response from a third agency should not be an issue. However, once HSPD 19 is fully implemented, the lines of authority will be reflected as to who will have the lead in addressing different types of terrorist related bombing incidents.

Question. If the lines of authority are unclear who will the State and locals call for assistance?

Answer. The Department continues to work with the White House and DHS to ensure that the HSPD 19 implementation plan will ensure that clearly defines the lines of authority for differing terrorist related bombing incidents are clearly defined. Once that policy is fully implemented state and local officials will know which agency to contact for assistance during an incident.

Question. Why are we paying 2 federal agencies to do research on explosives?

Answer. The role of explosives research varies by agency. While it is important to ensure the proper expenditure of taxpayer funds and avoid duplication of efforts it may not be possible for a single agency to do the entirety of explosives research. Within the Department the FBI operates a number of explosives research programs at Quantico as well as at Redstone that address areas such as render safe techniques and bomb disposal. ATF on the other hand manages research projects and programs such as the National Center for Explosives Training and Research (NCETR) as well as post-blast research intended to foster ATFs abilities and techniques for post-blast investigations. The Department, however, is unable to comment on the program activities of DHS and any research activities that might be underway there.

Question. Should we transfer this authority to the Department of Homeland Security since it seems to fit their mission statement? Be specific.

Answer. No. The Department continues to have legitimate reasons for pursuing explosives research. ATF's research in explosives, for example, is vital to the accomplishment of their mandate. Such research not only benefits ATF in addressing explosives incidents but also enables them to better train state and local organizations as well as the U.S. military in Iraq. It also provides important data that is regularly used in ATF's investigative proceedings. The FBI continues their focus on the development of diagnostic and render safe technologies and tools. The FBI participates with ATF as active members in the DOD Technical Support Working Group (TSWG).

Question. Do not agree on the information given out over the secure network? Do not agree on the terrorist explosive tactics? Do not agree on the proper response and handling by the state and locals?

Answer. Please provide further clarification as to what this question asks.

Question. Homeland Security is going to develop multi-jurisdictional improvised explosive devices security plans for high-risk jurisdictions. Isn't this something that the FBI should be using their JTTFs for?

Answer. The Joint Terrorism Task Forces (JTTFs) are operational units, and are not responsible for developing comprehensive response plans. These plans include program areas outside the criminal investigation responsibilities of the JTTF. DHS is responsible for providing input for the National Response Framework, which outlines how the Nation manages response to terrorism incidents. In essence, the efforts of DHS mirror those that were previously performed by the DOJ National Domestic Preparedness Office, which was transferred to DHS in the 2002 Homeland Security Act. The JTTFs, in concert with other relevant elements of the Department of Justice, will work as appropriate to coordinate with the DHS.

Question. Section 318 of the bill provides that the Secretary, shall—

"(1) evaluate and assess nonmilitary research, development, testing, and evaluation activities of the Federal Government relating to the detection and prevention of, protection against, and response to explosive attacks within the United States; and

"(2) make recommendations for enhancing coordination of the research, development, testing, and evaluation activities described in paragraph (1)."

Does the Department of Justice believe that this oversight and assistance from the Homeland is necessary?

Answer. The Department of Justice has not taken an official position on the Bill. Therefore, we cannot answer this question at this time.

Question. What expertise does the Department of Homeland Security have that would give them the expertise to evaluate and assess nonmilitary research, development, testing, and evaluation activities of the Justice Department relating to the detection and prevention of, protection against, and response to explosive attacks within the United States?

Answer. The Department of Justice believes it would be inappropriate to comment on the expertise of another federal agency. While multiple organizations across the Federal Government have programs to address this threat, the Department of Justice continues to work with all stakeholder agencies to avoid any redundancy or duplication of effort while best leveraging the unique expertise of each agency.

Question. I am concerned to see the Department's position or lack thereof on IED training. It's only a matter of time before terrorists will begin detonating improvised explosive devices in the United States. The ATF and FBI are the premier experts in handling explosives and responding to an explosives incident, yet the Department of Justice is somehow ceding this jurisdiction to a fledgling agency that has endured embarrassing failure after failure.

The Department of Homeland Security failed miserably in handling hurricane response, contracting Coast Guard ships that aren't seaworthy, the virtual fence, baggage-screening systems, the biometric entry-exit tracking system, and now Justice leadership has quietly watch the newly created DHS Office of Bombing Prevention begin seeping into its explosives jurisdiction. The Department of Homeland Security has its hands full with the border, among other problems. I would prefer the world's best and most experienced professionals in the ATF and FBI handle explosive prevention and training.

Why has the Department idly sat by as the Office of Bombing Prevention has grown?

Answer. By no means is the Department sitting idly on this issue. In fact, we The Department continue to train State, local, federal and international partners on render safe, post blast, disposal, prevention and detection. Training is an important component in ensuring a successful defense against IEDs. Facilities like the National Center for Explosives Training and Research (NCETR) will continue the Department's efforts in this important component. The Department is not aware of DHS' specific IED training curriculum and cannot comment specifically on that but we are working with the White House and DHS to make sure our interests are protected.

Question. The establishment of the Office for Bombing Prevention, is to address terrorist explosive threats, and for other purposes. This proposal contains language that would provide yet another computer database that would provide "a secure information sharing system that allows the sharing of critical information relating to terrorist explosive attack tactics, techniques, and procedures."

Why is it necessary to create yet another explosives data base?

Answer. ATF's Bomb Arson Tracking System (BATS) is a case management system used by federal, State, and local agencies investigating arsons, bombings, and other explosives incidents. The system provides law enforcement and fire service officials with access to information collected in ATF's U.S. Bomb Data Center (USBDC), the repository for all domestic bombing and arson incidents.

To avoid duplication of effort and allow more efficient use of Department resources, the FBI no longer tracks domestic law enforcement bomb incident data. However, in support of its intelligence and counter terrorism missions, the FBI continues to collect bombing-related intelligence and information as well as requests for FBI assistance from other law enforcement agencies. This information is entered into the FBI's enterprise case management system; all data is eventually archived.

EXPeRT is the FBI's document management system and electronic reference library for organizing and making available for future reference all the documents, reference material, photos, and other information related to explosives forensic examinations conducted by the FBI Lab Explosives Unit and the Department's Terrorist Explosive Device Analytical Center (TEDAC). EXPeRT is used within the FBI to share case data and reference material that support forensic exams and investigations, within TEDAC in the DOJ/DOD/INTEL Community to share information.

DOJ's explosives data and information sharing systems (EXPeRT, and BATS) are now hosted, or in the alternative hyperlinked, on the Law Enforcement Online (LEO) portal.

The DHS database referenced in proposed legislation already exists as the National Capability Database (NCAD). The DHS database collects and shares information about federal, state, and local law enforcement and emergency service capabilities including bomb squad, dive teams, explosives detection canine teams, and SWAT teams. State and local planners use NCAD to identify gaps and apply "best practices" to improve their security posture and develop multi-jurisdiction plans to respond to emergencies.

Question. Is this an agency looking for a mission?

Answer. The Attorney General is the chief law enforcement officer of the United States with the duty to protect, deter, prevent and respond to terrorist attacks. Missions and functions of DHS are mandated in other laws. DOJ cannot address the missions currently assigned to the Department of Homeland Security.

Question. Doesn't the Department already maintain 2 databases related to explosive incidents?

Answer. ATF maintains the Department's sole database on arson and explosives incidents. ATF's Bomb Arson Tracking System (BATS) is a case management system used by federal, State, and local agencies investigating arsons, bombings, and other explosives incidents. The system provides law enforcement and fire service officials with access to information collected in ATF's U.S. Bomb Data Center (USBDC), the repository for all domestic bombing incidents.

To avoid duplication of effort and allow more efficient use of Department resources, the FBI no longer tracks domestic law enforcement bomb incident data. However, in support of its intelligence and counter terrorism missions, the FBI continues to collect bombing-related intelligence and information as well as requests for FBI assistance from other law enforcement agencies. This information is entered into the FBI's enterprise case management system; all data is eventually archived.

EXPeRT is the FBI's document management system and electronic reference library for organizing and making available for future reference all the documents, reference material, photos, and other information related to explosives forensic examinations conducted by the FBI Lab Explosives Unit and the Department's Terrorist Explosive Device Analytical Center (TEDAC). EXPeRT is used within the FBI to share case data and reference material that support forensic exams and investigations, within TEDAC in the DOJ/DOD/INTEL Community to share information.

DOJ's explosives data and information sharing systems (EXPeRT, and BATS) are now hosted, or in the alternative hyperlinked, on the Law Enforcement Online (LEO) portal.

Question. Does the FBI or ATF system already do this? If not, why not?

Answer. The DHS database referenced in proposed legislation already exists as the National Capability Database (NCAD). The DHS database collects and shares information about federal, state, and local law enforcement and emergency service capabilities including bomb squad, dive teams, explosives detection canine teams, and SWAT teams. State and local planners use NCAD to identify gaps and apply "best practices" to improve their security posture and develop multi-jurisdiction plans to respond to emergencies.

Question. The Administration has indicated that one of its priorities surrounding the violence occurring along the SWB is to stop the flow of firearms into Mexico.

While interdiction at the border is one way to deal with the problem, it seems that we also need to identify and disrupt the sources of these weapons.

What is the Department doing to ensure that illegal firearms trafficking investigations are a priority along the SWB?

Answer. Since 1972, because of its specific statutory authorities over firearms and explosives, ATF has played a strategic role in addressing violent crime along the Southwest Border—investigating criminal organizations that traffic firearms and explosives from the United States into Mexico and regulating Federal firearms licensees (FFL) and Federal explosives licensees (FELs) In April 2006, ATF created Project Gunrunner to enhance resources and focus efforts strategically on the Southwest Border to deny firearms, the "tools of the trade," to criminal organizations in Mexico and along the border and to combat firearms related violence affecting communities on both side of the border.

Intelligence gathered by ATF and other domestic Federal law enforcement entities strongly suggests that drug trafficking organizations have tasked their money laundering, distribution and transportation apparatuses—all of which reach across the border into the United States—to acquire firearms for illegal transfer back to Mexico for use in facilitating narco-trafficking and other criminal activities. ATF has developed an extremely effective real-time intelligence and evidence sharing network with the Mexican government. Given current circumstances and increasing volume, however, the system has been overwhelmed on both sides of the border.

ATF is working with Mexican officials to increase their current usage of ATF's eTrace system. eTrace provides web-based access to ATF's Firearms Tracing System to allow law enforcement both domestically and internationally the ability to trace firearms seized in connection with criminal investigations. From fiscal year 2006 to fiscal year 2008, ATF has experienced more than a 100 percent increase in the number of trace requests from Mexico. With the deployment of eTrace to the nine consulates and the eventual implementation of Spanish eTrace, these numbers should continue to increase in the coming years. ATF's goal is to deploy eTrace software to all 31 states within the Republic of Mexico.

Under Project Gunrunner, ATF has approximately 148 special agents dedicated to working firearms trafficking investigations on a full time basis and 56 industry operation investigators (IOI) responsible for conducting regulatory inspections of FFLs. ATF is also expanding its presence at the El Paso Intelligence Center (EPIC) which serves as the central repository and "clearinghouse" for all weapons related intelligence collected and developed by ATF's field personnel and attaches in Mexico as well as by all other Federal, State and local law enforcement entities involved in narcotics interdiction and investigation along the U.S./Mexico border.

ATF's industry operations strategic plan under Project Gunrunner includes an outreach component to both the firearms industry and law enforcement at the Federal, State, and local level. ATF's outreach includes firearms seminars conducted within the border region to educate the firearms industry concerning schemes associated with firearm trafficking. An integral part of this outreach is ATF's "Don't Lie for the Other Guy" public awareness campaign that educates both FFLs and the general public on their responsibilities as it relates to purchasing firearms. ATF also partners with the National Shooting Sports Foundation (NSSF) on a retailer education program that includes a public awareness component with public service messages warning persons not to purchase firearms for others. Plans are underway to take this initiative to several cities along the Southwest Border. ATF also continues to provide training on SWB gun trafficking to law enforcement agencies both in the United States and abroad.

ATF is pursuing funding to establish firearm trafficking groups within each of its four border field divisions. The groups would be staffed by one group supervisor, eight special agents, two IOIs and one investigative analyst. These trafficking groups would be fully dedicated to firearm trafficking investigations. ATF is also seeking funding from the Organized Crime Drug Enforcement Task Force (OCDETF) Executive Office for five positions to expand ATF's Gun Desk at the El Paso Intelligence Center (EPIC)—three intelligence research specialists (IRS), one investigative analyst and one full-time special agent. An additional four IRS positions have been requested to support the field divisions on the Southwest Border. The team at EPIC will coordinate with the IRSs in the field divisions to gather, analyze, and disseminate intelligence from ATF investigations targeting firearms trafficking cases that involve OCDETF CPOT- and RPOT-linked along the Southwest Border. The teams will also liaison with all participating agencies at EPIC to ensure intelligence gathered is coordinated.

ATF is further collaborating with the Mexican government by deploying special agents to U.S. Consular offices in Mexico City and Monterrey, with additional deployments planned for Hermosillo, Baja California, Ciudad Juarez, and Tijuana in the near future, if funding is available. In this way, ATF will be able to work directly with Mexican counterparts, taking advantage of real-time intelligence that will benefit drug-related firearms trafficking investigations on both sides of the border. Intelligence sharing and transnational collaboration will provide valuable additional resources for ATF and its law enforcement partners. Those resources will be directed to identifying violent gangs and firearms traffickers that are also associated with OCDETF targets.

Question. The Committee was under the impression that determining technology to be used in the field by bomb squads was part of the role for the Hazardous Devices School. How will this new initiative at the Dept of Homeland Security merge with the efforts of the FBI and the ATF?

Answer. The Department of Justice is unable to comment on another Department's initiatives. The Hazardous Devices School (HDS) is not designed to serve as a research and development agency; however, the HDS is integral to the identification and transmission of operators' requirements and assists in the test and evaluation of emerging technologies developed through the efforts of the DOD Technical Support Working Group (TSWG) and others. TSWG is an interagency and international research and development organization focused on short term, quick turn around, fielding of equipment to meet operators' requirements. Both FBI and ATF, as well as OBP, are members of the TSWG and the National Science and Technology Council for Counter IED Research. As it stands, the Department continues to determine the technology best suited for bomb squad field use.

Question. How much has the taxpayer already expended to create and maintain the current 2 systems?

Answer. The cost to the taxpayers for the creation and maintenance of ATF's current database system is $13.8 million, with the first database being created in 1996.

QUESTIONS SUBMITTED BY SENATOR MITCH MCCONNELL

Question. What are the authorized and the current staffing levels for the Bureau of Prisons facilities within the Commonwealth of Kentucky, including FMC Lexington, USP Big Sandy, FCI Ashland, FCI Manchester, and USP McCreary?

Answer.

	S&E Authorized Level	S&E Current Staffing Level
FMC Lexington	501	430
USP Big Sandy	385	337
FCI Ashland	289	258
FCI Manchester	308	273
USP McCreary	376	330

Question. What are the current inmate-to-staff ratios at each of the Bureau of Prisons facilities within the Commonwealth of Kentucky, including FMC Lexington, USP Big Sandy, FCI Ashland, FCI Manchester, and USP McCreary?

Answer. The current (June 5, 2008) inmate-to-staff ratios are as follows:

	Ratio
FMC Lexington	3.9 to 1
USP Big Sandy	5.2 to 1
FCI Ashland	6.0 to 1
FCI Manchester	6.1 to 1
USP McCreary [1]	3.8 to 1

[1] USP McCreary is transitioning from Medium Security to High Security Programming. The inmate population will continue to increase until the transition is complete and thereby increase the Inmate to Staff Ratio.

Question. What are the authorized, optimal, and minimally-safe inmate-to-staff ratios at each of the Bureau of Prisons facilities within the Commonwealth of Kentucky, including FMC Lexington, USP Big Sandy, FCI Ashland, FCI Manchester, and USP McCreary?

Answer. The Bureau of Prisons (BOP) does not have an optimal or minimally safe inmate to staff ratio, particularly for individual prisons. For fiscal year 2007, the BOP's inmate to staff ratio was to 4.92 to 1, whereas 10 years ago, this ratio was at 3.57 to 1.

Question. What steps is the Bureau of Prisons taking to increase security and safety at each of its facilities within the Commonwealth of Kentucky, including FMC Lexington, USP Big Sandy, FCI Ashland, FCI Manchester, and USP McCreary, regarding current staffing levels and inmate-to-staff ratios?

Answer. Ensuring the safety and security of all facilities including the facilities in Kentucky is the highest priority of the Bureau of Prisons (BOP). The BOP ensures institution security through a combination of factors that include the classification of inmates based on risk factors; physical security features at BOP's institutions, including the structure of inmate living quarters, security technologies, and perimeter security measures; internal controls for inmate movement and accountability; direct staff supervision of inmates; and inmate involvement in correctional programs.

The graduated classification system allows the BOP to assign an inmate to an institution in accordance with his or her likelihood of engaging in disruptive behavior. Inmates who require high levels of security are confined in higher-security facilities. Inmates who are able to function with relatively less supervision, without disrupting institution operations or threatening the safety of staff, other inmates, or the public, are confined in lower security level institutions.

Architecture and security technology also help maintain the safety and security of BOP institutions, and the BOP continues to evaluate and add technological innovations to increase the physical security of facilities. To facilitate direct supervision of inmates, structural barriers between staff and inmates are minimized where possible, and staff offices are located near the areas where programs and services are delivered. Staff circulate freely and constantly through all areas of the institution, continually interacting with inmates. This promotes a more normalized environment within an institution and places staff in a better position to observe inmate behavior. Frequent and constructive interaction and communication between staff and inmates is critical to ensuring security, maintaining accountability, and managing inmate behavior. Staff are encouraged to talk with and be available to inmates and to be receptive to inmate concerns. Most institutions also rely on closed-circuit cameras and monitors to augment staff observation of inmates.

Question. Why has the Bureau of Prisons facility at USP McCreary not staffed certain security towers while its stun/lethal fence remained incomplete and non-operational? What steps to ensure the safety of staff, inmates, and the community has the Bureau taken while the towers remain unstaffed?

Answer. The BOP is piloting a stun-lethal fence system at seven of its high security facilities. During the construction phase of these fence systems, Wardens have established adequate procedures to provide perimeter security. At USP McCreary, the Warden determined that while the stun-lethal fence is being installed, the certain towers will continue to be staffed to control access to and from the institution. In addition to this, perimeter patrols are being used for perimeter security. It should be noted that electrified fence systems have been in operation at several state correctional facilities for a number of years, and their perimeter security is very similar to those established at Bureau institutions.

Question. On March 14, 2008, Bureau of Prisons Director Harley Lappin testified before the U.S. House of Representatives Committee on Appropriations, Subcommittee on Commerce, Justice, Science, and Related Agencies. In response to a question from U.S. Representative Hal Rogers of Kentucky, Director Lappin described his concern about an increase in the severity of incidents of violence or disorder as the Bureau's inmate-to-staff ratio has worsened. He testified that the Bureau seeks to identify perpetrators and shift them into higher-security institutions. Given current staffing levels and inmate-to-staff ratios, what steps is the Bureau taking to ensure the security and safety of the staff, inmates, and community affiliated with the higher-security institutions that receive the violent inmates? What steps is the Bureau taking to retain and recruit staff at the higher-security institutions?

Answer. As with the Department's answer to your previous question, ensuring the safety and security of staff, inmates, and the public is the highest priority of the Bureau of Prisons. The BOP ensures institution security through a combination of factors that include the classification of inmates based on risk factors; physical security features at our institutions, including the structure of inmate living quarters, security technologies, and perimeter security measures; internal controls for inmate movement and accountability; direct staff supervision of inmates; and inmate involvement in correctional programs.

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BOP staffs are a key component to effective security and inmate management. Regardless of the specific discipline in which a staff member works, all BOP employees are "correctional workers first." This means that everyone is responsible for the security and good order of the institution. All staff are expected to be vigilant and attentive to inmate accountability and security issues, to respond to emergencies, and to maintain a proficiency in custodial and security matters, as well as in their particular job specialty. This approach allows the BOP to maximize emergency preparedness and to operate in the most cost-effective manner (with fewer correctional officers) and still maintain direct supervision of inmates.

Finally, the BOP operates a broad variety of programs to keep inmates constructively occupied and provide them opportunities to learn important skills. Research has shown that keeping inmates productively involved in appropriate correctional programs and activities is critical to ensuring both a safe and secure prison and public safety. Correctional programs and activities reduce inmate idleness and the stresses associated with living in a prison, and these programs are important to public safety by assisting inmates to return to the community as productive, law-abiding citizens.

Question. What steps is the Bureau of Prisons taking to increase security and safety at each of its facilities within the Commonwealth of Kentucky, including FMC Lexington, USP Big Sandy, FCI Ashland, FCI Manchester, and USP McCreary, regarding the transfer of non-English-speaking or bilingual violent inmates (including gang members) from other regions of the country and the attendant need to monitor inmate communications in foreign languages for threats to staff and institutional security?

Answer. Ensuring the safety and security of our staff, inmates, and the public is the highest priority of the Bureau of Prisons. The BOP ensures institution security through a combination of factors that include the classification of inmates based on risk factors; physical security features at our institutions, including the structure of inmate living quarters, security technologies, and perimeter security measures; internal controls for inmate movement and accountability; direct staff supervision of inmates; and inmate involvement in correctional programs.

During July 2007, the Bureau of Prisons established a Blanket Purchase Agreement to provide foreign language translation services for all institutions. The agreement incorporates language proficiency standards, security background requirements that the translators must meet, and an aggressive turnaround response time requirement (ordinarily two business days) for the contractor to complete the translation and return it to the Bureau of Prisons.

At the same time guidance was provided to all institutions that all social communications (correspondence and telephone calls) for inmates meeting specific identified criteria, one of which was disruptive group affiliation or gang involvement, would be translated if written in foreign language. Social correspondence prepared in a foreign language by identified inmates would be held, translated and analyzed for intelligence value prior to mailing out of the institution. Incoming correspondence written in a foreign language would also be held, translated and analyzed for intelligence value prior being delivered to the inmate. Audio recordings of telephone calls are currently translated after the calls occur, but a new agreement currently under development will include the ability for simultaneous translation of inmate telephone calls.

SUBCOMMITTEE RECESS

Senator MIKULSKI. This subcommittee stands in recess until Wednesday, April 16, at 2 p.m., when we'll take testimony from the Director of the FBI.

We thank the Director for coming and for his forthcoming statements and look forward to working with his team.

This subcommittee stands in recess.

Attorney General MUKASEY. Thank you very much.

Senator MIKULSKI. As the prerogative of the Chair, the subcommittee's officially recessed. We would thank the advocates from the Y for coming today.

I'm going to ask my staff, and I'm sure the Shelby staff would join, so that they can have a brief conversation with you and bring you up to date on what our efforts will be, but we thank you for your advocacy and, most of all, we thank you for the hundred years of good work empowering women and fighting racism and bigotry in our society.

God bless you.

[Whereupon, at 10:56 a.m., Thursday, April 10, the subcommittee was recessed, to reconvene at 2 p.m., Wednesday, April 16.]

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2009

WEDNESDAY, APRIL 16, 2008

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2 p.m., in room SD–124 Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Shelby, and Stevens.

DEPARTMENT OF JUSTICE

FEDERAL BUREAU OF INVESTIGATION

STATEMENT OF HON. ROBERT S. MUELLER III, DIRECTOR

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. The Commerce, Justice, Science Subcommittee will come to order.

There are many hearings going on right now. I know the hearing on the supplemental is wrapping up and we have a vote at 2:15. So, I know Senator Shelby is on his way, Director Mueller.

I want to exercise the prerogative of the Chair and give my opening statement. By that time Senator Shelby will be here. We hope to hear your testimony, then we'll recess and then come back for questions and answers. But I think that there are five hearings on appropriations going on simultaneously. Here he is.

Good afternoon, and welcome. Today, the Commerce, Justice, Science Subcommittee will hear from Director Robert Mueller, the head of the Federal Bureau of Investigation (FBI), for its budget priorities for fiscal year 2009. We've had a very productive relationship with Director Mueller and his team and he can count on us to work with him.

We regard this year as a year of transition. This time next year, we will have a new President and whatever we do with this year's budget for the FBI will be the operating budget for that President's first term.

I want to make sure the FBI has the right resources to fulfill its mission, to fight terrorists, violent criminals, cyber crooks, and also predators on our children.

The FBI has so many multiple roles, it truly is not J. Edgar Hoover's FBI anymore, and it isn't even Judge Webster's FBI anymore.

It is a new modern FBI with multiple responsibilities, both as an intelligence and law enforcement agency, responsible for keeping 300 million people safe from terrorists, as well as, criminals.

The President's budget request is $7.1 billion, a $450 million increase above the 2008 passed omnibus. This will be a 7 percent increase and it should help with funding for more special agents and more intelligence analysts.

While we work to get the FBI the right resources, we also have to make sure that we have the best management practices. We know the FBI is hiring to meet our Nation's needs and we want to discuss with him the issues related to recruitment, retention, and training.

In the area of counterterrorism, most increases in the FBI budget are in this category. We all agree this is a top priority. For counterterrorism, the budget proposes $3 billion, a $234 million increase above the 2008 omnibus. Counterterrorism is now 40 percent of the FBI's budget. This has been quite a transformation in the last 5 years.

For intelligence, the budget proposes $1.4 billion, a $208 million increase over 2008 and an 18 percent increase. I'm pleased that the FBI proposes major investments in intelligence gathering, fighting cyber crime, dealing with these issues related to weapons of mass destruction and improvised explosive devices (IEDs).

At the same time, we need to know how the FBI is improving its management and oversight of critical intel tools. We know that the inspector general has raised flashing yellow lights about national security letters and to be sure that they are sent and used appropriately, the terrorist watch list, when you get on, how soon does it take to get the bad guy on it, and how soon does it take a good guy off of it inadvertently placed there, and also we're concerned that the FBI wiretap bill was unpaid. We cannot miss a ring on that number. The FBI must improve its accuracy and protect our privacy.

Then we go to the crime budget. There is a surge in crime in the United States of America and we need our FBI. We are very concerned that over the years, funding for the FBI in the terrorist area was taken at the expense of crime.

This year, the request is $2.3 billion for the FBI's traditional crime-fighting efforts, a $105 million increase over the 2008 omnibus level, but the budget has no new funds for the surge in violent crime, the additional surge responsibility of investigating the mortgage fraud disclosures which I know the chairman's an expert in, and also continuing our efforts to deal with a rising crime against children, the child predator issues from those who stalk children in our communities to the growing international child pornography rings.

Since September 11th, the FBI has shifted 2,000 agents from violent crime to counterterrorism work. Local law enforcements taken up this slack. They're stretched to the limit. So, if we're going to have a surge of help in Baghdad, we need a surge of help in Baltimore.

We support the idea of the joint Federal-State task forces. We have seen the work, the excellent work the FBI has done with these joint Federal-State task forces in fighting violent gangs, drug dealers, and child predators.

If we can put $5 billion into the Iraqi police force, we can put more money into our FBI. Given all the FBI's important roles and responsibilities, we want to be sure that they have the right resources, that they are able to hire and keep the right people and that they have the modern technology that we need to fight these new techno-threats against the United States.

We want to very much hear the Director's priorities and to work with him in a spirit of bipartisan partnership to keep America as safe as we can by having a strong FBI and we're going to be smarter in the way we work with you and fund this in order to get the job done.

I now turn to Senator Shelby for any comments he has to make.

STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you, Madam Chairwoman. Before I begin my opening statement, I would want to take a moment to commend the chairwoman for her fiery comments to the OMB Director in the supplemental hearing that took place moments ago.

Senator Mikulski, I stand with you in the fight to increase State and local funding in the supplemental and thank you for being the leader in this effort.

Director Mueller, thank you for joining us today. We had a nice meeting in my office yesterday to discuss the Federal Bureau of Investigation's 2009 budget request.

I want to begin by thanking the men and women of the FBI who work every day to protect the Nation. We're all indebted to them for the sacrifices they make to protect us.

Since your arrival as the sixth Director of the FBI, Congress has tasked the FBI, Mr. Director, with more responsibility than any other Federal law enforcement agency resulting in more challenges and changes than ever before. No one knows this more than you.

The FBI is the Nation's premier law enforcement, counterterrorism, and counterintelligence agency. The Bureau's missions include fighting terrorism, foreign intelligence operations, cyber crime, public corruption, white collar crime, and violent crime.

The FBI request for 2009 is $7.1 billion. This is a $448 million increase over the 2008 omnibus funding level. While this represents an increase, the FBI has a $56 million shortfall in the 2009 budget request.

The bottom line may have increased but funding for the core missions and the responsibility has not. This hole in the budget increases the pressure on the FBI to do more with less.

Based on my review of your request, Mr. Director, combined with the likely fiscal constraints of this subcommittee, we will need your assistance as we face tough funding decisions. This subcommittee and the Bureau share the difficult task of targeting these limited resources in a manner that safeguards taxpayer dollars while preserving public safety.

I want to re-emphasize the chairwoman's point that since 9/11, the FBI has shifted 2,000 agents from violent crime into counterterrorism and while this shift was necessary, it has created a huge burden on our State and local enforcement agents.

This budget abandons our State and local law enforcement officials and cuts at all the grants that would have helped them to meet our most critical needs. We will work with you, Mr. Director, to ensure that we provide the FBI with the resources necessary to assist these critical partners in our fight against crime.

Director Mueller, Congress has provided nearly $100 million for the FBI's render safe mission for critical equipment and air assets to counter the explosive devices in the United States. The FBI's render safe mission requires the FBI to have the capability to access, diagnose, and render safe chemical, biological, radiological, or nuclear devices within the United States and its territories.

The FBI's responsible for all render safe operations involving weapons of mass destruction in the National Capital Region. It has been approximately 1 year since the chairwoman and I worked with you in good faith to provide the FBI with the funding needed for this mission.

I understand as of today, the Office of Management and Budget (OMB) has still not released $38 million in funding appropriated in last year's war supplemental necessary for the Bureau to perform its critical weapons of mass destruction (WMD) and render safe missions. The availability of that funding expires in less than 6 months, September 30, 2008.

I look forward to hearing your plans on how the FBI will be fully obligating these funds prior to their expiration.

Currently, the FBI has on-call assets from other agencies. These same on-call assets are also responsible for conducting other critical missions. If these assets are not designated for both the U.S. Government and the FBI, how will the FBI use them to carry out a render safe response during a crisis? These assets could be double-booked.

The FBI's Hazardous Device School, HDS, is a crown jewel of the Federal Government's effort to provide training to Federal, State, and local bomb technicians. In partnership with the Army, this facility has trained more than 20,000 bomb technicians. That is a proven record of success.

A November 2007 Congressional Research Service (CRS) report stated that IEDs, roadside bombs, and suicide car bombs caused 70 percent of all American combat casualties in Iraq and 50 percent of all combat casualties in Afghanistan. The report also notes that "there's a growing concern that IEDs might eventually be used by insurgents and terrorists worldwide, including in this country."

The administration's most recent homeland security strategy recognizes the potential threat of IEDs being used by terrorists here. IEDs are clearly a threat. We need to understand and prepare for them. We cannot afford to be complacent and pretend that it cannot happen here.

The question is will we be prepared when they arrive? There has been more than 13,000 IED and evidentiary submissions from Iraq and Afghanistan in 2007. These submissions cause backlogs that require Federal, State, and local law enforcement to wait an average of 200 plus days to receive the results of forensic examinations from the FBI lab.

We need to make sure that the FBI and its lab have the resources it needs to handle not just the influx of work associated with the war on terrorism but also provide timely forensic assistance to law enforcement. We must ensure that the Terrorist Explosive Device Analytical Center has the forensic and technical capabilities it needs to support its critical mission of countering the IED threat from terrorists without denying those same services to others who depend on the FBI for lab support.

This threat, I believe, is not going to diminish. There are many other issues, Mr. Director, I'd like to discuss, including national security letters, critical rebuilding of the FBI Academy and the use of resources with the FBI's priority missions, and I look forward to your thoughts on these issues and many others.

Thank you for joining us.

Senator MIKULSKI. Thank you, Senator Shelby, and again Director Mueller, we just want to assure you we're going to move on your budget in a bipartisan way. Our thoughts are identical on this, but why don't you go ahead with your testimony?

STATEMENT OF HON. ROBERT S. MUELLER III

Mr. MUELLER. Thank you, Madam Chairwoman, and Senator Shelby. Thank you for having me here today to discuss the issues relating to our 2009 budget request.

I did submit a longer statement. I would hope that it would be made part of the record.

As you are aware, the FBI's top three priorities are counterterrorism, counterintelligence, and cyber security. These priorities are critical to our national security and to the FBI's vital work as a committed member of the intelligence community.

Also important are our efforts to protect our communities from the very real threat of crime, especially violent crime. In the counterterrorism arena, al-Qaeda and related groups continue to present a critical threat to the homeland, so do self-radicalized homegrown extremists and they are difficult to detect, often using the Internet to train and operate.

At home, through our domestic joint terrorism task forces and abroad with our legal attachés and our international partners, we together share real-time intelligence to fight these terrorists and their supporters.

An important aspect of the fight against terrorists is the threat of weapons of mass destruction and the FBI's commitment to our render safe mission to prevent, prepare for, and respond to the threat of a WMD in the United States.

We appreciate the resources that you have provided for this endeavor and with your ongoing support, we will continue to work on this critical issue. I'm looking forward to discussing the funding in support of that particular initiative.

Another important effort is the work of the Terrorist Explosive Device Analytical Center, the TEDAC as it is called, as was pointed out by Senator Shelby. This center was established as an interagency laboratory for analyzing explosive devices used by terrorists worldwide and it does use the most contemporary forensics techniques available to do so, providing that information to our troops on the ground in Iraq, Afghanistan, and elsewhere.

With regard to the counterintelligence threat, protecting our Nation's most sensitive secrets from hostile intelligence services or others who would do us harm is also at the core of the FBI mission.

In furtherance of this priority, we reach out to businesses and universities. We join forces with our intelligence community partners and we work closely with the military to help safeguard our country's secrets.

As was pointed out by you, Madam Chairwoman, cyber threats to our national security and the intersection between cyber crime, terrorism, and counterintelligence is increasingly evident.

Today, the FBI's cyber investigators focus on these threats and we partner with Government and industry. One way we do so is through our sponsorship of a program called Infraguard, an alliance of more than 23,000 individual and corporate members to help identify and prevent cyber attacks.

We have also asked for your specific support of our efforts in connection with the comprehensive national cyber security initiative. The FBI's unique position as both an intelligence and law enforcement agency allows us to rapidly respond to cyber events at U.S. Government agencies, military installations, and within the broader private sector.

I am mindful of your ongoing interest in the FBI's progress in building an intelligence program while combating these threats. The FBI has made a number of changes in the last several years to enhance our capabilities.

Today's intelligence is woven throughout every FBI program and operation. By utilizing this intelligence, we have successfully broken up terrorist plots across the country, from Portland, Oregon; Lackawanna, New York; Torrance, California; Chicago, Illinois, to the more recent Fort Dix, and JFK plots.

We have increased and enhanced our working relationships with our international partners, sharing critical intelligence to identify terrorist networks and disrupt planned attacks around the globe.

We have doubled the number of intelligence analysts on board and tripled the number of linguists. We have tripled the number of joint terrorism task forces, from 33 in September 2001 to over 100 to date. Those task forces combine the resources and expertise of the FBI, the intelligence community, military, State, local, and tribal law enforcement.

Another critical and important part of the FBI mission, the traditional mission is quite clearly our work against criminal elements in our communities, very often and most useful in task forces with our Federal and State and local and tribal partners.

Also, public corruption remains the FBI's top criminal investigative priority. In the past 2 years alone, we have convicted over 1,800 Federal, State, and local officials for abusing their public trust.

Similarly, our work to protect the civil rights guaranteed by our Constitution is a priority, which includes fighting human trafficking, as well as, our focus on the civil rights cold case initiative.

Gangs and violent crime continue to be as much a concern for the FBI as it is for the rest of the country. The FBI's 143 Safe Streets violent gang task forces leverage the unique knowledge of State and local police officers with Federal investigative resources to combat this growing problem.

The FBI also sponsors 52 additional violent crime and interstate theft task forces, as well as, 16 safe trails task forces targeting crime in Indian country.

The FBI combats transnational organized crime in part by linking the efforts of our Nation's 800,000 State and local police officers with international partners. This is accomplished through the FBI's legal attaché offices of which we have over 60 at this juncture around the world.

And finally, major white collar crime. From corporate fraud to fraud in the mortgage industry clearly continues to be an economic threat to the country. For example, in recent years, the number of pending FBI cases focusing on mortgage fraud, including those associated with subprime lending, has grown nearly 50 percent to over 1,300 cases. Roughly one-half of these cases have losses of over $1 million and several have losses greater than $10 million. In addition, the FBI will continue our work to identify large-scale industry insiders and criminal enterprises engaged in systemic economic fraud.

As I believe both of you have pointed out and we, too, recognize that for the past 100 years of the FBI's history, our greatest asset has been our people. We are building on that history with a comprehensive restructuring of our approach to intelligence training for both our professional intelligence analyst cadre, as well as, for new FBI agents coming out of Quantico.

We have and will continue to streamline our recruiting and hiring processes to attract persons having the critical skills needed for continued success of the FBI's mission.

I also remain committed to ensuring our employees have the information technology infrastructure they need to do their jobs. This includes the continuing successful development of the Sentinel Case Management System, as well as, other information technology (IT) upgrades.

I am very well aware of your concerns that we always use legal tools given to the FBI fully but also appropriately. For example, after the Department of Justice review of the use of national security letters, we instituted internal oversight mechanisms to ensure that we, as an organization, minimized the chance of future lapses.

Among the reforms was the creation of a new Office of Integrity and Compliance within the Bureau to identify and mitigate potential risks.

In closing, the FBI recognizes that it is in some sense a national security service responsible not only for collecting, analyzing and disseminating intelligence but most particularly for taking timely action to neutralize threats to this country. These threats could be from a terrorist, from a foreign spy or a criminal, and in doing so, we also recognize that we must properly balance civil liberties with the public safety in pursuing our efforts and we will continually strive to do so.

PREPARED STATEMENT

Madam Chairwoman, Senator Shelby, I appreciate the opportunity to testify this afternoon and look forward to your questions.

Thank you.
[The statement follows:]

PREPARED STATEMENT OF ROBERT S. MUELLER III

Good afternoon, Chairwoman Mikulski, Senator Shelby, and Members of the Subcommittee. I appreciate the opportunity to appear before you today to discuss the President's fiscal year 2009 budget for the Federal Bureau of Investigation (FBI). I would also like to thank you for your continued oversight of the Bureau and for your efforts to ensure our success as we pursue the shared goal of making America safer.

After the attacks of September 11, 2001, the FBI's priorities shifted dramatically as we charted a new course, with national security at the forefront of our mission. The intervening 7 years have seen significant changes at the FBI, and we have made remarkable progress. Today, the FBI is a stronger organization, combining greater capabilities with a longstanding commitment to the security of the United States, while at the same time upholding the Constitution and the rule of law and protecting civil liberties.

2009 BUDGET REQUEST

The fiscal year 2009 budget for the FBI totals 31,340 positions and $7.1 billion, including program increases of 1,129 new positions (280 Special Agents, 271 Intelligence Analysts, and 578 Professional Support) and $447.6 million. These resources are critical for the FBI to perform its national security, criminal law enforcement, and criminal justice services missions. Most importantly, the additional funding requested will continue to build upon our on-going efforts to integrate and cement our intelligence and law enforcement activities. These resources will allow us to create an awareness of, and become receptors for change in threats, and have the ability to make immediate adjustments in priorities and focus in an environment where national security threats and crime problems are constantly changing and shifting.

Guiding the development of the FBI's budget strategy are six enterprise-wide and interdependent capabilities that the FBI needs to effectively perform its national security, criminal investigative, and criminal justice services missions. These end-state capabilities are:

—*Domain and Operations*.—A mature enterprise capability for employing intelligence and analysis to identify and understand the national security threats and crime problems challenging America, and developing and executing operational strategies to counter these threats and crime problems;
—*Surveillance*.—A surveillance (physical, electronic, human source) and operational technology capability to meet operational requirements;
—*Partnerships*.—An established and productive network of partnerships with local, State, Federal, and international law enforcement and criminal justice agencies;
—*Leveraging Technology*.—An enhanced capability for providing forensic, operational technology, identification, biometric, training, and criminal justice services to the FBI workforce and our local, State, Federal, and international partners;
—*Workforce*.—A professional workforce that possesses the critical skills and competencies (investigative, technical, analytical, language, supervisory, and managerial), experiences, and training required to perform our mission; and
—*Infrastructure*.—A safe and appropriate work environment and information technology to facilitate the performance of the FBI's mission.

The FBI's 2009 budget strategy builds upon both current knowledge of threats and crime problems and a forward-look to how we anticipate terrorists, foreign agents and spies, and criminal adversaries are likely to adapt tactics and operations in a constantly evolving and changing world. This forward-look helps inform and determine the critical operational and organizational capabilities the FBI must acquire over the same time period to remain vital and effective in meeting future threats and crime problems.

We also linked our budget plan to the FBI's Strategy Management System to ensure the investments in new resources were tied to our strategic vision and goals.

I will highlight some of the key components of our budget request below.

DOMAIN AND OPERATIONS

In order for the FBI to be successful, we must be able to fully utilize our intelligence analysis techniques to establish a mature enterprise capability for identifying and understanding the national security threats and crime problems facing the United States, and to develop and execute operational strategies to counter these threats and problems.

This budget requests 568 new positions (190 Special Agents, 158 Intelligence Analysts, and 220 Professional Support) and $131.0 million to improve intelligence analysis and conduct intelligence-driven terrorism investigations and operations. These resources will enable the FBI to conduct investigations to prevent, disrupt and deter acts of terrorism and continue to strengthen working relationships with our Federal, State and local partners; provide support to the National Virtual Translation Center, which serves as a clearinghouse to facilitate timely and accurate translation of foreign intelligence for elements of the Intelligence Community; leverage and expand existing Foreign Terrorist Tracking Task Force (FTTTF) operations to support all National Security Branch (NSB) mission areas to include Counterintelligence, Weapons of Mass Destruction (WMD), Domestic and International Counterterrorism, and Intelligence; and address growth in the number of terrorism and counterintelligence-related computer intrusion cases.

The National Counterterrorism Center's WMD Threat Assessment, 2005–2011 reaffirmed the intent of terrorist adversaries to seek the means and capability to use WMD against the United States at home and abroad. Within the United States Government, the FBI has been assigned responsibility for Render Safe operations involving WMD in the National Capital Region and for the rendering safe of deliberate deployments of WMD throughout the remainder of the United States. To carry out its critical responsibilities in the area of WMD, the FBI must continue to build the capacities and capabilities of its Render Safe Program while ensuring that the FBI is adequately staffed and equipped to forensically respond to a terrorist incident, whether it be Chemical, Biological, Radiological, or Nuclear. The FBI's fiscal year 2009 budget includes 132 positions (43 Special Agents and 89 Professional Support) and $65.8 million to enhance the FBI's capabilities to prevent, prepare for, and respond to the threat of WMD. These resources will allow the FBI to enhance strategic partnerships with foreign intelligence, law enforcement, security, public health, agricultural, chemical, and other public and private sector agencies and organizations that are vital to the early detection of a potential WMD incident.

The FBI's fiscal year 2009 budget for Domain and Operations also includes an enhancement of 211 positions (35 Special Agents, 113 Intelligence Analysts, and 63 Professional Support) and $38.6 million to support investigative, intelligence, and technical requirements of the Comprehensive National Cybersecurity Initiative.

The threat of cyber-related foreign intelligence operations to the United States is rapidly expanding. The number of actors with the ability to utilize computers for illegal, harmful, and possibly devastating purposes continues to rise. Cyber intrusions presenting a national security threat have compromised computers on United States Government, private sector, and allied networks. The FBI is in a unique position to counter cyber threats as the only agency with the statutory authority, expertise, and ability to combine counterterrorism, counterintelligence, and criminal resources to neutralize, mitigate, and disrupt illegal computer-supported operations domestically. The FBI's intelligence and law enforcement role supports response to cyber events at United States Government agencies, United States military installations, and the broader private sector.

SURVEILLANCE

Shifting from a reactive criminal prosecution approach to a prevention and intelligence-driven focus in our counterterrorism program is taxing the FBI's capacity to gather intelligence through both physical and electronic surveillance. The capacity to carry out extended covert court-authorized surveillance of subjects and targets is absolutely critical to the FBI's counterterrorism and counterintelligence programs. Surveillance activities—physical and electronic—give us insight into and awareness of our adversaries, which, in turn, create opportunities to identify sleeper cells, disrupt support networks and communications, and recruit assets. We need a vigorous surveillance capacity to keep on top of known and emerging targets. Additionally, we must be able to develop and deploy new operational technologies and techniques to counter a more technically sophisticated adversary and to exploit and share the information we gather.

In fiscal year 2009, we seek an enhancement of 145 positions (10 Special Agents and 135 Professional Support) and $88.5 million to strengthen surveillance capabilities. These resources will enable the FBI to increase the number of physical surveillance teams; replace aging surveillance aircraft; develop new techniques and tools to address emerging technologies; meet demands for new audio and data collection and upgrade or replace obsolete digital collection system equipment and components; and develop new techniques and tools for tactical operations.

PARTNERSHIPS

The FBI prides itself on establishing and maintaining a productive network of partnerships with local, State, Federal, and international law enforcement and criminal justice agencies. In order to do this, we must enhance our capability and capacity to collect, manage, analyze, and share information within the FBI and with our Intelligence Community (IC), law enforcement, and allied partners. The fiscal year 2009 budget includes 3 positions (2 Special Agents and 1 Professional Support) and $5.7 million to expand the FBI's presence overseas to obtain intelligence relative to threats involving the homeland; open and staff a new Legal Attaché office in Algiers, Algeria, which will address a significant number of counterterrorism cases and leads in that region; and enhance the FBI's ability to participate in State and local intelligence Fusion Centers, which have become an important component in maintaining the flow of information between and within Federal, State, local, and Tribal Governments.

LEVERAGING TECHNOLOGY

Technology is the cornerstone to fulfilling the FBI mission as well as creating efficiencies for both FBI personnel and our Intelligence and Law Enforcement Community partners. Leveraging technology will allow the FBI to provide forensic, analytical, and operational technology capabilities to FBI investigators and analysts, law enforcement officers, and the intelligence community. Without enhanced resources to invest in applied research, development, knowledge building, testing, and evaluation, the FBI will not be able to take advantage of emerging technologies or adapt to a constantly changing and evolving threat and operational environment.

For example, the use of DNA technology continues to be an important tool for law enforcement; it not only helps identify suspects, but it can also be used to ensure innocent persons are not wrongly convicted of a crime. The FBI Laboratory continues to support forensic exploitation analysis for FBI investigations, State and local cases, and terrorist identification from Improvised Explosive Devices (IEDs) obtained from in-theater operations in Iraq and Afghanistan. The FBI's fiscal year 2009 budget includes 52 Professional Support positions and $32.1 million for DNA-related initiatives and enhanced counterterrorism and forensic analysis support for FBI investigations. The failure to provide timely examination results can affect information available for prosecutors during trials or negotiating plea agreements, or can cause a delay in the gathering of intelligence to support the identification of terrorists and their associates, which could impact the safety of United States troops overseas. By enhancing the forensic capabilities of the FBI Laboratory, the FBI will be better positioned to solve crimes and offer assistance to partner law enforcement agencies.

The FBI must also keep pace with evolving technology. Currently, all wireless carriers in the United States are upgrading their networks to 3rd Generation wireless technology. This upgrade will radically transform voice, internet, email, short message service, multimedia services and any future services from circuit-switched data to packet transferred data. The FBI, along with the rest of the Intelligence Community, has created a Joint Wireless Implementation Plan, which will allow us to provide the field with advanced tools and technologies as well as provide adequate training on the use of duly authorized wireless intercept and tracking tools. The fiscal year 2009 budget includes $4.1 million to assist us in keeping abreast of this cutting edge technology and the ability to counter the technology posed by our adversaries.

WORKFORCE

The FBI remains committed to a professional workforce that possesses the critical skills and competencies (investigative, technical, analytical, language, supervisory, and managerial), experience, and training required to perform our mission. With an expanding mission and a growing workforce there will be an increase in workforce-related challenges that need addressing. We must be able to attract strong candidates to fill Special Agent, Language Analyst, Intelligence Analyst, and Professional Support positions, bring these candidates on-board in a timely manner, and provide them with professional training.

The fiscal year 2009 budget includes 18 positions and $43.6 million to address these workforce requirements, including resources for National Security Branch Training, which will enable the FBI to expand the number of Domestic Human Intelligence (HUMINT) Collection Courses, develop and deliver a HUMINT training program that specifically addresses terrorist organizations, and provide training to Cyber investigators on national security-related computer intrusions; the Foreign

Language Proficiency Pay Program (FLP3), which will dramatically increase the FBI's recruitment and retention of highly qualified language professionals, especially those with expertise in Arabic, Urdu, and Chinese; pay modernization efforts, which will align FBI efforts more closely to the pay modernization plans established by the Office of the Director of National Intelligence (ODNI); and the FBI's Personnel Security Program, which will expedite the investigation, adjudication, and polygraph examination for prospective FBI employees and contractors.

As a leader in the Intelligence and Law Enforcement Communities, the FBI must be equipped to hire, train, and pay the specialized cadre of personnel that the FBI employs.

INFRASTRUCTURE

Critical to the success of the FBI's mission are safe and appropriate work environments and state-of-the-art information technology (IT). Over the years, the FBI has made substantial investments to upgrade its information technology architecture, including the purchase of computer workstations and software for employees and networks for connectivity both within the FBI and with external partners. Additionally, the FBI is moving forward to invest in upgrading field and training facilities to ensure secure and adequate workspace. However, the FBI still faces gaps in its capacity to support all of its critical projects and initiatives. Continued investments are needed to close the gaps to ensure the availability of critical FBI IT systems, applications, facilities, and data in the event of a disaster. The fiscal year 2009 budget includes $38.2 million to continue to develop facilities and IT support and services.

The FBI prides itself on its ability to share information in a timely manner. The fiscal year 2009 budget includes resources to enhance and extend the unclassified network (UNet) and integrate it with the Law Enforcement Online, as well as upgrade our IT disaster recovery locations. This funding will enable the FBI to increase information sharing capabilities within the Bureau as well as with outside entities, like the Intelligence Community. Additionally, this funding will support the creation of backup IT capabilities to be available in the event of a catastrophic disaster.

The FBI's budget also includes upgrades to our field facility infrastructure, expansion of the FBI Academy, and security for field office expansion. The FBI is in dire need of adequate space for FBI personnel and the large number of FBI-led, multiagency task forces such as Joint Terrorism Task Forces, Safe Streets Task Forces, Health Care Fraud Task Forces, and Field Intelligence Groups. These resources will support the FBI's facility requirements to ensure adequate, safe, and secure working environments. The budget also includes resources to consolidate FBI records at the Central Records Complex (CRC). The CRC will enable us to efficiently locate and access all of our records quickly, thus allowing us to more effectively process name checks.

STRATEGIC EXECUTION TEAM: IMPROVEMENT OF FBI'S INTELLIGENCE PROGRAM

Before closing, I would like to tell the Committee about our Strategic Execution Team (SET) and describe some of the changes that team has brought about toward improving FBI intelligence activities. This team exemplifies the commitment of the men and women of the FBI to successfully integrating our intelligence and law enforcement activities.

We recently completed a comprehensive self-assessment of our intelligence program and concluded that we need to move further and faster to enhance our capabilities. In consultation with the President's Intelligence Advisory Board, we began working to examine how we can accelerate our progress and we have identified a number of areas where we are focusing our efforts.

We have created a SET of field and headquarters personnel to help drive implementation of needed changes across the organization. The SET team includes approximately 90 agents, analysts, and other professional staff, from FBI Headquarters and roughly 27 field offices. This team has focused its initial efforts on three critical areas: intelligence operations, human capital, and program management.

With the guidance of the SET, we are restructuring our Field Intelligence Groups (FIGs), so they can better coordinate with each other, with street agents, and with analysts and agents at FBI Headquarters. Drawing from the best practices we identified, we have developed a single model under which all FIGs will function, to increase collaboration between intelligence and operation, and to provide accountability for intelligence gathering, analysis, use, and production. The model can be adjusted to the size and complexity of small, medium, and large field offices.

To enhance our collection capabilities, we are taking a two-pronged approach. First, we must ensure we are taking full advantage of our current collection capabilities in terms of what we know through our case work, and what we could know if we asked our existing source base the right questions. Tactical analysts will work with investigative squads, in all program areas, to ensure that collection plans are executed, and to help squads identify opportunities to address the intelligence requirements of the office.

Second, to enhance the picture of a threat developed through our investigations, the FIG will include a team of specially trained agents who will collect intelligence to meet requirements, conduct liaison with local partners, and focus on source development.

In terms of human capital, we have refined the Intelligence Analyst career path, including training, experiences, and roles that are required to develop a cadre of well-rounded and highly proficient analysts. We have also established core intelligence tasks for all Special Agents, further defined the Special Agent intelligence career path, and tailored individual development plans for all agents. Finally, we have developed a university recruiting program to hire additional intelligence analysts with targeted skill sets. We received hundreds of applications as a result of this effort.

We in the FBI are mandated by the President, Congress, the Attorney General, and the Director of National Intelligence to protect national security. For nearly 100 years, the FBI has used intelligence to solve cases; today, however, we rely on our agents and analysts working hand-in-hand with colleagues across the country and around the world to collect intelligence on multiple, inter-related issues. With the authority and guidance provided by the Intelligence

Reform and Terrorism Prevention Act and other directives and recommendations, the FBI has implemented significant changes to enhance our ability to counter the most critical threats to our security.

Today, we are building on our legacy and our capabilities as we focus on our top priority: preventing another terrorist attack. It is indeed a time of change in the FBI, but our values can never change. We must continue to protect the security of our nation while upholding the civil rights guaranteed by the Constitution to every United States citizen.

When I speak to Special Agents upon their graduation from the FBI Academy, I remind each one that it is not enough to prevent foreign countries from stealing our secrets—we must prevent that from happening while still upholding the rule of law. It is not enough to stop the terrorist—we must stop him while maintaining civil liberties. It is not enough to catch the criminal—we must catch him while respecting his civil rights. The rule of law, civil liberties, and civil rights—these are not our burdens; they are what make us better.

CONCLUSION

Madam Chairwoman, I would like to conclude by thanking you and this Committee for your service and your support. Many of the accomplishments we have realized during the past 7 years are in part due to your efforts and support through annual and supplemental appropriations. From addressing the growing gang problem to creating additional Legal Attaché offices around the world, and, most importantly, to protecting the American people from terrorist attack, you and the Committee have supported our efforts.

On behalf of the men and women of the FBI, I look forward to working with you in the years to come as we continue to develop the capabilities we need to defeat the threats of the future.

MORTGAGE FRAUD

Senator MIKULSKI. Thank you very much, Director Mueller. We have about 4 minutes left in the vote. Senator Shelby and I are going to dash to the vote. This subcommittee will stand in recess. The first one back will reopen the hearing.

This subcommittee will reconvene for the purposes of asking questions.

Senator Shelby, I am going to take about 5 minutes, turn to you and then we'll come back for a second round. I know your ranking membership on the Banking Committee is taking a lot of your time.

So, my first question is going to deal with mortgage fraud and the whole issue of predatory lending. As we look at what are the resources that the FBI needs, we know we've talked about the national security issues related to counterintelligence, counterterrorism, and the cyber initiative, I'll come back to that, but you've also gotten a surge responsibility related to mortgage fraud and the FBI mortgage load, the FBI mortgage fraud workload is increasing dramatically.

The suspicious activity reports of mortgage fraud is up 300 percent. We know that your workload has increased and it requires a very sophisticated—all of your agents are sophisticated, but this goes to forensic accounting and a whole lot of other very technical fields.

Could you share with us what is it that you need in order to continue to do the type of investigations America needs you to do? We know that the workload has increased, that you have 138 agents dedicated to investigating mortgage fraud.

How many more agents do you need? Will you be able to add them? What is it that you need in the budget to really be able to meet this kind of surge demand?

Mr. MUELLER. Madam Chairwoman, as you point out, we've had a tremendous surge in cases related to the subprime mortgage debacle.

We currently have almost 1,300 cases that have grown exponentially over the last several years and we expect them to grow even further. We also, as I pointed out in my statement, have 19 cases involving institutions themselves, where mortgage fraud may have contributed to misstatements and the like as you have pointed out, each of these cases, particularly the larger ones, require forensic analysis.

We currently have a total of 150 agents who are working these cases. The vast majority of agents are working cases on brokers, buyers, lenders and the like and other agents that are working on the corporation misstatements. We also are participating in 33 task forces around the country.

What we have found is that, over the last couple of years, we have had to take agents from other areas, whether it be healthcare fraud or other financial fraud cases, and put them on this area.

When the budget was put together, the subprime mortgage cases had not grown to the point where we could anticipate the extent of the surge. Even at this point, I'm not certain at this point we can see the extent of the surge.

What I'd like to do is be able to get back to you in terms of how many additional resources we need to address this.

[The information follows:]

MORTGAGE CASE RESOURCES

The FBI will work with the Department of Justice, the Office of Management and Budget, and Congress to convey the full resource requirements required to address Mortgage Fraud investigations.

Mr. MUELLER. One other point that you have raised in the past, as I recall, and that is the possibility of seeing an upsurge in cases relating to reverse mortgages. That is something that we are seeing and may well need additional resources to address.

It is still too early to discern the full contours of the extent of the number of cases that we'll have to address, but we'll keep in touch with the subcommittee on that.

Senator MIKULSKI. Well, we want very much to work with you because we feel that the enforcement of existing laws and holding people accountable through rigorous and fair investigations are what is very much needed.

We need to not only protect the American people with their foreclosures but we have to make sure that we maintain confidence in the financial institutions. If we have a collapse of confidence, this could have even far more draconian effects on our economy.

So, we'd like to hear back from you about what do you need to do the job that you're required and we request you to do. What we're looking for is full budgeting, not only the number of agents but the other kind of technical assistants you might need from others that are agents, as well as clerical help, et. cetera. This is enormously significant, important and timely. So, we look forward to hearing from you on that.

STATE AND LOCAL VIOLENT CRIME

The other area that I want to move on is the whole issue of State and—excuse me. State and local violent crime. State and local law enforcement strongly support the joint Federal-State task forces. We hear that everywhere, but we're concerned that you've not had the resources to expand the program.

In the President's request to us, there's no additional funding to expand these excellent task forces where we maximize the resources of the Federal Government and utilize the resources of State and local.

You know that crime is up, robbery, aggravated assault, murder. So, our question to you is with the violent crimes on the rise, what is it that you think—what would be the desirable number you would like to expand the joint task forces and what would it take to do that?

Mr. MUELLER. Well, as I think I pointed out, we have 182 violent gang crime task forces now, we continue to expand. We have 16 safe trails task forces, 23 child prostitution task forces, and 9 major theft task forces around the country.

Senator MIKULSKI. Say that last one again.

Mr. MUELLER. We have 23 child prostitution task forces and nine major theft task forces around the country today.

Senator MIKULSKI. Child prostitution?

Mr. MUELLER. Child prostitution task forces, yes. Children that are——

Senator MIKULSKI. Lured into this?

Mr. MUELLER [continuing]. Lured into child prostitution rings, yes, around the country.

Senator MIKULSKI. God.

Mr. MUELLER. Whether it be violent crime or areas such as this, it is our belief we have approximately 12,500 agents at this juncture, and we leverage our resources by task forces with our State, local, and other Federal counterparts.

Regardless of the vehicle on the Federal side, I do believe that it's important that the State and local police departments, and sheriffs' office's are encouraged to participate in these task forces. Regardless of the vehicle, to the extent that funds are made available and tied into participation on task forces, it maximizes our ability and the ability of State and local law enforcement to address a number of these issues that you have raised.

Senator MIKULSKI. Well, I'm going to come back to crimes against children. I'm going to turn now, my time is up, to Senator Shelby. I was a child abuse social worker. You know, all crimes are terrible but crimes against children are heinous. So, we'll come back, and we know the FBI's been just great on this, on the Internet predator and so it's a tough duty.

Senator Shelby.

RENDER SAFE MISSION

Senator SHELBY. Thank you, Madam Chairwoman. Mr. Director, I alluded in my opening statement to the $38 million provided in the 2008 war supplemental with the OMB program, associate directors for justice, which it's my understanding they have refused to release.

When these—when requested, these funds were critical, we were told, for the Bureau to perform its WMD and render safe missions. These funds have been available for obligation for approximately 1 year and will expire, as I mentioned, in 6 months.

Two questions. Are these funds critical to successfully carry out your mission?

Mr. MUELLER. They are, Senator, and let me explain a little bit about the mission to the extent that I can do so without going into classified matters.

That mission requires us to put together WMD response teams, which include persons with the skills to be able to render safe various WMD devices. However, it also requires supporting command, control, communications, logistics, scientific and hazardous materials support elements as well, and coupled with that is a necessity for mobility of getting those resources to the site of the device.

We have had tremendous support in long distance and getting those resources necessary for the program. We have been working with OMB to get the support for the release of that 38,000 that you mentioned.

Senator SHELBY. $38 million.

Mr. MUELLER. $38 million. Maybe it's a wee bit more than what I said. The $38 million that you mentioned, and it is tremendously important because we do have the responsibility for the National Capital Region, as well as, responsibility across the country and consequently that's important to us.

Senator SHELBY. Why is it—what's the hold-up with OMB?

Mr. MUELLER. Well, we're in discussions with representatives of OMB and our hope is that these funds will be released relatively shortly.

Senator SHELBY. Okay.

Senator MIKULSKI. Mr. Chairman, may I interrupt——

Senator SHELBY. Yes, you may.

Senator MIKULSKI [continuing]. Without in any way taking from your time?

I am very disappointed in this, and I think my colleague and I would like to—we just had kind of a dust-up with OMB over law enforcement, at least I had a dust-up with them, and they've got to release the money and we would again work on a bipartisan basis to write a letter to him or to ask for the release of the money.

It was appropriated in the supplemental. You need the money and this is a pretty important mission, so much so that we can't even talk about it except in a classified way. It doesn't get any bigger deal than that.

So, Senator Shelby, why don't, after the hearing, you and I put our heads together and see if we can't spring this?

Senator SHELBY. We want to work with the Director on this.

Senator MIKULSKI. Yes, absolutely.

Mr. MUELLER. Let me just say that OMB has been supportive of this, in supporting our mission. This is the one outstanding issue there is, but they have been tremendously supportive of our mission.

Senator SHELBY. Do you think you'll resolve this on your own?

Mr. MUELLER. It is my hope that we can. As I say, we've had discussions with OMB recently as well.

Senator SHELBY. Okay.

Senator MIKULSKI. Well, we do the supplemental, the new supplemental, the new new new supplemental, and if it hasn't been—we've got to get that done, but we're going to be holding—we're going to be moving the supplemental in 2 weeks to the floor. So, let's—if we can't get it done in 2 weeks, we have to go to plan B. Okay?

Mr. MUELLER. Okay. Yes, ma'am.

FUNDING GAP

Senator SHELBY. Thank you, Madam Chairwoman. Budget for shortfalls. The budget the administration has submitted on behalf of the FBI proposes an additional $450 million to partially fund the implementation of the Bureau's intelligence mission and national security initiatives.

This budget request fails to fix a $56 million gap in your base funding. During the 2008 budget process, Chairwoman Mikulski and I worked to provide the resources that you needed, Mr. Director, to close a $139 million shortfall in your budget. We expected the administration to fix the problem it created and we're disappointed that once again we're facing the substantial base shortfall in the FBI.

With that in mind, what would be the impact on the FBI if there was a long-term continuing resolution for the first 90 to 180 days of 2009? I know I don't want to contemplate that. It would be an impact.

Mr. MUELLER. I want to thank the subcommittee for its efforts last year on the shortfall. Most of it was taken care of. To the extent it was not, it did affect our ability to fully fund programs, such as the deoxyribonucleic acid (DNA), cyber, surveillances and the like.

If there is a continuing resolution and I would say 90 days, it would probably have an impact or shortfall of approximately $30 million and that would result in a—could conceivably result in a hiring freeze and it would require across-the-board reductions in all of our programs, and I do point out that from experience. I know that a number of the national security-related budgets were passed earlier last year. These include the Department of Homeland Security (DHS), quite obviously the military, as well as, the intelligence budgets. Now that we are a partner in the intelligence community, I would hope that the subcommittee would look at the impact of continuing resolutions. I recognize perhaps that we do need a budget as soon as possible, if we are to maintain and increase the programs that we have been discussing here.

Senator SHELBY. So basically, it could affect you carrying out your missions?

Mr. MUELLER. Yes. Yes, sir.

SHIFT OF CRIMINAL AGENTS TO COUNTERTERRORISM

Senator SHELBY. And the subject of realignment of FBI, I guess, from criminal cases to terrorism, since 9/11, the FBI has shifted more than 2,000 agents from criminal investigations into terrorism. I agree that terrorism is the highest priority and represents the gravest threat to national security.

I think it's also shortsighted for us to continue to cannibalize the criminal side of the FBI when we should be requesting more agents and resources to provide the FBI with the means to fight the threat of terrorism, as well as, help State and local law enforcement fight the rising crime epidemic gripping our communities.

Mr. Director, are you satisfied that the FBI is reaching the right balance in resources between its national security and the criminal investigation missions or could you do more with more resources?

Mr. MUELLER. Well, the answer to the last part of that question is yes, we could do more with the resources.

The fact of the matter is——

Senator SHELBY. Without the resources, you've got one hand tied behind you.

Mr. MUELLER. We do, and the fact of the matter is, you've used the word "cannibalize," and I think that is appropriate, we've taken resources from the criminal side of the house to meet our national security responsibilities and to build up the intelligence side of the house which was absolutely essential in the wake of September 11th.

We increasingly find that State and local law enforcement want us back working on task forces with them. Not across the country generally but in certain places across the country warrants a backfill of those agents who we've had to take from the criminal side of the house and put on the national security side of the house.

Likewise, with the subprime mortgage crisis, the Innocent Images task forces, the growth of the Internet and the cyber challenges present unique threats that we now face. On the criminal side of the house, I do believe it's important to recognize that we have certain particular skills that could augment State and local law enforcement. Furthermore, we should consider building up those agents and the other support functions that we've had to push over to the national security side since September 11th.

TERRORIST EXPLOSIVE DEVICE ANALYTICAL CENTER

Senator SHELBY. I want to get into the subject of the FBI labs. The Terrorist Explosive Device Analytical Center, TEDAC we call it, accounted for almost two-thirds of the evidence submitted to the FBI lab for processing in 2007. This increased workload has affected the lab's ability to assist other agencies, including State and local law enforcement.

The budget, this budget contains a request to reduce the backlog of the Federal Convicted Offender Program, but there appears to be minimal new resources to address the workload generated by TEDAC.

Is the case turnaround time, which I'm told, Mr. Director, is currently averaging around 200 days, for processing evidence in the FBI lab an impediment to cases and prosecutions?

Mr. MUELLER. Yes.

Senator SHELBY. If not, could it be?

Mr. MUELLER. Yes, it is. We have two challenges here. One is IEDs, as you pointed out, and to bring in our expertise, Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF's) expertise to IEDs, whether they be in Iraq and Afghanistan or elsewhere around the world, and not only identifying——

Senator SHELBY. Sometimes here, although——

Mr. MUELLER. Or perhaps here——

Senator SHELBY [continuing]. I'm not suggesting——

Mr. MUELLER [continuing]. Ultimately.

Senator SHELBY [continuing]. That.

Mr. MUELLER. But identifying the engineer, the persons responsible for the various mechanisms that are used, but also utilizing DNA and fingerprints, contributing to intelligence has been tremendously effective for the military.

On the DNA side of the house, that has meant a delay and we've also had additional responsibilities on the DNA side of the house when broader categories of individuals whose specimens need to go into our databases and so on both fronts, we're facing a shortfall and have requested funds to address that shortfall.

Senator SHELBY. So TEDAC basically is not sufficient a resource to do its job, not the job you would want it to do?

Mr. MUELLER. Well, again we've had to take resources from the criminal cases to address the national security which in this case is TEDAC as opposed to the services that have traditionally provided, not only to our investigators on the criminal side but also State and local investigators, and we have had to, to a certain extent, dry up the support we give the State and local laboratories traditionally in order to meet the national security demands that have been placed upon us.

Senator SHELBY. Senator Mikulski, I hope that we'll look at this hard and fast as we get into this to make sure that we fund it properly.

Senator MIKULSKI. Absolutely. I find it—I find this very troubling.

FBI ACADEMY

Senator SHELBY. Quantico, very important, the FBI Academy in Quantico. Not only trains all FBI special agents but also trains intelligence analysts, as well as, State, local and international law enforcement National Academy students.

Some of us are concerned that your training infrastructure needs are not being met here. It's a question of resources. The FBI Academy has expanded over the years and still struggles to satisfy all of the requirements of students and faculty to ensure that your agents, analysts and the National Academy students have the finest training capability available.

In 2009, the FBI requested $9.8 million for FBI Academy instruction. Does this funding satisfy all your needs or is this just meeting the minimum?

Mr. MUELLER. Our buildings we have at Quantico for agents and the like are 40 years old at this juncture. We have gotten funds in past years to upgrade them, but it is certainly not enough.

We have additional demands, as I indicated in my remarks, and we've doubled the number of investigative or intelligence analysts. They need to be trained and that has put a demand on the facilities at the FBI Academy.

One of the crown jewels of the Bureau is the National Academy and the training that is done for not only State and local law enforcement, but also international law enforcement. There have been demands to expand our classes, both for State and local, as well as, international, and so we have additional demands, as well as, a relatively old structure that we would like to expand our capabilities of the FBI Academy to address these demands but also we have to continue to upgrade our facilities to meet our training needs.

An example is as we get enhanced technology in the Bureau, the buildings are 40 years old and do not have the wiring that enables us to put in the classified networks that we need to provide the instruction for both our analysts, as well as, our agents.

CYBER SECURITY INITIATIVE

Senator SHELBY. The national cyber security initiative. I don't know what you can talk about here. We might need a classified briefing, Mr. Director, but to talk about the role of the national cyber security initiative, why it's important and also the resources. Is that more a place for a classified hearing than this?

Mr. MUELLER. I think I can talk generally about this initiative and then if it would be helpful, we can certainly go to a different session.

The challenge of protecting the variety of networks, Government and private, is going to be increased over the years. We have the example that you mentioned, Madam Chairwoman in Estonia recently where it was subject to a wave of cyber attacks which could happen not only to Estonia but around the world.

We have the responsibility to prevent and investigate the attacks within the United States. Most often, attacks do not occur within our borders but from outside our borders, which requires the integration of our experts with experts from other countries and the use of our legal attachés.

In the last year or so, we have joined with our counterparts at the National Security Administration (NSA), Department of Defense (DOD), and the Department of Homeland Security to put together what is called the national cyber investigative joint task force which has us working in an integrated fashion to address these threats.

We need to build on our capabilities, as well as, the capabilities of the Government overall. We have requested 211 positions and $39 million in this budget to address the challenges we see from the threat of cyber attacks.

Senator SHELBY. Thank you. Thank you, Madam Chairwoman.

Senator MIKULSKI. Senator Shelby, we are going to have a classified conversation about this rather than a formal hearing in which you and I and others can participate.

I discussed this with Director Mueller yesterday. There are things that really are said elsewhere and last week, Senator Stevens presided over a DOD hearing on the DOD aspects. This is a pretty big deal.

Interestingly enough, Business Week this week has a whole—that's their front page about the possible attacks on corporate networks which, of course, have significant effect, financial networks, et cetera.

So, we're going to hold a conversation with you to make sure that we're on the right track in terms of technology, workforce, while the administration works out a complicated governance approach.

Also, if you would like to have an additional classified conversation on the Render Safe Program, we would want to cooperate with you on arranging it. It's really needed.

Senator Stevens, we're happy to see you today.

Senator STEVENS. Thank you. I've got other hearings going on. My neighbor is here, but I wondered about the concept of the arrangements the FBI has with the Department of Homeland Security.

It seems to me we're spreading this whole thing across the Government now. We had the hearing on DOD, as you said. We're having one on Homeland Security.

Are you sharing across the board now in terms of these operations? You relate to a certain extent with Homeland Security, right?

Mr. MUELLER. Yes, sir. Whether it be the cyber initiative where we have roles, we work with Department of Homeland Security on the national cyber investigative joint task force that I just mentioned, but beyond that, we are working with Homeland Security fusion centers that have been established States around the country.

We work very closely with them in terms of protecting our borders against terrorists. Are, I would say, across the board integrated with the Department of Homeland Security across the country.

The last point I would mention is on joint terrorism task forces. We have over 100 joint terrorism task forces around the country now and we have members from various elements of the Department of Homeland Security that participate in task forces.

Senator STEVENS. Senator Mikulski mentioned, as a matter of fact, that was a classified issue. We can't talk about numbers, but I can tell you I was shocked with the numbers we saw, and I think you were, too, weren't you, Madam Chairman, in terms of the whole question of preparing to deal with the defense against cyber attacks.

We've got a massive amount in the Defense Appropriations Subcommittee. We've got some in Homeland Security. Do you have part of that cyber attack in this budget?

Mr. MUELLER. We have a piece of it, yes, and——

Senator STEVENS. We need to know how it all fits together and how much it really is, if it's stretched so far, is what I'm asking.

Mr. MUELLER. We have a piece of it and we have worked with others in the community to set out a 5-year plan for what we need to build to address this particular threat.

Senator STEVENS. Would it be proper to suggest that maybe one of these days we should have a classified hearing with all three there——

Senator MIKULSKI. You know,——

Senator STEVENS [continuing]. To discuss this in depth?

Senator MIKULSKI [continuing]. I absolutely do. We encouraged Director McConnell, the head of the DNI, to meet separately with the appropriators involved with this.

For those of us on the Intel Committee, we got an overall picture and we were concerned exactly what you're raising, Senator. How does it all fit together? How do we sequence what we need to fund because you don't fund everything at the same time, and then the overall question, sir, about who is in charge?

But I think, why don't we cooperate with Senator Byrd and Senator Inouye and the ranking members and let's have a conversation about this?

Senator STEVENS. I hope you understand what we're saying. We—I believe we want redundancy and I do believe we want everyone involved to use their expertise, but the problem is, is do we have an overlapping of funding that is warranted?

I tell you, if you saw the figures we saw projected out for the next 5 years, it was a substantial increase that we're looking at, and I don't know, we haven't got yours for that 5-year period, but I do hope we can find some way to be assured that the money follows the assignment responsibility that we don't have a duplication of funding occurring without intention to do so and just not really realizing how much jointness there is in this operation.

Mr. MUELLER. I think——

Senator STEVENS. I'm talking about cyber now.

Mr. MUELLER. Right. We're talking about cyber. The Director of the DNI, Admiral McConnell, would be very willing to sit down with Mike Chertoff, myself and others to explain and lay out exactly how the pieces come together.

I do understand substantial funding——

Senator MIKULSKI. Do you want to do that?

Senator STEVENS. Yes. Thank you very much.

Mr. MUELLER. Thank you.

Senator STEVENS. That's my answer.

SENTINEL

Senator MIKULSKI. Thank you very much, Senator Stevens.

We will pick up on this because it's not only the money but it also goes to what needs to be done when, by whom, and who's in charge, number 1, and number 2, who will provide the technological assurances that we don't—that it's a boon, not a boondoggle. So, we don't need to go into that here.

I want to raise, though, something that was a boondoggle that we turned into a boon which goes to our favorite program of the Sentinel. If I could, I'd like to focus on some of the oversight issues.

Some years ago, this subcommittee was faced, as you were, where the fact that the attempt to develop an electronic case management system called Trilogy became deeply troubled and dysfunctional. We then moved to a new effort called the Sentinel.

This is a very important tool because right after 9/11, the case management issues were not only what did we know and when did we know it but did we know how to connect the dots and that's why we looked for a new case management system. It wasn't only to be cool and groovy with electronics and be paperless, it was to have a better chase.

So, having said that, while we're here today to stand sentry on the Sentinel. So, could you tell us where we are and how is the progress coming?

Mr. MUELLER. As you point out, in the wake of September 11th, we had a contract to complete that had been started before September 11th called Trilogy. It was called Trilogy because there were three legs to the stool. Two of them were successful; that is, the networks themselves and other aspects of putting in place the infrastructure. What was not successful was the third leg of the stool and that was the software.

We had to make a very difficult decision and say we could not go forward on that and, as you point out, it was replaced by Sentinel, which is contracted by Lockheed Martin, is a forward-based system.

Phase 1 was successfully deployed in June 2007 and with the lessons from the deployment of phase 1, we have gone to what is called an incremental development strategy for phases 2 through 4.

We have had 12 builds since June on phase 1 which is part of that incremental development strategy, and phase 2 is on schedule and within planned costs.

As an aside, I would say that the FBI and Lockheed Martin deployed phase 1 on budget and a few weeks late, but phase 2 is on schedule and currently within planned costs. Indeed, on April 4, we delivered the Enterprise Portal, which is a key component of the Sentinel project.

I meet with CEO Bob Stevens of Lockheed Martin quarterly to make certain that this program is on track. Others who are much more involved in the program on a daily basis meet with their counterparts at Lockheed Martin regularly to make certain it is on track. I don't think there's another program that has more oversight than Sentinel from the inspector general, the Government Accountability Office (GAO), and Congress.

I'm confident at this juncture that we are proceeding as we should be on this project, but I welcome the scrutiny and am happy to brief anyone on where we are to make certain that you also share that confidence that I have that we are on track.

Senator MIKULSKI. Well, we understand from GAO that they say that Sentinel is on track and also on budget. So, it's on track in terms of its technology development, but we're also concerned that some of the most difficult parts lie ahead which is the conversion of case files from the old database to Sentinel.

We just encourage you to really stand your continued vigilance on this because I think now we're also moving to some of the really tough parts and those that will determine the efficacy of its operation.

Mr. MUELLER. May I add one comment on that,——

Senator MIKULSKI. Sure.

Mr. MUELLER [continuing]. Madam Chairwoman. We have been focused and rightfully so on Trilogy and also Sentinel, but since September 11th, we recognize the necessity of putting information relating to counterterrorism into a searchable database. In the wake of September 11th, we developed what was called the investigative data warehouse for our counterterrorism information. This database has been built up over time, and is a different database than that which had supported our case structure before. It is the latest in terms of technology and gives us the capability to connect the dots in the counterterrorism arena, similar to what we're moving to overall with Sentinel.

So, we have not stood by waiting for the development of Sentinel but have put into place the mechanism a number of years ago to meet that shortfall.

One last point on information technology, if I could. We have in the last year put out approximately 20,000 Blackberries to our agents, analysts, and others that enable us to be on the cutting edge of communication and capability to accomplish our mission.

In the next year or so, we will be putting in almost 25,000 UNeT computers, which is the Internet. As you know, we operate at the secret level but everybody should have Internet capability on their desk as opposed to having to go down to some other work station. We have already put in 12,000 those UNeT units. In 2008, we're going to put in another 14,000. By the end of 2009, everybody will have UNeT capability.

Senator MIKULSKI. Well, I'm glad you brought all of that up. You know, when we think of the FBI, we think of agents, then we think of analysts, then we think of linguists. We don't think of the incredible support that we need to provide to our very talented and dedicated people who, I'll say, are in the street, whether that's Baghdad or Baltimore or whatever, but you need to have the kind of support staff, like I know you hired a chief information officer, and isn't that when we began to kind of right the ship on Sentinel and some others? Then that person needs to have the support.

So, when we look at your appropriations, it's not only, you know, how many agents and do they have the guns and all of that is important, but you also need to have these other highly technical people to make sure that our agents, analysts, et cetera, are right resourced, isn't this right?

Mr. MUELLER. Absolutely. Since September 11th, we have had to put in place a chief information officer office and bring on board the talent and the capabilities to do that. We needed an architecture that would span the Bureau as a whole. We needed to develop a Government structure so that you identify and prioritize the particular projects that you're going to undertake as an organization.

We've made substantial strides, but I will tell you we still have, we still have gaps that we need to fill in terms of providing the infrastructure, and the IT that the Bureau needs. We're working hard to fill those gaps, but I would be remiss if I thought that we were there. We've made a lot of strides but we've got a ways to go.

TERRORIST WATCH LIST

Senator MIKULSKI. Which takes me to—I've got about two more questions—the terrorist watch list. The inspector general has identified concerns about the terrorist watch list and going back then to those dark days after 9/11 and the 9/11 Commission, the Intel Committee's investigations, one of the things, issues that emerged was the efficacy of our watch lists, and according to the Department of Justice (DOJ) inspector general, he has identified serious flaws in the FBI terror watch list and also DOJ, Department of Justice, which means a real time lag in putting terrorists on the watch list and then also because of identical names or complexity, getting good people off of that watch list.

Could you tell us your response to the inspectors general flashing yellow lights on this?

Mr. MUELLER. Let me start by saying that I believe the watch list is a success story. I believe it was 12 agencies who had separate watch lists. Since 2003 we have pulled together those 12 agencies and established a watch list procedure. A nomination process for international nominees come from the National Counterterrorism Center and domestic nominees come from the FBI.

It has been successfully in operation, integrated with Border and Customs individuals, the State Department, as well as State and local law enforcement.

The inspector general report did point out deficiencies in two areas and I will just single out those two areas. In the nomination process, the inspector general indicated that the FBI had established appropriate procedures for nominating, appropriate criteria for nominations, and appropriate quality controls.

The inspector general did point out that we were not updating our watch list entries as fast as we should and there were field offices that had submitted incomplete and/or inaccurate information. The inspector general looked at a number of organizations, as well as ours, and pointed out those deficiencies.

We have put into place software fixes and additional training to address these concerns. Of the 18 recommendations that the inspector general had, the FBI has closed 4 and we are waiting for another 12 to get approved from the inspector general.

One last point I'd make on the other aspect that you mentioned, the redress issues relating to a watch list. Recommendation was made that we put together a multiagency working group to address that. In September 2007, put together and had signed off by each of the contributing agencies an memorandum of understanding (MOU) that would establish and did establish a redress officer in every one of the agencies and a unit in every one of the agencies to address that.

There is still a backlog, but we have in place the mechanism that we need in my mind in each of the agencies to assure swifter redress so those persons who should not be on the watch list are taken off the watch list.

As I said, of the 18 recommendations that the inspector general has made, 16 of those are on the verge of being completed and there are 2 that we're still working on.

FIGHTING CRIMES AGAINST CHILDREN

Senator MIKULSKI. Well, thank you very much. I think with that, it gives us the assurance that, number 1, you take the inspector general concerns seriously and as we've talked about, both at this hearing and also in other conversations with you, that those issues that the inspector general did raise, that you, through your team, have addressed them. So, we do appreciate that.

I just have one general area I'd like to come back to. You know, the crimes against children. It really took my breath away to hear about something called a joint task force on child prostitution, and I know Senator Shelby has just been a fantastic colleague and ally on issues related to trafficking, the child predator thing even in other parts of this appropriation, implementation of the Adam Walsh bill.

We know that the FBI was given some time ago, even at the dawn of the Internet, the responsibility for dealing with child predators on the Internet.

Could you just tell us what basically are you—are the programs you're responsible for the protection of children and do you feel that you need more support in this? Because I tell you, it just—you know, it seems that there's no end to how vile the world can be.

Mr. MUELLER. Well, this is a daunting problem. We could probably take all of our agents and still have work to do in terms of addressing the exploitation of children in a variety of horrific ways.

I mentioned child prostitution, the task forces that we have addressing that. Human trafficking of persons, often children, is one aspect of that and you are knowledgeable about the FBI's Innocent Images Program which is where much of the work is initiated, particularly the international work is accomplished out of the task force up in Maryland.

We currently have almost 270 agents who are working on Innocent Images cases. We have a total of 5,300 Innocent Images cases which are child pornography, the child predators on the Internet. We have on the international task force that we established in 2004, we have worked with 47 separate investigators from 21 different countries to address child pornography and child predators on the Internet.

Senator MIKULSKI. Do they come to the Calverton facility for training?

Mr. MUELLER. Yes, they come to the Calverton facility and work on a task force shoulder to shoulder with the FBI.

Senator MIKULSKI. Do they get training there, too?

Mr. MUELLER. Trained, and as we work together, we train together, then we work cases together. We recently had a case of a group of child predators on the Internet. We arrested persons in Australia, the United Kingdom, the United States, and other European countries. They had believed that they were free from the scrutiny of law enforcement by encrypting their files. They had something like 15,000 child pornographic files that had been encrypted. This case and it was emblematic of the work that we need to do internationally with our counterparts to address problems such as this.

So internationally and domestically, we have put what resources we can to address a problem that is growing.

Senator MIKULSKI. Well, we want to do all we can for you to be supported not only at the Calverton effort but in these task forces. You know, if you say to the American people, the taxpayer, I mean, they would want us to make this a priority.

So, we have other questions, but we will submit them for the record.

Senator Shelby, do you have any others?

Senator SHELBY. I have no further questions. I'm just glad to hear from the Director.

Senator MIKULSKI. Yes, we're glad to hear from you, Director. We thank you for your candor and for your forthcoming in answering our questions, and we thank you and look forward to working with you as we put together both this 2009 appropriation as well as the supplemental because some of the issues will be addressed there.

ADDITIONAL COMMITTEE QUESTIONS

If there are no further questions, the Senators may submit additional questions, we ask for the FBI to respond within 30 days.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

BULLET LEAD

Question. More than four months ago, in a letter I sent to you that remains unanswered, I expressed my concerns that flawed bullet lead analysis done by the FBI for many years may have led to wrongful convictions. The National Academy of Sciences issued a report in 2005 discrediting bullet lead analysis, and the FBI stopped conducting bullet lead testing that same year. Over the last two years, however, the Justice Department has not taken steps to find or correct the cases where it was misused. As a former judge, I am sure you share my fear that this faulty forensic evidence may have been introduced in the estimated 2,500 cases where it was used. In my letter in November, I asked you to provide the Judiciary Committee with the list of cases where FBI bullet lead analysis was used, and to advise the Committee what steps you've taken to correct any unjust convictions resulting from bullet lead analysis.

Please state whether you have taken any action in response to my letter and explain your response.

Answer. As is discussed in more detail in the response to your November 2007 letter to the Attorney General, in 2005 the FBI sent to the National District Attorney's Association, the National Association of Criminal Defense Lawyers, the Innocence Project, and approximately 300 agencies letters outlining the FBI's decision to discontinue these examinations. The letters were sent so the recipients could take whatever steps they deemed appropriate to ensure no one was convicted based on inappropriate bullet lead testimony.

The FBI has committed to review all testimony provided by FBI Laboratory personnel in bullet lead cases that resulted in convictions in order to determine whether they testified within the scope of the science. Because the FBI performed bullet lead examinations for approximately 40 years, we cannot readily produce a list of all cases in which bullet lead analysis was performed. Because FBI laboratory personnel who conducted bullet lead examinations also conducted other types of forensic tests, the FBI has to examine all files worked by the universe of examiners who conducted bullet lead analysis. That process is ongoing. As of mid-May 2008, the FBI had identified approximately 1,270 cases (covering the period of 1975 to 2004) in which bullet lead analyses resulted in "positive" results that may possibly have formed the basis of trial testimony.

As the FBI Director has testified, the FBI will be working with the Innocence Project (IP) to ensure all appropriate parties are notified. Specifically, as the FBI identifies cases in which bullet lead analysis was performed, we will provide to the IP the FBI file number, the names of the contributor and prosecutor and their contact information, contributor and prosecutor file numbers, the FBI Laboratory examiner's name, the defendant's name, and the FBI's assessment of the appropriateness of the testimony provided. The FBI will also offer the IP copies of the transcripts received from prosecutors. By providing a dual notification track (that is, notification to both the prosecutor and the IP), the FBI is confident that appropriate notification will made to any defendant who was or may have been adversely affected by inappropriate FBI bullet lead testimony.

Question. When can I expect a response to my letter?

Answer. DOJ is completing its response to the letter and will be transmitted to your office presently.

Question. According to press accounts, the FBI agreed in November to provide a list of all cases where bullet lead analysis was used to the Innocence Project in order to begin working to identify cases where there may be problems.

Please state whether you support this collaborative effort and explain your response.

Answer. In an FBI press release on November 17, 2007, the FBI announced that it has undertaken an additional round of outreach, analysis, and review efforts concerning bullet lead analysis. This has included joint work with the Innocence Project, which has done legal research to identify criminal cases in which bullet lead analysis has been introduced at trial.

The Department of Justice, including the FBI, takes this issue very seriously, and we are developing procedures to ensure that appropriate disclosures are made to the relevant parties. Thereafter, the parties involved can make an assessment of the effect of any potentially erroneous testimony.

Question. Has anyone in the Justice Department taken any steps to support or oppose this agreement between the FBI and the Innocence Project?

Answer. Please see the response to subpart a, above.

UNANSWERED QUESTIONS

Question. As of May last year, the Justice Department reported to the Judiciary Committee that there was only one FBI agent assigned to Iraq and one assigned to Kuwait to investigate significant contracting fraud. Since May 2007, has the Justice Department assigned more full-time FBI agents or other federal investigators to work on contracting fraud cases in Iraq and Afghanistan? If not, why not?

Answer. The FBI currently has Special Agents (SAs) deployed in Iraq, Afghanistan, and Kuwait to provide full-time support to the International Contract Corruption Initiative, which addresses major fraud and corruption in the war and reconstruction efforts in Iraq and Afghanistan. These deployments are conducted in 120-day rotation cycles and SAs work jointly with the Defense Criminal Investigative Service, Army Criminal Investigation Command Major Procurement Fraud Unit, Special Inspector General for Iraq Reconstruction, and U.S. Agency for International Development, who also have agents deployed to address this crime problem. The FBI's overseas assignments in direct support of this multi-agency initiative are as follows: one SA in Kuwait; one Assistant Legal Attaché and two SAs in Iraq; and two SAs in Afghanistan.

Question. In November, I sent you a letter expressing my concerns that flawed bullet lead analysis done by the FBI for many years may have led to wrongful convictions. As you know, the National Academy of Sciences issued a report in 2005 discrediting bullet lead analysis, and the FBI stopped conducting bullet lead testing that same year. But over the last two years, the Justice Department has not taken steps to find or correct the cases where it was misused. As a former judge, I am sure you share my fear that this faulty forensic evidence may have been introduced in the estimated 2,500 cases where it was used. Two months ago, I asked you to provide the Judiciary Committee with the list of cases where FBI bullet lead analysis was used, and to advise the Committee what steps you've taken to correct any unjust convictions resulting from bullet lead analysis. When can I expect a response to my letter? Have you taken any action in response to my letter?

Answer. Please see the response to Question 1, above.

Question. According to press accounts, the FBI agreed in November to provide a list of where all bullet lead analysis was used to the Innocence Project in order to begin working to identify cases where there may be problems. Do you support this collaborative effort? Has anyone in the Justice Department taken any steps to support or oppose this agreement between the FBI and the Innocence Project?

Answer. Please see the response to Question 2, above.

QUESTION SUBMITTED BY SENATOR BYRON L. DORGAN

TRIBAL JUSTICE FUNDING

Question. The Justice Department dedicated 102 Federal Bureau of Investigations agents to investigate violent crimes in Indian country in 1998. Congress provided funding for an additional 30 agents in fiscal year 1999, and an additional 27 agents in fiscal year 2005. As a result of these appropriations, there should be 159 FBI agents dedicated to violent crime in Indian country. However, there are only 114 FBI agents dedicated to Indian country today. Can you please explain this discrepancy?

Answer. As of June 2008, there are 104 FBI Special Agents working on Indian Country (IC) matters. Of this total, 30 were appropriated in fiscal year 1997, 30 in fiscal year 1999, and 10 in fiscal year 2005 (the FBI's fiscal year 2005 appropriation included 27 positions, 10 of which were Special Agents). The remaining 34 Special Agents currently working IC matters have been assigned by their respective field offices to address specific IC issues.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

PAY AND BENEFITS OVERSEAS

Question. What efforts has the Department of Justice taken to ensure retention of its best and brightest, particularly in the enforcement agencies out in the field and those agents and employees working outside the United States?

Answer. While Department of Justice law enforcement officials working outside the United States may be eligible for certain additional pay or benefits based on the location, the retention incentives available to those employees are the same as the incentives available to those located in the United States.

The FBI continues to use the authorities it received in the 2005 Consolidated Appropriations Act, some of which expire at the end of 2009, to better compete with private industry and improve attrition rates. These authorities include recruitment, relocation, and retention incentives, student loan repayment, and the University Education Program. Recruitment bonuses allow the FBI to competitively recruit employees who possess special qualifications for hard-to-fill FBI positions, relocation bonuses increase the number of employees interested in hard-to-fill positions within the FBI by, in effect, reducing the employee's relocation costs, and retention allowances are used to retain current employees who possess high-level or unique qualifications or who fill critical FBI needs. Retention allowances may be provided on either an individual or group basis to help the FBI retain certain employees or categories of employees, such as intelligence analysts and police officers.

The FBI has also used education benefits to improve the quality and job satisfaction of our workforce. For example, in order to improve our recruitment and retention of Intelligence Analysts, the FBI repaid 359 student loans for these employees in fiscal year 2007. The FBI has also used the University Education Program to fund tuition expenses for current employees seeking to obtain certifications and academic degrees, approving payments for 679 participants in fiscal year 2008.

Question. Is danger pay provided to agents and DOJ employees actively working along the Southwest Border?

Answer. The FBI's Legal Attaché (Legat) office in Mexico maintains a presence in Mexico City, Guadalajara, and Monterrey, but does not maintain a permanent presence along the Southwest Border. Currently, neither FBI employees assigned to the Mexico City Legat nor those assigned in the United States near the Southwest Border are afforded danger pay. It is the FBI's understanding that DEA personnel working in Mexico have been eligible to receive a danger pay allowance of 15 percent of basic pay since approximately 1991. In April 2008 the FBI's Mexico City Legat asked FBI Headquarters to consider affording danger pay to all FBI personnel in Mexico based on the hostile environment in Mexico, including threats from organized crime fugitives, rebels, and terrorist groups, as well as street and residential crimes. This request is under review.

SUBCOMMITTEE RECESS

Senator MIKULSKI. This subcommittee stands in recess subject to the call of the Chair.

Mr. MUELLER. Thank you, Madam Chairwoman, Senator.

[Whereupon, at 3:22 p.m., Wednesday, April 16, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2009

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

[The following testimonies were received by the Subcommittee on Commerce, Justice, Science, and Related Agencies for inclusion in the record. The submitted materials relate to the fiscal year 2009 budget request for programs within the subcommittee's jurisdiction.]

DEPARTMENTAL WITNESSES

DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

PREPARED STATEMENT OF VICE ADMIRAL CONRAD LAUTENBACHER, JR. (U.S. NAVY, RET.), UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE AND ADMINISTRATOR

Madam Chairwoman and members of the Committee, before I begin my testimony I would like to thank you for your leadership and the generous support you have shown the National Oceanic and Atmospheric Administration (NOAA). Your continued support for our programs is appreciated as we work to improve our products and services for the American people. Thank you for the opportunity to testify on the President's fiscal year 2009 budget request for NOAA.

The fiscal year 2009 President's budget supports NOAA's priority to advance mission-critical services. The fiscal year 2009 request is $4.1 billion, which represents a $202 million or 5.2 percent increase over the fiscal year 2008 enacted level. This request includes the level of resources necessary to carry out NOAA's mission, which is to understand and predict changes in the Earth's environment, and conserve and manage coastal and marine resources to meet our nation's economic, social and environmental needs. At NOAA we work to protect the lives and livelihoods of Americans, and provide products and services that benefit the economy, environment, and public safety of the nation. Before I discuss the details of our fiscal year 2009 budget request, I would like to briefly highlight some of NOAA's notable successes from the past fiscal year (2007).

FISCAL YEAR 2007 ACCOMPLISHMENTS

NOAA is Major Contributor to Nobel Prize-Winning Intergovernmental Panel on Climate Change Reports

Scientists from NOAA's Earth System Research Laboratory were among those sharing in the 2007 Nobel Peace Prize. The scientists were recognized for their contributions to the Intergovernmental Panel on Climate Change (IPCC). The IPCC was created in 1988 by the World Meteorological Organization and the United Nations Environment Program to provide regular assessments for policymakers of the scientific, technical and socio-economic aspects of climate change. IPCC has produced its major assessments every five to six years since 1990.

NOAA scientists served as contributors to and government reviewers of the Fourth IPCC Assessment Report. NOAA's Geophysical Fluid Dynamics Laboratory provided model runs that enhanced the projections used in the IPCC report.

Magnuson-Stevens Act Implementation

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2007 was signed into law on January 12, 2007. The reauthorized Act contains significant new provisions to end overfishing, promote market-based approaches to fisheries management, improve the science used in fisheries management, improve recreational data collection, enhance international cooperation in fisheries management, and address illegal, unreported, and unregulated fishing, as well as bycatch of protected living marine resources. Especially notable is the requirement to establish an annual catch limit for each fishery, which for the first time creates a mandate with a timetable to end overfishing.

Progress on Next Generation Geostationary Satellite Program

Geostationary satellites remain the weather sentinels for NOAA. The next-generation geostationary satellite series, GOES–R, will provide new and improved atmospheric, climatic, solar, and space data. In 2007, NOAA revised the management and acquisition strategy for the GOES–R program, partnering more closely with NASA to take advantage of each agency's technical expertise. In February 2007, the Advanced Baseline Imager, the main instrument on GOES–R, completed a key milestone, enabling the contractor to begin building the first instrument. Throughout 2007, NOAA awarded the three remaining instrument contracts for the Solar Ultraviolet Imager, Extreme Ultra Violet and X-Ray Irradiance Sensors, and Geostationary Lightning Mapper. These instruments will help us to understand and forecast solar disturbances as well as track lightning strikes from space.

NOAA's National Weather Service Provides More Specific Warning Information for Severe Weather

NOAA's National Weather Service (NWS) began issuing more geographically specific warnings for tornadoes, severe thunderstorms, floods, and marine hazards on October 1, 2007. The new "storm-based warnings" allow forecasters to pinpoint the specific area where severe weather threats are highest, thereby reducing the area warned by as much as 70 percent when compared to the previously used county-by-county warning system. Storm-based warnings are displayed graphically and are extremely adaptable to cell phones, PDAs, and the Internet. The Emergency Alert System (EAS) is geared toward counties and NOAA Weather Radio (NWR) All Hazards will still sound an alarm if there is a warning anywhere in a county. However, text and audio messages will provide more specific information about the location of the storm in the county, and the direction in which it is moving. Storm-based warnings will reference landmarks such as highways, shopping centers, and parks, and will use directional delimiters to indicate county location.

Fleet Modernization Moves Ahead

In June 2007, NOAA celebrated the keel laying of NOAA ships BELL M. SHIMADA and FERDINAND R. HASSLER in Moss Point, Mississippi. This marked the first time NOAA has celebrated this important construction milestone for two ships simultaneously. HENRY B. BIGELOW, second of the four fisheries survey vessels of the same class being built by VT Halter Marine, was commissioned into the fleet in July before beginning operations in New England. In September, Phase I of conversion of NOAA Ship OKEANOS EXPLORER (formerly USNS CAPABLE) to an ocean exploration ship was completed. NOAA ship PISCES was christened in December and subsequently launched in Moss Point, Mississippi.

New State-of-the-Art Satellite Operations Facility Officially Opened

In June 2007, NOAA and the General Services Administration officially opened the new state-of-the-art NOAA Satellite Operations Facility (NSOF). NSOF is the new home for NOAA's around-the-clock environmental satellite operations, which provides data critical for weather and climate prediction. NSOF supports more than $50 million of high technology equipment, including 16 antennas monitoring the operations of 16 on-orbit satellites.

National Water Level Observation Network Upgraded to Real-time Status

The National Ocean Service (NOS) completed a three-year effort to upgrade the technology of its National Water Level Observation Network (NWLON). NWLON stations provide mariners, first responders, and the public with real-time tide and water-level information. A major benefit of the upgrade is that network stations normally equipped to transmit water-level and other environmental data at hourly increments via NOAA Geostationary Operational Environmental Satellites now transmit data every six minutes, thus enabling users to access data more quickly.

NOAA Aids in the Recovery of Fisheries and Fishing Communities Damaged by Hurricanes

NOAA funded and conducted a number of activities aimed at helping Gulf Coast fisheries recover from the devastating impacts of Hurricanes Katrina, Rita, and Wilma, which struck the Gulf Coast in 2005. The states are using these funds to restore and rehabilitate oyster, shrimp, and other marine fishery habitats damaged or destroyed by hurricane events, and to conduct cooperative research and monitoring and other activities designed to recover and rebuild Gulf of Mexico fisheries and fishing communities.

NOAA Weather Radio All Hazards Activities: Meeting the Expectations of the Nation for Weather and All Hazard Warning Information

NOAA's National Weather Service added 16 broadcast stations to the NOAA Weather Radio (NWR) All Hazards network in 2007. In addition to achieving 100 percent coverage of high-risk areas, NOAA refurbished 62 broadcast stations with technology upgrades that significantly improved reliability and availability, while decreasing maintenance costs. This allows the network to meet expectations of availability as the nation's weather and all hazard warning system.

NWR is a reliable and inexpensive means of communicating weather, hazard, and emergency information directly to the public. The network infrastructure consists of 986 broadcast stations covering 98 percent of the nation's population and has the ability to deliver messages to individuals monitoring their own receivers as well as the ability to reach millions of listeners and viewers through the Emergency Alert System, which is monitored by television and radio license holders. The network is required to broadcast to all areas of the United States identified as being at high risk of experiencing severe weather and to sustain a high level of reliability and maintainability in those areas.

Marine Reserves Established in Channel Island National Marine Sanctuary

In 2007, NOS established the Federal portion of the marine reserves and conservation area network within the Channel Islands National Marine Sanctuary. This is the largest network of marine reserves in Federal waters in the continental United States. This action complements the State of California's established network of marine reserves and conservation areas within the State waters of the sanctuary in 2003.

Expanding U.S. Tsunami Preparedness

NOAA's National Weather Service (NWS) is responsible for the expansion of the U.S. network of tsunami detection sensors. During 2007, 14 Deep-ocean Assessment and Reporting of Tsunamis (DART™) buoys were established: four in the Western Pacific Ocean, three off the Pacific Coast of Central America, five in the northwestern Pacific Ocean, and two in the North Atlantic Ocean, bringing the total number of U.S. DART™ stations to 34. The United States, with NOAA as lead agency, is currently working with approximately 70 countries, the European Commission, and over 50 non-governmental agencies in planning and implementing the Global Earth Observation System of Systems (GEOSS), which includes a global tsunami warning system. In addition, NWS works with communities to prepare for tsunamis through the TsunamiReady™ Program. As of December 12, 2007, there are 47 TsunamiReady™ sites in 10 states, Puerto Rico, and Guam. The National Weather Service reached its goal of recognizing 10 new TsunamiReady™ communities in fiscal year 2007.

First Buoy to Measure Acidification Launched

The first buoy to directly monitor ocean acidification was launched in the Gulf of Alaska. Ocean acidification is a result of carbon dioxide absorbed by the ocean. The new buoy, part of a National Science Foundation project awarded to PMEL and the University of Washington in Seattle, in collaboration with Fisheries and Oceans Canada and the Institute of Ocean Sciences in British Columbia, measures the air-sea exchange of carbon dioxide, oxygen, and nitrogen gas, in addition to the pH (a measure of ocean acidity) of the surface waters. The buoy is anchored in water nearly 5,000 meters deep and transmits data via satellite. Rising acidity in the ocean could have a detrimental effect on ocean organisms, with resulting impacts on ocean life and the food chain.

NOAA Ships Arrive at New Home Port in Hawaii

NOAA ships OSCAR ELTON SETTE, HI'IALAKAI, and KA'IMIMOANA relocated to their new home port at Ford Island, Pearl Harbor, Hawaii, heralding the permanent presence of NOAA on Ford Island. This was a major milestone in the multi-year, multi-phase construction of the NOAA Pacific Regional Center, a project to consolidate NOAA programs and operations on the island of Oahu into a single facility on Ford Island.

NOAA's Open Rivers Initiative Completes First Projects

In its first year, NOAA's Open Rivers Initiative completed three projects that restored over 30 miles of spawning and rearing habitat for migratory fish. The obsolete Brownsville Dam, located on the Calapooia River in Oregon, was removed in August 2007, effectively eliminating an obstruction to migratory fish and a safety hazard to the local human community. In California, two failing and undersized culverts were removed, allowing endangered salmon to reach their historic spawning and rearing grounds. In collaboration with local communities, NOAA's Open Rivers Initiative will continue to restore free fish passage to historic habitat by removing obsolete dams and barriers that dot the rivers of coastal states.

Delivering Real-Time Data to Help Shellfish Growers

Shellfish growers in the Pacific Northwest can now get near real-time water quality data from the System-wide Monitoring Program operating at National Estuarine Research Reserves in Alaska, Washington, and Oregon. The data are available through telemetering capabilities, which measure, receive, and transmit data automatically from distant sources. Water quality data can be viewed on a Web site jointly sponsored by NOS and the Northwest Association of Networked Ocean Observing Systems (http://www.nanoos-shellfish.org/). Water quality and weather data are transmitted every 30 minutes via satellite from monitoring stations at all 27 National Estuarine Research Reserves, providing information to the growing Integrated Ocean Observing System (IOOS).

Great Lakes Lab Recognized for "Green" Research Vessels

NOAA's Great Lakes Environmental Research Laboratory (GLERL) converted a fleet of research vessels from petroleum-based to 100 percent bio-based fuel and lubricants, earning a White House Closing-the-Circle Award in the green purchasing category. GLERL operates research vessels throughout the Great Lakes region as scientific platforms for ecosystems research and other NOAA interests in the area. The conversion was a result of a call for "greening" of Government agencies through waste reduction, recycling, and the use of environmentally friendly and sustainable products including bio-products.

FISCAL YEAR 2009 BUDGET REQUEST HIGHLIGHTS

Supporting the President's Ocean Initiative

Building on last year's investment in Ocean Initiative related activities, the fiscal year 2009 President's request includes new increases of $49.1 million for NOAA over the fiscal year 2008 President's request to support the President's Ocean Initiative. This ocean initiative includes more funding to advance ocean science and research; protect and restore marine and coastal areas; and ensure sustainable use of ocean resources.

New investments in ocean science are aimed at monitoring and better understanding marine ecosystems. Increased funding of $7.0 million is included for the Integrated Ocean Observing System (IOOS) to support Data Management and Communications, Regional Observations, and the Data Assembly Center (DAC), which delivers real-time, quality controlled data from NOAA and regional observing systems. An increase of $1 million is requested to manage the escalating size and quantity of hydrographic datasets collected by NOAA and other providers. This increase in funding will help NOAA update the nautical charts provided to mariners navigating on U.S. waters in a more timely fashion. In addition, NOAA is requesting $2 million in increased funding for the PORTS® program, to improve and expand the delivery of real-time and forecasted navigation information. A recent economic benefits study of the Houston/Galveston PORTS® program, released in May 2007, showed that the program brought the Houston/Galveston area significant economic benefits and has helped to achieve a 50 percent reduction in groundings.

Projects to protect and restore valuable marine and coastal areas include funding of $4 million to implement the newly enacted Marine Debris Research, Prevention, and Reduction Act. This funding will allow NOAA to provide competitive grants and to develop the first Federal clearinghouse on marine debris. NOAA also requests increased funding of $5.4 million for the Open Rivers program to restore stream miles of fish habitat through watershed-level projects with multiple fish passage opportunities.

Finally, the budget provides support to ensure sustainable access to seafood through the development of offshore aquaculture and better management of fish harvests. In direct support of new provisions of the MSRA, and to provide better management of fish harvests, NOAA requests increased funding of $31.8 million over the fiscal year 2008 enacted level. Of this amount, $5.1 million is requested to enhance the independent peer-review process for scientific data required to appropriately set the annual catch limits for all managed fisheries; $8.5 million will initiate and expand existing sampling programs and management procedures in order to end overfishing by 2011, as mandated by the MSRA; and $3.0 million will complete the final implementation phase of a new registry system for recreational fishermen and for-hire fishing vehicles. An additional $1.5 million increase is requested in support of deep sea coral research, allowing NOAA to begin identifying, understanding, and providing the information needed in order to protect deep coral habitats.

Sustaining Critical Operations

As always, I support NOAA's employees by requesting adequate funding for our people, infrastructure, and facilities. NOAA's core values are people, integrity, excellence, teamwork, ingenuity, science, service, and stewardship. Our ability to serve the nation and accomplish the missions outlined below is determined by the quality of our people and the tools they employ. Our facilities, ships, aircraft, environmental satellites, data-processing systems, computing and communications systems, and our approach to management provide the foundation of support for all of our programs. Approximately $42.0 million in net increases will support our workforce inflation factors, including $37.5 million for salaries and benefits and $4.5 million for non-labor-related adjustments, such as fuel costs.

This year we have focused our increases on satellite continuity and operations and maintenance support for our aircraft and NOAA vessels. A funding increase of $242.2 million is requested to continue support of the Geostationary Operational Satellites (GOES) program. GOES satellites provide critical atmospheric, oceanic, climatic, and solar products supporting weather forecasting and warnings, climatologic analysis and prediction, ecosystems management, and safe and efficient public and private transportation. This increase will be used for continued systems engineering, development of satellite instruments, risk reduction activities, and transition to the systems-level acquisition and operations phase of the program.

Funding of $6.1 million is also requested in support of a Major Repair Period for the RAINIER, NOAA's most productive hydrographic vessel. At 39 years old, the RAINIER requires a major capital investment in its mechanical and electrical systems in order to maintain its current operational tempo and reduce risks to personnel, property, and mission capability.

Finally, NOAA requests an increase of $4.0 million in support of additional flight hours and operations and maintenance for our aircraft. The requested funds will provide an additional 1,295 flight hours for hurricane research, surveillance, and reconnaissance, as well as for other research and forecasting requirements. NOAA also asks this year for restoration to several of our base programs, most notably in the National Weather Service and the National Marine Fisheries Service. These requested increases in our base accounts will allow NOAA to sustain on-going programs and projects at the levels recommended in the fiscal year 2008 President's budget.

Improving Weather Warnings & Forecasts

Severe weather events cause $11 billion in damages and approximately 7,000 weather-related fatalities yearly in the United States. Nearly one-third of the U.S. economy is sensitive to weather and climate. Realizing this, NOAA seeks to provide decision makers with key observations, analyses, predictions, and warnings for a variety of weather and water conditions to help protect the health, life, and property of the United States and its economy. Landfalling hurricanes are one of the most physically destructive and economically disruptive extreme events that impact the United States, often causing billions of dollars of damage in their wake. In fiscal year 2009, NOAA will continue to improve our hurricane research and modeling capabilities with a requested increase of $4.0 million for operational support and maintenance of the next-generation Hurricane Weather Research and Forecasting model and storm surge prediction system, as well as accelerated improvements to that system. Increased funding of $3.0 million will support the operations and maintenance of 15 hurricane data buoys in the Caribbean, Gulf of Mexico, and the Atlantic Ocean, enhancing our real-time hurricane storm monitoring and observations.

NOAA also continues to improve and maintain our weather warning infrastructure, with requested funding of $6.6 million to upgrade the Advanced Weather Interactive Processing System, the nation's weather and flood warning system. Increased funding of $4.8 million will be used to upgrade twelve NOAA Wind Profilers and to perform a tech-refresh on this twenty-year-old radar system. Finally, NOAA is requesting $2.9 million in increased funding for modernization of the NOAA Weather Radio network.

Climate Monitoring & Research

Society exists in a highly variable climate system, and major climatic events can impose serious consequences on society. Preliminary estimates of the impact of the severe drought which affected the Great Plains and the Eastern United States throughout 2007 are in the range of $5 billion, with major reductions in crop yields and low stream and lake levels. Continued drought and high winds in the Western United States in 2007 resulted in numerous wildfires, with 3,000 homes and over 8.9 million acres burned, and at least 12 deaths. The fiscal year 2009 budget request contains investments in several programs aimed at increasing our predictive capability, enabling NOAA to provide our customers (farmers, utilities, land managers, weather risk industry, fisheries resource managers and decision makers) with assessments of current and future impacts of climate events such as droughts, floods, and trends in extreme climate events. NOAA continues to build a suite of information, products, and services that will enable society to respond to changing climate conditions. In fiscal year 2009, NOAA will support the critical National Integrated Drought Information System with increases of $2 million to develop and bring into operation by fiscal year 2010 the next-generation Climate Forecast System, leading to improved climate forecasting products. An increase of $74 million will be used to develop Clouds and the Earth's Radiant Energy System (CERES) and Total Solar Irradiance Sensor (TSIS) climate sensors to preserve decades long climate data records. The CERES sensor will measure the Earth's radiation budget, an essential measurement for determining the causes of climate variability and change. The TSIS sensor measures the total energy of the sun falling on the Earth, a measurement used to identify and isolate natural solar variations that impact climate in contrast to other factors, such as human influences on climate.

Critical Facilities Investments

The fiscal year 2009 President's budget request also includes important increases for critical facilities, necessary to provide a safe and effective working environment for NOAA's employees.

For fiscal year 2009, NOAA will concentrate their modernization efforts on three main projects. NOAA requests an increase of $40.2 million for the continued construction of the new Pacific Region Center on Ford Island in Honolulu, Hawaii. This increase in funding will support the continued construction and renovation of two buildings, enabling NOAA to reduce expenditures for rent and relocate operations from their current location in the deteriorating Kewalo Basin and Dole Street Lab Facilities. An increase of $12.1 million will complete the design and initial preparations for a replacement facility for the Southwest Fisheries Science Center. Finally, $11.7 million is requested to support the installation of a semi-permanent replacement structure for the at-risk Operations Complex at the NESDIS Command and Data Acquisition Station in Fairbanks, Alaska. The current facility is at risk to experience a major structural failure in the next five years. The requested funding will ensure that NOAA maintains crucial mission operations support for the polar-orbiting satellites, as well as backup support for others.

CONCLUSION

NOAA's fiscal year 2009 budget request provides essential new investments in our priority areas while maintaining critical services, reflecting NOAA's vision, mission, and core values. The work NOAA accomplished in 2007 impacted every U.S. citizen. We will build on our successes from last year, and stand ready to meet the challenges that will surface in fiscal year 2009 and beyond. NOAA is dedicated to enhancing economic security and national safety through research and accurate prediction of weather and climate-related events, and to providing environmental stewardship of our nation's coastal and marine resources. That concludes my statement, Mr. Chairman. Thank you for the opportunity to present NOAA's fiscal year 2009 budget request. I am happy to respond to any questions the Committee may have.

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

NPOESS: CERES AND TSIS SENSORS

Question. Although the budget includes funding for the restoration of the CERES and TSIS climate sensors, it has not been decided whether TSIS would fly on NPOESS or another satellite.

When will a decision be made regarding which satellite TSIS will fly on?

Answer. NOAA is completing a study with NASA to recommend whether TSIS would fly on NPOESS or another satellite. The results will be briefed at the next NPOESS Executive Committee (EXCOM) meeting, currently planned for May 2008. A decision on the platform for TSIS will be made shortly thereafter.

If TSIS is placed back on NPOESS doesn't it just add more complexity and risk to NPOESS which was the very reason it was removed?

Answer. The NPOESS Integrated Program Office (IPO) has concluded a study which determined that integrating TSIS on the first NPOESS satellite (C1) would not pose an appreciably higher risk to the overall NPOESS program should the EXCOM decide to manifest TSIS on C1.

It is important to note that the 2006 decision to remove several sensors from NPOESS was made not only to reduce overall program risk, but also to address significant cost over-runs. The latter is not an issue since funding for building and adding TSIS would be coming from outside the NPOESS program. This helps make adding TSIS to (C1) a feasible option.

The study also determined that the data requirements to command the TSIS instrument, and to transport the data to the appropriate ground processing location, are well-understood and would not add risk to the NPOESS command and control and data handling systems. However, since the priority for C1 is operational weather data continuity, there is a clear understanding that if a decision is made to fly TSIS on C1, the TSIS instrument would have to be delivered with an adequate lead time for integration onto the C1 spacecraft to avoid jeopardizing the 2013 launch date. If TSIS were not delivered within this timeframe, C1 could potentially launch without TSIS in order to maintain operational weather continuity.

VIIRS CONTRACTOR DEFICIENCIES

Question. In discussing the recent delays caused by the VIIRS issues Admiral Lautenbacher stated that he was "extremely disappointed with the pace of the contractor in analyzing and closing potential quality, workmanship, and testing issues in the VIIRS program."

Could you provide specific examples of what he meant by those comments?

Answer. Vice Admiral Lautenbacher's comments were based on poor performance of the NPOESS contractors in resolving workmanship and design problems that arose during the initial phases of the test program, current technical issues, and independent assessments of future work required. A summary of the key issues is provided below:

—Insufficient time had been scheduled for test preparations;

—Insufficient time had been scheduled to review the data generated from the test program;

—Insufficient time had been scheduled to resolve problems highlighted by the test program;

—Excessive use of jumper (White) wires;

—Excessive number of Engineering Failure Reports (EFRs) remained open after completion of ambient phase; and

—Inability to determine the root cause of the power supply anomaly.

Question. What is NOAA doing to address these contractor deficiencies?

Answer. In addition to addressing potential quality and or workmanship deficiencies on a case by case basis, the NPOESS Program Executive Officer, a NOAA Senior Executive, is conducting bi-monthly senior executive level reviews with the prime contractor and the sub-contractor. These executives monitor progress and ensure corporate best practices and resources are being applied to the program. The NPOESS Executive Committee (EXCOM) directed the NPOESS contractors to increase management oversight at the VIIRS facility. In addition to the above actions that were given at the January 16, 2008 EXCOM meeting, the following steps are being taken by the Government team:

—In-plant oversight has been increased.

—Independent review of the test schedule for VIIRS has continued.

—Weekly reviews of all open/unresolved issues are being conducted.

OCEAN SURFACE VECTOR WINDS DATA

Question. I recently read in Space News that NOAA was in discussions with the Chinese and Indian government's to gain access to their satellite data for ocean surface winds.

Answer. That is correct. NOAA has enjoyed a longstanding working relationship with the Indian and Chinese space agencies. NOAA is working though our respective Embassies in Beijing and New Delhi to seek timely access to surface vector wind (both speed and direction) data from satellite scatterometers that the Chinese State Oceanic Administration and the Indian Space Research Organization plan to launch within the next two years.

Question. Why do we have to go overseas for our weather data?

Answer. NOAA leverages data from international partners wherever possible so that we can meet our higher priority needs for environmental observations within our budget constraints. Currently, there is no funded U.S. satellite in development that would carry a scatterometer capable of providing similar observations in the post-QuikSCAT era, so we are seeking access to any available observations from all sources.

Question. By relying on another government's satellite will we not have reliability and data quality concerns?

Answer. Our international partnership agreements include provisions to work with our foreign partners to achieve the greatest reliability and data quality possible. For example, NOAA is working with European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) and has been processing and evaluating vector winds from EUMETSAT's MetOp mission since its launch in late 2006. MetOp is nearing the end of its post launch testing and will be providing wind data for operational use shortly. However, while the reliability and quality of the MetOp Advanced Scatterometer (ASCAT) data are not a concern, it only provides 60 percent of the coverage that QuikSCAT currently offers.

Additionally, QuikSCAT is approaching 10 years of operations. In light of these factors, NOAA is seeking other sources of ocean vector winds data. NOAA is in discussions with China and India seeking access to ocean vector winds data once the scheduled Chinese and Indian satellites have been launched. While neither China nor India have flown a scatterometer instrument in the past, we can anticipate a lengthy test and evaluation phase, during which there could be reliability and data quality concerns. However, since there are no funded U.S. satellites that would carry a scatterometer capable of providing observations similar to QuikSCAT in the post-QuikSCAT era, NOAA is seeking access to similar observations from all sources to help meet the need for these data.

Question. What would we do if after signing an agreement, the Chinese or Indians decide to renege and not provide the data? Can we afford this risk?

Answer. NOAA has had longstanding working relationships with China and India with full and open exchange of satellite data. NOAA will ensure that the agreements are directly related to protecting lives and property or advancing our understanding of science. NOAA will work closely with the U.S. Department of State to ensure that the necessary provisions are included in the agreements to ensure uninterrupted access to these data.

Since there are no funded U.S. satellites in development that would carry a scatterometer capable of providing observations similar to QuikSCAT in the post-QuikSCAT era, NOAA is seeking access to similar observations from all sources. Given this situation, NOAA will have to assume some risk associated with a dependence on foreign sources to help meet the requirement for these data.

Question. The fiscal year 2009 request includes $3 million to study this issue but this seems like a critical component that deserves more than a study that once completed will likely tell us we need another satellite.

Answer. Within the President's fiscal year 2009 budget request for NOAA there is $3 million to explore space and non space-based alternatives for these data and to conduct a comprehensive cost-benefit analysis on all of the alternatives. Results from the fiscal year 2009 studies will help us more clearly define the follow-on capabilities that we should invest in and the specific benefits of those investments.

Question. What are the current cost estimates for replacement Quikscat type satellite that relies on the same technologies (i.e. the exact same as we have)? What would a replacement cost that has newer technology (i.e. an Advanced Quikscat)?

Answer. The NOAA Office of Systems Development is conducting an analysis of alternatives for acquiring ocean surface wind vector measurements. This analysis is still being developed and will include an evaluation of cost, schedule, and performance trades for a number of options. NOAA expects this analysis to be completed by this summer.

VACANCY RATES AT THE NATIONAL WEATHER SERVICE

Question. What is the vacancy rate at the National Weather Service?

Answer. At the halfway mark through fiscal year 2008 (though March 31, 2008), the FTE lapse rate (job vacancy rate) for the NWS is 5.1 percent. However, the lapse rate for the Continental United States (CONUS) field positions, which includes Regional Headquarters (HQ), River Forecast Centers, and Weather Forecast Offices, is only 2.9 percent.

Question. What percentage of positions is being held vacant due to lack of funds?

Answer. For fiscal year 2008, approximately 113 additional positions are projected to be held due to a lack of labor funding, primarily by holding NWS HQ positions vacant.

Background: "Labor lapse rates" are a function of the time from when a field or HQ vacancy occurs to the time that position is filled. They can fluctuate based on job location, job requirements/duties, NOAA Workforce Management staffing workload and general job market conditions. Due to the current housing slump, the lapse rate for CONUS field positions is projected to be higher in fiscal year 2008.

Question. Is the fiscal year 2009 request sufficient to eliminate these vacancies and fill all operational positions in a timely manner?

Answer. Yes. The fiscal year 2009 requested restoration of $5.8 million in Local Warnings & Forecasts (LWF) funding and $233,000 in Central Forecast Guidance (CFG), combined with full funding of our adjustments to base (ATBs) including the federal pay raise, will be sufficient to address these needs.

Question. How much additional funding would be necessary to accomplish that?

Answer. Please see response to the previous question; no additional funding is required.

COORDINATION OF OCEAN RESEARCH

Question. As the lead federal agency on oceans, how does NOAA coordinate its efforts with NSF's research program? With other federal agencies?

Answer. As evidenced by the President's establishment of the cabinet-level Committee on Ocean Policy (COP, created through Executive Order 13366 EO), the United States has an interagency approach to advancing ocean research. The COP provides a framework to coordinate the ocean and coastal related activities (including research) of over 20 federal agencies that administer 140 laws. In addition, the EO mandated coordination among federal agencies with coordination and consultation with state, tribal and local governments; the private sector; foreign governments; and international organizations. NOAA believes that this structure has demonstrated progress on ocean leadership and coordination. As directed by the Oceans Act of 2000, the U.S. Ocean Action Plan is the President's response to the Final Report of the U.S. Commission on Ocean Policy. The implementation of the Ocean Action Plan through the coordinated interagency structure has begun to improve federal capacity to integrate research across jurisdictions at the federal, state, and non-governmental level. This new governance structure is still young but the Administration is committed to its success.

NOAA continues to lead national ocean-related activities within the new, coordinated ocean governance structure outlined above. Specifically, NOAA has taken an active leadership role within the COP, the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI), the Joint Subcommittee on Ocean Science and Technology (JSOST), and the Subcommittee on Integrated Management of Ocean Resources (SIMOR). NOAA serves as co-chair on both the JSOST and SIMOR. The National Science Foundation (NSF) also serves as a co-chair with NOAA on the JSOST, thereby increasing interagency coordination. NOAA and NSF leadership are engaged in numerous task teams under JSOST and SIMOR bodies to guide the successful execution of activities and to build strong collaboration with our sister agencies.

Together, as co-chairs of the JSOST, NOAA and NSF led the development of Charting the Course for Ocean Science and the Ocean Research Priorities Plan and Implementation Strategy (Charting the Course for Ocean Science), a major milestone in federal coordination of ocean research. Charting the Course for Ocean Science describes the first ever national ocean research priorities that focus on the most compelling issues in key areas of interaction between society and the ocean. After extensive public participation, including public workshops and public comments, Charting the Course for Ocean Science provides guidance on how the various ocean science sectors (government, academia, industry, and non-government entities) can and should be engaged, individually or through partnerships, to address the areas of greatest research priority and opportunity. Charting the Course for Ocean Science identifies 21 recommendations for science and research needed to support six overarching societal objectives, and puts forward four near-term priorities.

The Administration is now actively engaged in implementing Charting the Course for Ocean Science. The fiscal year 2008 President's budget requested $40 million ($20 million for NOAA, $17 million for NSF, and $3 million for USGS) to begin implementation of the four near-term priorities identified in Charting the course for Ocean Science (Assessing Meridional Overturning Current Variability: Implications for Rapid Climate Change (AMOC); Comparative Analysis of Marine Ecosystem Organization (CAMEO); Sensors for Marine Ecosystems; and Forecasting the Response of Coastal Ecosystems to Persistent Forcing and Extreme Events). The fiscal year 2008 appropriations provided NOAA and other agencies a portion of the $40 million ($11.25 million). For NOAA in fiscal year 2008, the Office of Oceanic and Atmospheric Research has committed $3 million to AMOC. NOAA's National Marine Fisheries Service (NMFS) issued a call for CAMEO proposals which will be completed at the end of the fiscal year 2008 and will result in projects available for funding by NMFS and NSF in fiscal year 2009. The administration believes that all four priorities are important and as such NOAA is taking steps to address the Sensors for Marine Ecosystems and Forecasting the Response of Coastal Ecosystems to Persistent Forcing and Extreme Events priority areas. Activities planned for the near-term priorities are consistent with the NOAA Five-Year Research Plan, and all of the near-term priorities are areas in which NOAA has significant programmatic responsibilities.

In the President's fiscal year 2009 budget, NOAA requests $20 million to implement the four near-term priorities identified in Charting the Course for Ocean Science ($5 million for each near-term priority). NOAA is committed to working with the NSF, other agencies, and our partners to implement the priorities in Charting the Course for Ocean Science.

Finally, the Under Secretary of Commerce for Oceans and Atmosphere and the Director of the National Science Foundation jointly submit a comprehensive annual report to the House Committee on Resources and Science and the Senate Committee on Commerce, Science and Transportation on how the oceans and coastal research activities of NOAA and NSF will be coordinated (in compliance with Section 9 of Public Law 107–299). The report describes in detail any overlapping ocean and coastal research interests between the agencies and specifies how such research interests will be pursued by the programs in a complementary manner. This year's annual report is currently under administrative review.

FUEL COSTS

Question. NOAA operates a fleet of 21 ships with the price of oil above $100 a barrel. How has this increase in fuel costs impacted the amount of science that can be conducted? When you prepared your budgets what was your assumption for fuel costs?

Answer. Answer. At the time of our fiscal year 2009 budget development, NOAA projected fuel to cost $2.47 per gallon. Today, fuel costs are averaging nearly $3.17 a gallon. As an example of the challenges we are facing, in January 2008, one ship paid over $4 per gallon to refuel at a foreign port under a DOD contract. Half way through fiscal year 2008, with diesel fuel reaching record highs and averaging over $3 a gallon, our projection for fiscal year 2009 fuel prices shows a full-year average cost of $3.66 per gallon.

At $2.47 per gallon, we expected to perform 3,390 days of science in fiscal year 2009; at $3.66, we can only perform 2,600 days of science—a reduction of 790 days or a 23 percent decrease.

Rising fuel prices have also impacted NOAA's ability to charter days at sea. The day rate to charter both UNOLS and commercial ships has increased due to the rise in fuel costs. For example, UNOLS' RV REVELLE's fiscal year 2007 day rate was $26,200/day. As of March, 2008, this rate is now $32,000/day, a 22 percent increase. Other UNOLS vessels of the same class have also correspondingly increased in their day rates.

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

"JOHN C. COBB" DECOMMISSIONING

Question. I have been told that NOAA plans to decommission the NOAA fishery survey vessel JOHN C. COBB this year.

What are NOAA's plans to replace this vessel?

Answer. NOAA Fisheries Service is currently undertaking a comprehensive analysis of Southeast Alaska mission requirements that will address present and future MSRA mandated responsibilities. Potential procurement and/or long-term lease of suitable charter vessels to support NOAA's mission will be considered.

Question. If this vessel is decommissioned does the fiscal year 2009 budget request contain enough funding to contract out all of the surveys currently undertaken by the COBB in Alaska?

Answer. NOAA's base funding contains $500,000 in fiscal year 2009 to charter vessels to meet survey requirements in Southeast Alaska. This funding would be used to charter a vessel (or vessels) with capabilities similar to the COBB for work primarily in Southeast Alaska.

PACIFIC COASTAL SALMON RECOVERY FUND

Question. The President's fiscal year 2009 budget calls for a drastic reduction in funding for the Pacific Coastal Salmon Recovery Fund.

This program has been valuable in my State to ensure the health of salmon populations, and to mitigate the impacts of harvest reductions imposed by the Pacific Salmon Treaty on Alaska fisheries and coastal communities.

How will the reduction in funding impact these efforts?

Answer. The President's fiscal year 2009 budget requests $35 million for Pacific Coastal Salmon Recovery Fund activities. The funds will be distributed under a competitive process between the eligible States of Washington, Oregon, California, Idaho and Alaska and Coastal and Columbia River Tribes.

The funds will be distributed based on Congressional authorization direction for the funds—salmon habitat conservation and restoration, salmon stock enhancement, and salmon research and related activities—and the following three program priorities: (1) Recovery and conservation of salmon and steelhead that are listed as threatened or endangered, or identified by a state as at-risk or to be so-listed, (2) Maintenance of salmon and steelhead populations necessary for exercise of tribal treaty fishing rights or native subsistence fishing, and (3) Habitat protection and restoration for salmon and steelhead. All funds distributed to State entities will require a 33 percent match of non-federal funds. Under the competitive process in fiscal year 2009 the State of Alaska will be eligible to receive funds. The amount Alaska will receive will depend on how the above listed criteria are addressed in grant applications.

QUESTION SUBMITTED BY SENATOR JUDD GREGG

CICEET

Question. VADM Lautenbacher, as you know, the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) is a partnership of the National Oceanic and Atmospheric Administration (NOAA) and the University of New Hampshire (UNH). CICEET is a valuable national resource that is making a difference in many coastal jurisdictions through its close coordination with the National Estuarine Research Reserve System.

With my support, CICEET was established in 1997 to develop tools for clean water and healthy coasts nationwide. Through its nationally competitive, peer reviewed program, CICEET has funded development and demonstration of dozens of field ready technologies—with many more in the pipeline—that address coastal resource problems in three ways: tools to detect pollution, tools to enhance recovery, and tools to prevent pollution impacts.

This year, the Office of Management and Budget elected to take CICEET out of the President's budget. Given the over ten years of Congressional support, an opportunity now exists for NOAA to make explicitly clear that CICEET is a core NOAA activity, and fund it directly out of its budget.

Could you please provide a plan for how CICEET will be funded in fiscal year 2009 and beyond?

Answer. The Administration has proposed a $5.2 million competitive research program to develop new technology to monitor coastal and estuarine environments and address coastal management challenges through the National Estuarine Research Reserves System. CICEET/UNH as well as previous CICEET grant recipients will be eligible to compete for funding through the NERRS competitive research program.

NATIONAL SCIENCE FOUNDATION

PREPARED STATEMENT OF DR. ARDEN L. BEMENT, JR., DIRECTOR

Chairwoman Mikulski, Ranking Member Shelby, and Members of the Subcommittee, I am pleased to present the National Science Foundation's budget for the 2009 fiscal year.

The National Science Foundation (NSF) proposes a fiscal year 2009 investment of $6.85 billion to advance the frontiers of research and education in science and engineering. Our budget request includes an increase of $789 million—or 13 percent—over the current fiscal year 2008 amount. This increase is necessary to put NSF back on the course that was charted by the President's American Competitiveness Initiative (ACI) and by the America COMPETES Act. This year's budget reflects the Administration's continued resolve to double overall funding for the ACI research agencies within 10 years.

An investment in the National Science Foundation is a direct investment in America's economic security. In fact, without a solid basic research foundation for our high-tech economy, no economic security is possible. Basic research underpins all of the technology that constitutes the lifeblood of today's global market. America's sustained economic prosperity is based in part on technological innovation resulting from previous fundamental science and engineering research. Innovation and technology are engines of the American economy, and advances in science and engineering provide the fuel.

While the United States still leads the world in its level of public and private R&D investment, our counterparts around the globe are well aware of the importance of funding R&D. A string of recent reports have found evidence that China is rapidly accruing global technological standing, including an OECD finding that China was set to become the second-highest investor in R&D among world nations in 2006, behind only the United States.[1 2 3] Over the last two decades, U.S. federal support of research in the physical sciences, mathematics, and engineering has been stagnant when adjusted for inflation. As a percentage of GDP, the U.S. federal government has halved its investment in physical science and engineering research since 1970. Conversely, the Chinese government has more than doubled its GDP percentage expenditure in R&D since 1995.[3]

More than a dozen major studies have now concluded that a substantial increase in federal funding for basic scientific research is critical to ensure the preeminence of America's scientific and technological enterprise.

Just recently, Norman Augustine, former CEO of Lockheed Martin, released a follow-up to "The Gathering Storm" report entitled, "Is America Falling Off the Flat Earth?" His message is clear: "Unless substantial investments are made to the engine of innovation—basic scientific research and development—the current generation may be the first in our country's history to leave their children and grandchildren a lower sustained standard of living."[4]

For over fifty years, NSF has been a steward of the nation's science and engineering enterprise. NSF investments in discovery, learning, and innovation have been important to increasing America's economic strength, global competitiveness, national security and overall quality of life.

With its relatively small size, NSF delivers an enormous "bang for the buck" of federal government research and development (R&D) investment. NSF represents just four percent of the total federal budget for research and development, but accounts for a full fifty percent of non-life science basic research at academic institutions. NSF is the research funding lifeline for many fields and emerging interdisciplines at the frontiers of discovery. In fact, NSF is the only federal agency that supports all fields of basic science and engineering research.

NSF relies on a merit-based, competitive process that is critical to fostering the highest standards of excellence and accountability—standards that have been emulated at other funding agencies around the world.

NSF SUPPORTS AMERICAN INNOVATION

The Foundation of Innovation

NSF often funds a technology in its earliest stages, frequently before other agencies or industries get involved. NSF funding was involved in the developmental phase of the technology used in magnetic resonance imaging (MRI) now ubiquitous

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[1] http://www.oecd.org/document/26/0,2340,en__2649__201185__37770522__1__1__1__1,00.html.
[2] http://www.tpac.gatech.edu/hti2007/HTI2007ReportNSF__012208.pdf.
[3] http://www.nsf.gov/statistics/nsf07319/pdf/nsf07319.pdf.
[4] Augustine, Norman. Is America Falling off the Flat Earth? National Academies Press.

in diagnostic medicine, the research that led to the development of silicon-coated glass used in flat panel displays, and the early investigations that led to green and blue light-emitting diodes used in cell phone displays and traffic lights. In 1952, Caltech professor Max Delbruck used one of NSF's first grants to invent molecular biology techniques that enabled one of his students, James Watson, to discover the molecular structure of DNA, and another Nobel laureate, David Baltimore, to unravel some of its mysteries.

In a more recent example, NSF CAREER awardee Jay Keasling, now the head of the NSF-sponsored Synthetic Biology Engineering Research Center at the University of California-Berkeley, and two postdoctoral researchers from his lab founded Amyris, a company that is taking a revolutionary approach to chemical manufacturing by harnessing metabolic processes in microorganisms. Through genetic engineering, the researchers "program" the microbes to churn out useful chemicals, bypassing traditional, more expensive methods. Amyris has engineered a strain of yeast that can produce large quantities of artemisinic acid, a precursor to a compound found naturally in a plant that fights malaria but is currently in short supply. Amyris is also developing a fermentation process to deliver a biofuel gasoline substitute. NSF funding of the early research conducted at Berkeley enabled the discoveries that led to this promising new company, named 2007 "Business Leader of the Year" by Scientific American magazine.

NSF as an agency is itself the origin of transformative practices. One new NSF innovation is Research.gov, which is fulfilling our vision of a seamless interface between government funding agencies and the investigators we support. Research.gov is a one-stop shop, where researchers can go to manage their existing portfolio of grants and explore new opportunities. Research.gov is a tool that streamlines the process of applying for federal grants, making it easier and more cost-effective for the federal government to serve its customers.

Educating Tomorrow's Workforce

Beyond all of our efforts to advance the frontiers of knowledge and spur innovation, NSF is dedicated to educating and training the nation's skilled labor force. NSF plays a role in science, technology, engineering, and math (STEM) education at every educational level. Our contribution to education may ultimately be NSF's most profound and meaningful legacy.

The scientists, technologists, engineers, and mathematicians trained through NSF's integration of research and education transfer the latest scientific and engineering concepts from universities directly to the entrepreneurial sector when they enter the workforce.

Our graduate research fellowship (GRF) program has supported several notable technologists and scientists early in their professional training. Prominent economist Steven Levitt, co-author of the popular book Freakonomics, was an NSF GRF recipient from 1992 to 1994. Sergey Brin, co-founder of Google, was an NSF graduate research fellow in the mid-1990s when he began thinking about how to create an internet search engine. NSF's GRF program is as old as the foundation itself, and gives young scientists an early career charge, allowing them to go on to greatness. At least three Physics Nobel Prize winners are former NSF GRF recipients. We are extremely pleased with the proposed $29 million increase in the GRF program's funding for fiscal year 2009 which will enable us to fund an additional 700 promising young American investigators. A recent article from the National Bureau of Economic Research suggests that an increase in the number of GRF awards would help to supply an increased demand for talented individuals in the American science and technology workforce that will result from an increase in R&D spending.[5]

At some point in their careers, nearly 200 Nobel Prize-winning scientists received NSF funding for research in chemistry, physics, medicine, and economics. And scores of NSF-supported scientists shared a measure of the 2007 Nobel Peace Prize as members of the United Nation's Intergovernmental Panel on Climate Change.

To strengthen the educational institutions that benefit from NSF awards, the Directorate for Education and Human Resources (EHR) program, Innovation through Institutional Integration (I3), challenges institutions to think strategically about the creative integration of NSF-funded awards. This provides the opportunity for NSF-grantees at particular institutions to cooperate and share a common vision for improved educational excellence at their institution.

[5] Freeman, Richard. The Market for Scientists and Engineers. *NBER Reporter*, 2007 No. 3, pp. 6–8.

AMERICA COMPETES ACT COMPLIANCE

The America COMPETES Act contains several requirements for NSF. We are actively processing those directives and devising plans to implement them in a timely manner. In the fiscal year 2009 request, activities that overlap with the President's American Competitiveness Initiative receive top priority. These priority areas do include strong links to other fields, and our request includes across-the-board increases for all directorates.

We are currently evaluating how to best ramp up the Robert Noyce Teacher Scholarship Program to bring an infusion of talented teachers into the nation's K–12 education system. To launch such a large-scale program, we will carefully evaluate what we need to do to maximize its societal impact and success. We will apply what we have learned from our other successful scholarship programs to ensure the program is administered in the best possible way.

We are also working how best to evaluate grant applicants' plans for training undergraduates, graduate students, and postdocs in responsible and ethical conduct of research. A number of our programs including our Centers and the Integrative Graduate Education and Research Traineeship (IGERT) program already contain ethics components. We will add a new certification requirement for institutions, which will require the institution to have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research for all undergraduates, graduate students, and postdocs participating in the NSF-funded research project.

Open access to research results is an essential component of a strong and healthy scientific enterprise. We currently make available the citations of NSF-funded research on both the NSF website and on Research.gov. To further the goal of disseminating the results of NSF-funded research, we will develop revised reporting guidelines for NSF principle investigators (PIs). These guidelines will enable the PIs to summarize the key accomplishments of their NSF-funded work, including scientific findings, student training, and professional development activities. This information will be made available on the NSF website.

2009 BUDGET REQUEST HIGHLIGHTS

At NSF, we understand that new discoveries are the main driving force behind societal progress. As the nation's premier funding agency for basic research, our mission is to advance the frontiers of knowledge, where high-risk, high-reward research can lay the foundation for revolutionary technologies and tackle complex societal problems. The NSF budget for 2009 reflects this vital agenda, and I'm pleased to present it to you today.

Let me begin with the big picture. As noted earlier, the President is requesting $6.85 billion for the NSF in fiscal year 2009. That's an increase of almost $789 million, or 13 percent above the current 2008 appropriated amount. While it seems like a large increase, this level is necessary to fulfill the President's vision for physical science and basic research set forth in the American Competitiveness Initiative. The fiscal year 2009 request is squarely in line with the goal of doubling of ACI research agency budgets over 10 years. This increased investment will reinforce NSF's leadership in basic science and engineering and allow us to preserve America's preeminence in the global technology economy.

In this year's proposed budget, funding levels increase for every major NSF appropriations account. Research and Related Activities investments increase by 16 percent, and our Education and Human Resources account is increased by 8.9 percent. We need rapid progress in these areas to stimulate the discoveries in research we need to maintain our standing in the global marketplace, and to keep our students engaged and ready to perform in the global workforce. Our budget includes increases for every Directorate and Office within NSF.

Here are highlights of some of the key investments we are emphasizing in our 2009 budget.

Cyber-enabled Discovery and Innovation

Cyber-Enabled Discovery and Innovation (CDI) is expected to create revolutionary science and engineering research results using "computational thinking"—thinking that encompasses all possible computational concepts, methods, models, algorithms, and tools. Computational thinking is relevant to all fields of science, engineering and education, and promises to have a profound impact on our nation's ability to generate and apply new knowledge. We expect CDI research to produce paradigm shifts in our understanding of a wide range of science and engineering phenomena, and we anticipate socio-technical innovations to create new wealth and enhance the national quality of life. By investing in CDI, NSF continues its leadership in enabling the United States to preserve its role as the world leader in information technology.

Requested Funding Level: $100 million.

Science and Engineering Beyond Moore's Law

"Moore's Law" refers to the empirical observation made in 1965 by Intel co-founder Gordon Moore that the speed of computer processing based on semiconductor integrated circuits doubles about every 18 months. With current silicon technology, we expect to reach the physical and conceptual limits of Moore's Law within 20 years. If we are ever to solve the computational challenges inherent in today's great scientific questions, we must find a way to take computing power and communications beyond Moore's Law. To get there, we'll need entirely new scientific, engineering, and conceptual frameworks. Fundamental research across many disciplines will be called upon to deliver the new hardware, architectures, algorithms, and software of the computers of tomorrow.

Requested Funding Level: $20 million.

Adaptive Systems Technology

Recent progress in probing the secrets of biological systems has been explosive. We are only just beginning to see the application of these new and transformational discoveries to the development of engineered systems, especially at the interface between human and machines. We call our new interdisciplinary endeavor—research at the convergence of human and mechanical systems—Adaptive Systems Technology (AST). New applications and technologies resulting from AST have already demonstrated substantial economic potential. Artificial retinas and cochlea, electronic language translators, and smart hand-held electronics are just a handful of the products that have already come to market at the human-machine interface. NSF's broad portfolio encompasses the diverse research areas involved in this new interdisciplinary effort. Biologists uncover nature's progression from simple to complex nervous systems; physicists and chemists explain the fundamental processes underlying complex neural organization and communication pathways; mathematicians, computer scientists and cognitive scientists explore how systems compute; learning and behavioral scientists provide insights into how organisms learn and adapt to their environment; while engineers allow the design, analysis and construction of systems that mimic living nervous system networks. By working together, these scientists and engineers can benefit from the knowledge and experience of experts in other fields, developing new concepts through collaboration and idea-sharing.

Requested Funding Level: $15 million.

Dynamics of Water Processes in the Environment

This activity will build upon NSF's considerable track record on fundamental water research, while utilizing our unique ability to cross disciplinary boundaries to bring together the separate communities of researchers working on the varying aspects of water science. Water is fundamental to every economic activity in the country, and yet, we do not have a full understanding of the effects of human interventions and changing environmental conditions on the availability and quality of fresh water. The economic driving forces for understanding water processes are compelling: droughts alone cause average damages of $6 to $8 billion annually in the United States. Understanding water dynamics is also essential to understanding climate and environmental change. NSF's investment in Dynamics of Water Processes in the Environment will enhance our ability to understand complex freshwater systems at regional and local levels, taking advantage of advanced observation networks, cyberinfrastructure, and integrated databases.

Requested Funding Level: $10 million.

National Nanotechnology Initiative

NSF leads the U.S. nanotechnology research effort, and we remain strongly committed to supporting this vital emerging industry. Our goal is to support fundamental research and catalyze synergistic science and engineering research and education in emerging areas of nanoscale science and technology. We are also committed to research directed at the environmental, health, and safety impacts of nanotechnology. Novel materials, devices, and systems—with their building blocks designed on the scale of nanometers—open up new directions in science, engineering, and technology with potentially profound implications for society. With the capacity to control and manipulate matter at this scale, science, engineering, and technology are realizing revolutionary advances in areas such as individualized pharmaceuticals, new drug delivery systems, more resilient materials and fabrics, catalysts for industry, and order-of-magnitude faster computer chips.

Requested Funding Level: $397 million.

Climate Change Science Program

Scientists predict that the climate of the earth is changing rapidly, and we have much to learn about how climate affects human activities, how human activities affect climate, and what we can do to protect human life and health in the face of disruptive climate events. The Climate Change Science Program (CCSP) was established in 2002 in response to the challenge of understanding climate and climate variability. Science-based knowledge is absolutely essential to our ability to predict the changes that are likely to take place, and devise informed plans to mitigate the negative impacts of climate change on humanity. The CCSP engages thirteen U.S. agencies in a concerted interagency program of basic research, comprehensive observations, integrative modeling, and development of products for decision-makers. Consistent with the fiscal year 2009 Interagency Implementation Priorities memo, NSF provides support for the broad range of fundamental research activities that form a sound basis for other mission-oriented agencies in the CCSP, and the nation at large.

Building on our agency's particular strengths, NSF encourages interdisciplinary activities and focuses particularly on Earth system processes and the consequences of change. Our priorities include the management of enormous amount of data necessary for accurate global change modeling and research, the refinement and improvement of computational models, and the development of new, innovative earth observing instruments and platforms.

Requested Funding Level: $221 million.

International Science and Engineering

International collaboration is essential to the health of the nation's research enterprise. The importance of international partnership continues to increase as globalization "shrinks" our world. Consequently, our funding request for the Office of International Science and Engineering is increased by nearly 15 percent to $47.4 million. A major focus in our budget is the Partnerships for International Research and Education (PIRE) program, which increases by $3.0 million to $15.0 million. This program funds innovative, international collaborative research projects that link U.S. institutions and researchers at all career levels with premier international collaborators to work at the most promising frontiers of new knowledge.

Broadening Participation

NSF remains a leader in efforts to broaden participation in science and engineering, so that America's science and engineering enterprise is as diverse as the nation from which it draws its workforce. Our 2009 request for the Experimental Program to Stimulate Competitive Research (EPSCoR) program increases to $113.5 million. We are also increasing our request for several programs designed to reach out to underrepresented groups, including Alliances for Graduate Education and Professoriate (AGEP), the Historically Black Colleges and Universities-Undergraduate Program (HBCU–UP), the Louis Stokes Alliances for Minority Participation (LSAMP), and Centers of Research Excellence in Science and Technology (CREST).

Enhancing Opportunities for Beginning Researchers (CAREER)

The 2009 request provides an increase of approximately $14 million for funding of the CAREER program. This increase will allow us to award some 34 more CAREER awards than in fiscal year 2008. CAREER awards support exceptionally promising college and university junior faculty who are committed to the integration of research and education. Our experience with previous CAREER awardees has proven that these faculty become the research leaders of their respective fields, and this program is vital to fostering the success of emerging science and technology leaders.

Requested Funding Level: $182 million.

Stewardship

NSF's Stewardship goal, to support excellence in science and engineering research and education through a capable and responsive organization, remains a priority in the 2009 budget, with a 13 percent increase to $404.3 million. Our request increases the NSF workforce by 50 staff to enable us to manage our growing and increasingly complex workload. Investments in information technology (IT) increase by 32 percent to $82.0 million, with an emphasis on increasing the efficiency, productivity, and transparency of NSF's business processes. In this request, NSF's IT portfolio is realigned to tie funding for mission-related activities more directly to NSF's programs.

Requested Funding Level: $404 million.

Major Research Equipment and Facilities Construction (MREFC) account

NSF will continue to support a portfolio of ongoing projects in the Major Research Equipment and Facilities Construction account (MREFC), including the Atacama Large Millimeter Array, Ice Cube, and Advanced LIGO.

The Foundation continues to be committed to the Alaska Regional Research Vessel (ARRV), the National Ecological Observatory Network (NEON), and the Ocean Observatories Initiative (OOI). However, in keeping with new NSF policies, Administration and Congressional mandates, and guidance from the National Science Board, NSF has adopted more stringent budget and schedule controls to improve our stewardship of taxpayer dollars. We are postponing requests for additional funding for those projects until they have undergone a final design review, completed a risk management plan, and developed a rigorous baseline budget, including carefully considered contingencies.

NSF's MREFC portfolio includes late-stage design-phase funding for the proposed Advanced Technology Solar Telescope (ATST), which if carried into the construction phase would be the first large U.S. solar telescope built in the past 30 years. ATST would reveal critical information needed to explore crucial mysteries such as: What are the mechanisms responsible for solar flares, coronal mass ejections and space weather, with their associated impact on satellites, communications networks, and power grids? What are the processes that cause solar variability and its impact on the Earth's climate and evolution? The ATST project is managed by the National Solar Observatory, which administers the world's leading collection of solar telescopes.

Requested Funding Level: $2.5 million.

CONCLUDING REMARKS

Madam Chairwoman, I've touched on just a handful of programs found in NSF's diverse and vibrant portfolio. NSF's research and education activities support the nation's innovation enterprise. America's present and future strength, prosperity and global preeminence depend directly on fundamental research. This is not merely rhetoric; the scientific and economic record of the past 30 years is proof that an investment in R&D is an investment in a secure future.

NSF may not be the largest agency that funds science and engineering research, but our size serves to keep us nimble. Our portfolio is continually evolving as we identify and pursue new research at the frontiers of knowledge. An essential part of our mission is to constantly re-think old categories and traditional perspectives. This ability is more important than ever, as conventional boundaries constantly shift and disappear—boundaries between nations, between disciplines, between science and engineering, and between what is basic and what is applied. NSF, with its mandate to support all fields of science and engineering, is uniquely positioned to meet the needs of researchers exploring human knowledge at these interfaces, whether we're organizing interdisciplinary conferences, enabling cyber-sharing of data and information, or encouraging new collaborations and partnerships across disciplinary and national borders. No other government agency comes close to our flexibility in STEM education and basic research.

In today's high-tech economy, the supply of new jobs is inextricably linked to the health of the nation's innovation endeavor. NSF is involved in all aspects of innovation; NSF not only funds the discoveries that directly become the innovations of tomorrow, we also fund discoveries that lead to still more discoveries that lead to the innovations of tomorrow, and, perhaps most critically, we train the technologists who dream up the discoveries that lead to the discoveries and innovations of tomorrow.

Industry increasingly relies on government support for high-risk, high-reward basic research. If we fail to provide adequate support of the technological sector now, we may well reduce our own economic security. It is no accident that our country's most productive and competitive industries are those that benefited the most from sustained federal investments in R&D—including computers and communications, semiconductors, biotechnology, and aerospace.

As we look to the century ahead of us, we face the reality that the other nations in this world are eager to create jobs and robust economies for their citizens. In this context, "globalization" is shorthand for a complex, permanent, and challenging environment that calls for sustainable, long-term responses, not just short-term fixes. Regardless of our action or inaction as a nation, the world is full of highly motivated and increasingly skilled workers who are working hard to improve their economic standing and well-being. We can either innovate, and keep our economic prosperity, or stagnate, and suffer the consequences of inaction.

Despite some of the more pessimistic forecasts of some observers, I believe that America can continue to be on the leading edge of ideas and research. Through strong federal leadership, we can maintain the standing of our businesses and universities. We must not only maintain our position, we must actively seek to increase our strengths: leadership in fundamental discovery, including high-risk, high-reward transformational research, state-of-the-art facilities and infrastructure, and a world-class S&E workforce. With a firm commitment to these fundamental building blocks of our high-tech economy, we can solidify America's role as the world leader in innovation.

Madam Chairwoman and members of the Committee, I hope that this brief overview has given you a taste of just how very important the National Science Foundation and its activities are to the future prosperity of the United States. I look forward to working with you in months ahead, and I am happy to answer any questions you may have.

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

STEM EDUCATION

Question. Statistics show that women earn half of the bachelors degrees in science and engineering, yet continue to be significantly underrepresented in academic science and engineering careers (constituting 29 percent of doctoral science and engineering faculty in four-year colleges and universities and only 18 percent of full professors).

Why was ADVANCE the one program at NSF designed specifically to increase the participation and advancement of women in academic science and engineering careers cut in the fiscal year 2009 request?

Answer. The ADVANCE Program is an integral part of NSF's multifaceted strategy to broaden participation to help realize a diverse science and engineering (S&E) workforce. The program supports the critical role of the Foundation in advancing the status of women in academic S&E. ADVANCE is an NSF-wide activity and its success depends upon the cooperation, dedication, and coordinated action of directorates and offices from across the Foundation. EHR, where the ADVANCE Program now resides, supports several of the Foundation's flagship broadening participation programs and is well positioned to undertake this coordination. EHR's increased investment in fiscal year 2009 in ADVANCE serves to offset slightly the reduction from the Research and Related Activities account.

Question. NSF requests an overall increase in its fiscal year 2009 budget of 13 percent, yet the six primary programs that it utilizes to advance the goal of increasing diversity in the science and engineering workforce are only increased a combined 7 percent.

Why isn't NSF prioritizing the advancement of women and minorities in the fields of science and engineering as much as research grants?

Answer. A seven percent increase—far higher than the average increase for discretionary programs—shows NSF's strong support for these programs. NSF remains committed to broadening participation in science, technology, engineering and mathematics (STEM) disciplines. While the following six programs are flagship efforts within the HRD Division in support of diversity, there are other programs at NSF that support this goal. Alliances for Graduate Education & the Professoriate (AGEP); Centers for Research Excellence in Science and Technology (CREST); Historically Black Colleges and Universities-Undergraduate Program (HBCU–UP); Louis Stokes Alliances for Minority Participation (LSAMP); Research on Gender in Science and Engineering (GSE); and Tribal Colleges & Universities Program (TCUP).

Other programs located in the EHR Directorate that focus on diversity entirely or include it as a key component. They are: Research in Disabilities Education (RDE); Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM); Scholarships in Science, Technology, Engineering and Mathematics (S–STEM); Graduate Teaching Fellows in K–12 Education (GK–12); Robert Noyce Teacher Scholarship Program (NOYCE); and Math and Science Partnerships (MSP) Program.

Finally, several NSF programs focus on diversity as key components of workforce development: ADVANCE; Opportunities for Enhancement of Diversity in the Geosciences; Integrative Graduate Education Research Traineeship Program (IGERT); Graduate Research Fellowships (GRFs); EPSCoR (which focuses on broadened geographic diversity); Broadening Participation in Computing; and Broadening Participation in the Biological Sciences.

In addition, many NSF-supported centers conduct education and outreach efforts to increase interest in STEM. Some of these are aimed specifically at groups underrepresented in science and engineering.

Given the scope and complexity of Foundation-wide programs, NSF is currently developing a plan to coordinate ongoing STEM efforts to increase the participation of underrepresented groups as a core practice.

Question. The fiscal year 2008 omnibus urged NSF to begin focus on broadening Hispanic participation rates in science and engineering. What is NSF doing to increase Hispanic participation?

Answer. NSF appreciates the omnibus conference language encouraging the agency to broaden Hispanic participation throughout STEM disciplines. In response to the America COMPETES Act, NSF established an internal study group to determine the most effective ways to serve Hispanic-serving institutions (HSIs) through our existing programs and to consider the creation of a designated HSI program. We are in the process of gathering best practices from existing programs and scholarly research to complement current NSF program investments and to inform future programmatic directions regarding HSIs.

STEWARDSHIP

Question. How does the new "no-cost over run" policy impact the Alaska Research Vessel, NEON, and the ocean observatory initiative?

Answer. NSF expects the lead organizations for these projects to develop firm plans, budgets, risk assessments, and schedules for accomplishing the proposed activities prior to making any further request to Congress for construction funding. NSF will conduct Final Design Reviews (FDR) for all three projects, utilizing experts in all of the major technical, management, and administrative areas, to assure that these plans, budgets, risk assessments, and schedules are credible. Only after successful completion of these reviews will NSF make a request for further construction funding. The impact to these projects is that there will be confidence that they will accomplish what they propose within the envelope of requested construction funding, recognizing that required funding and schedules will be different than was previously presented in NSF budget requests.

Question. Will NSF submit a revised budget if the University of Alaska presents an acceptable schedule and budget for the Alaska Research Vessel under the new policy?

Answer. As is noted above, all future funding requests for the ARRV construction depend on the project successfully completing the final design review. Now that the FDR is a requirement, the current ARRV project plan is to complete the FDR process in time for consideration by the next Administration in the fiscal year 2010 budget request.

Question. Congress provided total appropriations of $115 million between fiscal year 2005 and fiscal year 2007 for the Scientific Ocean Drilling ship. The ship is currently under construction in Singapore as no U.S. shipyard bid on the project.

What special steps has NSF done to maintain oversight of this project given that it is on the other side of the world?

Answer. NSF has taken a number of specific steps to maintain oversight of the SODV project. These steps are intended to ensure ongoing communication with the project team in Singapore and to address the rapidly changing climate in the shipbuilding industry.

NSF has overseen the installation in Singapore of an experienced on-site project team, skilled in all aspects of ship construction and outfitting, to oversee, facilitate, and monitor progress. The on-site personnel are in daily communication with their stateside counterparts, and report regularly to NSF.

NSF staff members have made many visits to Singapore to confer with those directly involved in the refit of the ship, and to see first-hand the activity and progress that have occurred. Except for the greater travel distances involved, these oversight activities are similar to what would be done if the work were done at a closer location.

In addition to issues related to the location of the SODV refit, other issues relate to difficulties in managing the rapidly changing business climate in the shipbuilding industry. With a budget profile that allowed the SODV to enter the shipyard in 2007, rapid cost escalations meant that the original plan to extend the SODV was not financially feasible. The project team, led by the Joint Oceanographic lnstitutions' (JOI) Division of the Consortium for Ocean Leadership (COL) did not have ready a robust design for a refit within the existing hull, and time was needed to prepare one. In response to NSF concerns, COL has ensured involvement of, and buy-in from, the scientific ocean drilling community in the rescoped plans for the

SODV refit; overseen augmentation of, and changes to, the senior on-site project management team; and led planning for the final stages of construction and outfitting. NSF has requested and received from COL a Corrective Action Plan to ensure maximum efficiency and benefit to NSF in these final stages of the project.

Question. Has the weakness in the U.S. dollar adversely impacted the completion of the ship?

Answer. The effect of the weak U.S. dollar has been relatively small compared to the overall project budget of $115 million. The shipyard work is being done under a fixed price contract in U.S. dollars, and much of the ancillary science equipment is of U.S. origin. There have been negative impacts, however, due to the roughly 9 percent decline in the United States vs. the Singapore dollar, which has made it somewhat more expensive to maintain the necessary U.S. oversight team in Singapore during the refit activity.

Question. In the latest Semiannual Repot to Congress, the NSF Inspector General notes that the Large Facilities Office is not adequately staffed to handle it increasing responsibilities for oversight.

Do you plan to hire additional staff for this office?

Answer. NSF was able to add one additional person to the Large Facilities Office (LFO) in the last year, which has been very helpful. With a large number of ongoing and upcoming MREFC projects, we recognize the need to have the necessary internal resources available. The fiscal year 2009 budget includes funding for at least one additional FTE for the LFO, and we will allocate additional FTEs and financial resources as needed. We also engage outside project management expertise on a contract basis as needed.

Directorates involved in detailed planning or implementation for MREFC projects are also expected to provide the more specialized technical expertise that is closely matched to the needs of individual MREFC projects. This complements the capabilities of the LFO.

Question. If not, what other methods will you use to provide the additional oversight that is needed?

Answer. NSF continues to provide training opportunities to Program Officers to inform them of project management issues, and NSF and NSB are also examining ways that earlier NSB review and analysis of potential future large projects could strengthen NSF's oversight.

CLIMATE RESEARCH

Question. A recent GAO study of federal climate research at DOE, NASA, NSF, and NOAA examined how to make research data more widely available to research community. While some of the data generated by this research are stored in online achieves most remains in a less accessible format with individual researchers. GAO recommended that agencies develop additional archiving strategies.

What is the current policy with regard to the sharing of data at NOAA and NSF?

Answer. Data-sharing plans are an important consideration during both the peer review of proposals and subsequently in the award decision process. The NSF has a standing agency-wide data policy requiring free (other than duplication costs) and open access to data collected with NSF support. Most directorates have more detailed guidelines and terms designed specifically for the types of data normally collected in the research disciplines they support and may include specific requirements as part of their formal proposal solicitations.

Question. What are NSF and NOAA doing to address these GAO recommendations?

Answer. A large portion of the data collected routinely that is relevant to the Climate Change Science Program is obtained by various mission agencies (National Oceanic and Atmospheric Administration—National Oceanographic Data Center and National Climate Data Center, U.S. Geological Survey, United States Department of Agriculture, National Aeronautics and Space Administration, etc.), which support national archives, and much of the data collected as part of NSF's research efforts is ultimately stored in such archives. For example, much of the paleoclimate data are stored in the World Data Center for Paleoclimatology run by NOAA in Boulder, CO, although some resides in the National Lacustrine Core Repository at the University of Minnesota. Data from process studies may be stored at agency archives or at facilities serving the broader community such as the National Center for Atmospheric Research (NCAR). In addition, data are stored in personal archives maintained by NSF Principal Investigators at their home institutions.

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

POLAR ICEBREAKERS

Question. Does the funding arrangement for the polar icebreakers allow for adequate maintenance of the polar ice breaking fleet and the training/proficiency of Coast Guard crews?

Answer. Yes, assuming that our budget requests are fully appropriated. Under the terms of the USCG–NSF Memorandum of Agreement, the USCG provides budget estimates for inclusion in the President's budget request. NSF and USCG develop the annual program plan that supports operation and maintenance of the icebreakers.

Question. Did the National Science Foundation request funding this year to keep the *Polar Star* in care-taker status? Why did NSF opt to lease a foreign icebreaker rather than use the *Polar Sea* for this year's Antarctic mission?

Answer. NSF did not request funding to keep the *Polar Star* in caretaker status.

The Swedish icebreaker *Oden* was used instead of *Polar Sea* for several reasons. The *Oden* offers far superior capabilities for scientific research and the deployment enabled U.S. scientists to conduct research in the Southern Ocean that would otherwise have been impossible. In addition, using the *Polar Sea* for the Antarctic mission would have mandated subsequent dry dock maintenance and repair costs of approximately $5 million. Under our agreement for the *Oden*, our costs were strictly limited to those for operations. Finally, using *Oden* in Antarctica enabled us to keep *Polar Sea* in reserve in the North for any emergency Arctic duty. We should note also that the arrangement for use of the *Oden* was a government-to-government agreement and not an arrangement between NSF and a foreign firm.

Question. Do you see a strategic national interest in the Arctic beyond your science mission?

Answer. Other federal agencies are more qualified than NSF to address needs beyond those required to support scientific research. With decreasing ice cover in the Arctic there would seem to be a strong potential for an increased range of activities in the Arctic Ocean, including shipping and resource exploration, but a better understanding of why climate change is affecting different parts of the Arctic differently, and differently in different seasons, will be needed before these activities can proceed with confidence.

Question. Does the National Science Foundation intend to fund a *Polar Sea* Arctic mission this year in order to allow the Coast Guard icebreaking crew to maintain its competency?

Answer. Yes. The *Polar Sea* is currently underway in the Arctic, conducting crew training, USCG missions (including community liaison and law enforcement), and science of opportunity.

ALASKA REGION RESEARCH VESSEL

Question. I understand construction funding for the Alaska Region Research Vessel was not included in the President's fiscal year 2009 budget.

This vessel will replace NSF's recently de-commissioned R/V *Alpha Helix* and offer great opportunities to study the coastal and open ocean waters of the Alaska region.

What are your goals for completing construction of the vessel and what can we do to assist you in expediting the process?

Answer. NSF's goals for completing construction are:

—NSF will conduct a Final Design Review (FDR) this fall to validate the technical design, budget, and proposed schedule for the ship. The FDR's validated cost and schedule will be used to formulate the fiscal year 2010 budget request under the next Administration.

—The shipyard evaluation and bidding process will commence following FDR.

—We expect shipyard construction to require 30 months or more, followed by 6–12 months of sea trials and commissioning, overlapping with the first scientific activities.

We appreciate your offer of assistance and you and your colleagues' continued support for the Foundation's programs. In particular, your efforts to date with the University of Alaska to convey NSF's policies and the need for a rigorous pre-construction planning process have been especially valuable. We look forward to continuing to work with you as the fiscal year 2009 and subsequent budgets are considered.

NONDEPARTMENTAL WITNESSES

PREPARED STATEMENT OF THE REGIONAL INFORMATION SHARING SYSTEMS (RISS) PROGRAM

The Regional Information Sharing Systems (RISS) Program respectfully requests that Congress appropriate $52.7 million for fiscal year 2009 to continue RISS's support in combating violent crime, criminal gangs, terrorist activity, illegal drug trafficking, organized criminal activity, human trafficking, identity theft, and other regional criminal priorities and promoting officer safety.

RISS has been at the forefront in paving the way so that law enforcement, public safety, and private sector partners can share information and receive critical investigative and technical assistance. The fiscal year 2008 budget request to Congress stated that RISS has emerged as one of the Nation's most important law enforcement intelligence sharing networks and continues to support efforts to expand and improve information sharing.

RISS, which dates back to the 1970s, not only offers secure communications, access to intelligence databases, and investigative resources to law enforcement and public/private partners but also provides services to enhance and improve the ability to detect crime, apprehend offenders, and successfully prosecute individuals. These services include information sharing, analytical support, equipment loans, confidential funds, field staff support, technical support, training, research, publications, and officer safety. In many cases, these are services that criminal justice agencies would not have access to without the support of RISS.

RISS is a federally funded, nationwide program supporting local, State, Federal, and tribal law enforcement and prosecution efforts with membership in all 50 States, the District of Columbia, United States territories, Australia, Canada, and England. RISS operates on a national basis but provides support regionally through its six intelligence centers, which support and serve the unique needs of their regions. The six RISS centers and the areas that they serve are:

—*Middle Atlantic-Great Lakes Organized Crime Law Enforcement Network (MAGLOCLEN)*.—Delaware, District of Columbia, Indiana, Maryland, Michigan, New Jersey, New York, Ohio, and Pennsylvania, as well as Australia, Canada, and England.

—*Mid-States Organized Crime Information Center (MOCIC)*.—Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin, as well as Canada.

—*New England State Police Information Network (NESPIN)*.—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont, as well as Canada.

—*Regional Organized Crime Information Center (ROCIC)*.—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia, as well as Puerto Rico and the United States Virgin Islands.

—*Rocky Mountain Information Network (RMIN)*.—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming, as well as Canada.

—*Western States Information Network (WSIN)*.—Alaska, California, Hawaii, Oregon, and Washington, as well as Canada and Guam.

RISS acts as a force multiplier, enhancing the ability of criminal justice agencies to identify, target, and remove criminal conspiracies and activities spanning multijurisdictional, multistate and, sometimes, international boundaries. RISS facilitates the seamless exchange of information among agencies pertaining to known suspected criminals or criminal activity and enhances the coordination and communication among agencies that are in pursuit of criminal conspiracies determined to be interjurisdictional in nature.

There is an increasing communications sophistication by criminal networks and a rising presence of organized and mobile narcotics crime as well as a resurgence of gang activity occurring across the nation. Interagency cooperation in sharing information has proven to be the best method to combat this increasing criminal activity. The RISS centers fill law enforcement's need for rapid, but controlled, sharing of information and intelligence through their unique structure, versatility, flexibility, and diverse services. Congress funded the RISS Program to address this need, as evidenced by its authorization in the Anti-Drug Abuse Act of 1988.

The Bureau of Justice Assistance (BJA) administers RISS and has established guidelines for the delivery of RISS services. RISS is subject to oversight, monitoring, and auditing by the United States Congress; the United States Government Accountability Office; the United States Department of Justice (DOJ), BJA; and local and State governmental units. BJA also monitors RISS for 28 Code of Federal Regulations (CFR) Part 23 compliance. The 28 CFR Part 23 regulation emphasizes adherence to individual constitutional and privacy rights and places stricter controls on the RISS intelligence databases than those placed on most local, State, or Federal agencies. Evaluation of RISS continues to be positive. RISS supports and has fully operated in compliance with 28 CFR Part 23 since its inception. RISS firmly recognizes the need to ensure that individuals' constitutional rights, civil liberties, civil rights, and privacy interests are protected throughout the intelligence process. In this regard, RISS officials adopted a Privacy Policy to further strengthen their commitment and support of 28 CFR Part 23 and protection of individual privacy rights.

In 1997, well before the attacks of September 11, 2001, RISS began building a national system, a secure intranet known as RISSNET. Through funding from Congress, RISS was able to develop RISSNET, thereby creating a gateway for disparate systems to connect while providing users with the ability to quickly query, analyze, and research data. Today, RISSNET is used as the system of choice for numerous law enforcement entities. RISSNET links thousands of law enforcement, criminal justice, and public safety agencies and uses state-of-the-art technology, such as DOJ's Global Justice Extensible Markup Language (XML) Data Model, to connect existing systems and networks. RISSNET provides the communications backbone and infrastructure for bidirectional sharing of investigative and intelligence information, offers secure sensitive but unclassified electronic communications, and provides controlled access to a variety of sensitive information resources. Over 80,000 access officers, representing hundreds of thousands of law enforcement officers from around the globe, are able to access RISSNET resources.

Currently, more than 80 agencies are connected or pending connection to RISSNET. Examples include the El Paso Intelligence Center; the National White Collar Crime Center; Nlets—The International Justice and Public Safety Network; DOJ Criminal Division; information/intelligence networks from California, Colorado, Oregon, Utah, and Wyoming; and numerous other local, State, and Federal systems. In addition, the Executive Office for United States Attorneys has connected staff to RISSNET, and RISS continues to expand its partnership with the High Intensity Drug Trafficking Areas (HIDTA). Currently, 18 HIDTAs are electronically connected to RISSNET.

In this world of changing technology and with the increased need to provide timely, accurate, and complete information to law enforcement and public safety professionals, the ability to connect systems and streamline the capacity to house, share, inquire, and disseminate information and intelligence is paramount. Through RISSNET, RISS provides valuable collaboration with others who have experienced similar crime problems or who are investigating the same or similar crimes. In addition, RISS offers resources and tools to additional users beyond the typical bounds of the law enforcement realm, which vastly enhances the information exchange. After 9/11, RISS recognized the need to expand communications to public safety entities and developed the Automated Trusted Information Exchange (ATIX). ATIX is a communications system that provides first responders, critical infrastructure personnel, and other public safety personnel involved in prevention and response efforts with the ability to share terrorism and homeland security information in a secure, real-time environment. In 2007, ATIX was expanded to serve as a communications resource for both State sex offender registries and fusion centers.

In 2007, RISS expanded its RISS National Gang Program, known collectively as RISSGang, to include a criminal intelligence database, a Web site, a bulletin board, secure e-mail, and gang-specific resources. The RISSGang database provides law enforcement agencies with access to gang suspects, organizations, weapons, locations, and vehicles, as well as visual imagery of gang members, gang symbols, and gang graffiti. The Web site contains valuable information, research, tools, and other resources, including an anonymizing filter that is automatically applied when a user clicks on one of the links to published criminal gang Web sites. This tool removes the ability of the target Web sites to identify officers.

RISS is currently in the process of developing RISSafe, an officer safety event deconfliction system. RISSafe will store, maintain, and monitor information on planned law enforcement events—such as raids, controlled buys, and surveillances—with the goal of identifying and alerting affected agencies of potential conflicts. Over 18,000 law enforcement officers have been killed in the line of duty; RISSafe will make a significant contribution towards enhancing officer safety and supporting criminal investigations.

RISS partners with a number of criminal justice organizations and fosters a collaborative information sharing environment. RISS partnered with the United States Drug Enforcement Administration and HIDTAs to create the National Virtual Pointer System (NVPS). NVPS is an automated system that connects existing deconfliction pointer databases into one virtual pointer system. RISS also partnered with Project Safe Neighborhoods, which submits data to the RISS intelligence databases for the purpose of reducing gun violence. The Operation Respond Institute electronically connected its Operation Respond Emergency Information System, which provides critical information on railroads and other transportation industries, to RISSNET.

RISS is working with DOJ and the United States Department of Homeland Security (DHS) on the Counterterrorism Collaboration Interoperability Project (CCIP), which provides participating systems with the ability to publish documents for access by authorized users of other participating systems via Really Simple Syndication (RSS) feeds. This project has been recognized as a model for agencies to share information, as required by Presidential Executive Order 13388, Strengthening the Sharing of Terrorism Information to Protect Americans.

Throughout 2007, RISS continued to support a number of initiatives to enhance information sharing, including the Dru Sjodin National Sex Offender Public Website and the National Criminal Intelligence Resource Center. RISS represents the core of collaboration and constantly seeks out and fosters new and existing partnerships in order to maximize the Nation's information sharing environment.

RISS's partnerships and efforts have resulted in an unprecedented level of information and intelligence sharing. As a result, it is critical to ensure that the information is secure and available only to authorized users. RISSNET protects information through encryption, Internet protocol security standards, and firewalls to prevent unauthorized access. In addition, the criminal intelligence information accessed through RISSNET is controlled by its local, State, Federal, and tribal law enforcement member agency owners. RISS continues to evolve and expand, utilizing the latest technology to meet the needs of law enforcement member agencies.

In 2006, RISS embarked on the RISSNET 2007 initiative to streamline RISS users' access to RISSNET resources. This project enhances the security and accessibility of RISSNET and allows for compatibility and interoperability of existing systems' infrastructures to leverage and expand information and intelligence sharing systems. RISSNET 2007 consists of three main components—the RISSNET Portal, Secure Sockets Layer (SSL) authentication technology, and the Trusted Credential Project (TCP). The RISSNET Portal was launched in 2007 and provides authenticated users with one entry point for RISSNET, providing access to all RISSNET resources from one location. In addition, the Portal creates additional security layers that protect RISSNET resources and provides ease of access by RISS members to permitted resources. SSL is a widely implemented Internet browser-based technology used to transmit encrypted data between a Web server and a Web browser by creating a secure virtual connection between the browser and the server. SSL technology is supported by all major Internet browsers and is a maturely developed standard for the secure transmission of sensitive information. Finally, TCP seeks to identify industry-leading technologies for user authentication and access control and will develop, test, and demonstrate methods to recognize and accept credentials in addition to those currently used on RISSNET. These three projects work in unison and represent the natural next steps for enhancing RISS technology and service to its members.

The RISSNET architecture is referenced and recommended in the General Counterdrug Intelligence Plan (GCIP) and is endorsed by the National Criminal Intelligence Sharing Plan (NCISP). RISS has embraced and integrated the recommendations contained in the NCISP and continues to foster similar integration among its member agencies. In addition, RISS has embraced the Fusion Center Guidelines developed by DOJ and DHS and continues to build relationships with fusion centers. RISS developed a Fusion Center Partnership Strategy that integrates RISS services and tools into fusion center operations and has signed a Resolution in support of fusion centers. RISS has provided analysts to fusion centers, participated on fusion center advisory boards, provided RISSNET connectivity to fusion centers, and continues to work with fusion center leadership to tailor RISS services to their needs.

RISS is one of three systems promoted by DOJ's Law Enforcement Information Sharing Program (LEISP) Strategy and is the only nonfederal entity participating in the LEISP process. RISS has also begun exploring opportunities to meet the needs of the recently published National Information Sharing Strategy.

RISS's services and tools directly benefit detectives and investigative units within local, State, regional, Federal, and tribal criminal justice entities, making RISS a comprehensive and universal program. RISS delivers more that 20,000 analytical products annually and trains more than 68,000 officers each year. RISS's field staffs conducted over 27,000 on-site visits to member agencies last year to train, support, and help integrate RISS services. This one-on-one support has resulted in trusted relationships and a network prized among its members. These services are what make RISS a unique and valued program.

The success of RISS has been acknowledged and vigorously endorsed by the International Association of Chiefs of Police as well as other national law enforcement groups, such as the National Sheriffs' Association and the National Fraternal Order of Police.

In view of today's increasing demands on local, State, Federal, and tribal law enforcement budgets, requests for RISS services have risen. RISS's support has had a dramatic impact on the success of numerous investigations. By providing timely and accurate intelligence information, the RISS centers have greatly enhanced law enforcement's ability to more effectively dismantle criminal organizations. The results of these successes can be measured in the number of violent career criminals that are removed from our communities and the reduction of illicit drugs that are available to our young people. During the 3-year period of 2005–2007, RISS generated a return by member agencies resulting in 15,000 arrests, narcotics seizures valued over $113 million, and seizures of over $51 million in currency and/or recovered or seized property.

It is respectfully requested that Congress appropriate $52.7 million for fiscal year 2009 to continue RISS's efforts in combating crime and terrorism. Local and State law enforcement depend on RISS for information sharing, investigative support, and technical assistance and are increasingly competing for decreasing budget resources. It would be counterproductive to require local and State RISS members to self-fund match requirements, as well as to reduce the amount of BJA discretionary funding. Local and State agencies require more, not less, funding to fight the Nation's crime problem. RISS cannot make up the decrease in funding that a match would cause, and it has no revenue source of its own. Cutting the RISS appropriation by requiring a match should not be imposed on the program.

Funding is requested to support the increased needs of law enforcement and public safety entities, to maintain RISSNET, and to meet the demand for RISS services and resources. These funds will enable RISS to continue services to law enforcement agencies to identify, target, prosecute, and remove criminal conspirators involved in terrorism and other crimes that span multijurisdictional boundaries. In addition, RISS will utilize increased funds to:

—Deploy RISSafe on a nationwide scale and integrate RISSafe with intelligence systems and other deconfliction systems.
—Expand the existing RISSGang Program by developing and implementing online gang-related training programs and minimum standards for such training programs.
—Develop and implement a gang deconfliction system.
—Coordinate and host a regional/and or national gang conference.
—Expand fusion center partnerships by connecting fusion centers, providing bidirectional sharing, and offering technical on-site assistance.
—Expand RISS ATIX to accommodate the growing number of public and private sector entities requiring secure communications.
—Upgrade and maintain the RISSNET infrastructure. Upgrade hardware, operating systems, and portal framework software for the RISSNET Portal.
—Implement the Trusted Credential Project.

RISS is grateful for this opportunity to provide the committee with this testimony and appreciate the support this committee has continuously provided to the RISS Program. (See Attachment A)

ATTACHMENT A.—THE REGIONAL INFORMATION SHARING SYSTEMS

Each RISS center offers basic services to member agencies. Traditional services include information sharing, analysis, investigative support, equipment loans, confidential funds, training, and technical assistance.

Information Sharing.—The operation of RISSNET and its various applications enhances information sharing and communications among RISS members by providing various secure databases and investigative tools. Each RISS center develops and provides access to specialized information sharing systems for use by its member agencies.

Analysis.—RISS center personnel create analytical products for investigative and prosecutorial use. These products include highly complex and specialized flowcharts, link-analysis charts, crime scene diagrams, telephone toll analysis reports, and financial analysis reports and provide computer forensics analysis. Staff members also provide video and audio enhancement services.

Investigative Support.—Each center maintains a staff of intelligence technicians that support member agencies with a variety of investigative assistance. Staff members conduct database searches, utilize all RISS applications, and process batch uploads. Intelligence technicians respond to thousands of requests and questions.

Equipment Loans.—Pools of specialized and surveillance equipment are available for loan to member agencies for use in support of multijurisdictional investigations.

Confidential Funds.—Member agencies may apply for funds to purchase information, contraband, stolen property, and other items of an evidentiary nature or to provide for other investigative expenses related to multijurisdictional investigations. The availability and use of confidential funds are strictly controlled by Federal guidelines, and internal policies and procedures are developed by each center.

Training and Publications.—RISS centers sponsor or cosponsor meetings and conferences that build investigative expertise for member agency personnel. Subject areas include anti-terrorism, crime-specific investigative and surveillance techniques, specialized equipment, officer safety, and analytical techniques. In addition, each center researches, develops, and distributes numerous publications, such as bulletins, flyers, and criminal intelligence publications.

Technical Assistance.—RISS field service coordinators provide technical assistance to member agencies to facilitate delivery of RISS services. This personal interaction with member agencies significantly improves information sharing and ensures that member agencies are provided with quality and timely service.

Centers also offer additional services based on regional and member agency needs.

Prepared Statement of the Northwest Indian Fisheries Commission

Thank you for the opportunity to submit our testimony to this Committee to provide our funding requests on the Department of Commerce fiscal year 2009 appropriations. My name is Billy Frank, and I am the Chairman of the Northwest Indian Fisheries Commission (NWIFC). The NWIFC is made up of the twenty Tribes party to the *United States* vs. *Washington* litigation. The NWIFC supports an increase in funding over that proposed by the Administration for both the NOAA Fisheries and the NOAA-National Ocean Service (NOS) budgets. These budgets should, at a minimum, be that of the fiscal year 2006 enacted levels, with additional monies as described below that support key Federal and State partnerships with the twenty (20) Treaty Indian Tribes in Western Washington.

SUMMARY OF FISCAL YEAR 2009 APPROPRIATIONS REQUEST

NWIFC SPECIFIC REQUESTS

$110 million for the Pacific Coastal Salmon Recovery Fund with a $9 million allocation for the twenty affected Treaty Tribes and the Northwest Indian Fisheries Commission in Western Washington for their management responsibilities (NOAA/ National Marine Fisheries).

$3.17 million for the Tribal Ocean Ecosystem Initiative (NOAA/National Ocean Service).

JUSTIFICATION OF REQUESTS

$110 million for the Pacific Coastal Salmon Recovery Fund with a $9 million allocation for the twenty affected Treaty Tribes in Western Washington and the Northwest Indian Fisheries Commission

The Pacific Coastal Salmon Recovery Fund (PCSRF) is a multi-state, multi-tribe program established by Congress in fiscal year 2000 with a primary goal to help recover wild salmon throughout the Pacific Northwest and Alaska. The PCSRF seeks to aid the conservation, restoration and sustainability of Pacific salmon and their habitats by financially supporting and leveraging local and regional efforts. Recognizing the need for flexibility among Tribes and the States to respond to salmon recovery priorities in their watersheds, Congress earmarked the funds for salmon habitat restoration, salmon stock enhancement, salmon research, and implementation of the 1999 Pacific Salmon Treaty Agreement, as well as related agreements. PCSRF is making a significant contribution to the recovery of wild salmon throughout the region.

The Tribes' objectives for use of the PCSRF is to restore and protect essential habitat that promotes the recovery of ESA listed Puget Sound Chinook, Hood Canal Summer chum, Puget Sound steelhead, Lake Ozette sockeye, and other salmon populations in the Puget Sound and Washington Coast. These species are essential for Western Washington Tribes to exercise their treaty-reserved fishing rights consistent with *U.S.* vs. *Washington* and *Hoh* vs. *Baldrige*. These funds will support policy and technical capacities within Tribal resource management departments to plan, implement, and monitor recovery activities.

Since the program's inception, Pacific Coastal Tribes, including the 20 Treaty Tribes in Western Washington, have used PCSRF monies to remove 79 fish passage barriers—open access to 47 stream miles; restore 282 miles of instream habitat; restore 747 acres and 113 stream miles of riparian habitat; restore 129 acres of wetland habitat and protect 288 acres of habitat through land acquisition, easement or lease. The Tribes are also using these funds to implement the recovery plan for ESA-listed Puget Sound Chinook recently approved by NOAA.

Unfortunately, the PCSRF monies have decreased over the past few years from the original amount of $110 million that was appropriated in 2000 to $67 million in 2008. In the fiscal year 2009 budget proposal the Administration seeks to further decrease funding to $35 million for this very important program. The Tribes originally were slated to receive 10 percent of the overall amount, but with the declining base, the Tribal amount has dwindled precipitously. Restoration of these monies to the $110 million level will support the original intent of Congress and enable the Federal government to fill its obligations to salmon recovery and the Tribes.

$3.17 million for Tribal Ocean Ecosystem Initiative from the National Ocean Service

The Hoh River Tribe, Makah Tribe, Quileute Tribe, and the Quinault Indian Nation have deep connections to the marine resources off the coast of Washington. They have pioneered cooperative partnerships with the State of Washington and the Federal government in an effort to advance the management practices in the coastal waters. However, to be an effective partnership, the Tribes and their partners need additional funding. These requests are as follows:

Intergovernmental Policy Council (IPC) $1.10 million

The four Tribes, the State of Washington and NOAA National Ocean Service, through the Marine Sanctuary Program, have formed the Intergovernmental Policy Council (IPC). The IPC is intended to strengthen management partnerships through coordination and focus of work efforts. Through this partnership, the entities hope to maximize resource protection and management, while respecting existing jurisdictional and management authorities. While the IPC has received some funding from the Marine Sanctuary Program, the current funding does not provide for full participation in activities that will build the partnerships necessary to coordinate management and research activities within the Olympic Coast National Marine Sanctuary.

For the IPC to continue to expand its capacity for program operations, technical staff participation and development of collaborative research efforts, long-term program funding is needed. The four coastal treaty Indian Tribes, the State of Washington and the Olympic Marine Sanctuary needs $1.10 million in fiscal year 2009 to support their IPC efforts to transition into an ocean ecosystem-based management system.

As existing marine resource management transitions to an ecosystem-based management approach a forum and coordinating body such as the IPC will need the capacity to collect and organize information that will propel discussions and recommendations into decisions and actions.

Rockfish Assessment and Habitat Mapping $2.07 million

The Hoh River Tribe, Makah Tribe, Quileute Tribe, Quinault Indian Nation and the state hope to conduct a five-year ocean monitoring and research initiative to support and transition into an ecosystem-based management of rockfish. The proposal would augment the National Oceanic and Atmospheric Administration existing Northwest Science Center trawl survey data with additional State and Tribal survey data from areas currently not sampled on the continental shelf and slope. It would also expand the existing groundfish port sampling program for the region. Both of these data sources are essential to evaluate stock status and abundance. Finally, it would accomplish a comprehensive assessment of the coastal ecosystem and its associated species groups.

Effective management of the ocean ecosystem and its associated resources requires the development of baseline information against which changes can be measured. This initiative will expand on and complement existing physical and biological databases to enhance ecosystem-based management capabilities. In turn, this will support ongoing efforts by the State and Tribes to become more actively engaged in the management of offshore fishery resources. Transition to ecosystem-based management requires expansion of the current resource assessment surveys and ocean monitoring systems off the Olympic coast.

Effective conservation actions for rockfish and other groundfish species will depend on accurate knowledge and distribution of sea-floor habitat types and species found within the region. The establishment of this finer-scale biological database is an essential step toward improving the region's forecasting capability of stock status and abundance.

The partners hope to:

—Conduct a comprehensive stock assessment of rockfish resources found along the continental shelf and slope off the Olympic coast and enhance the existing groundfish port sampling efforts.

—Convene a State, Tribal and Federal technical workgroup to develop the sampling protocols and assessment methodologies necessary to incorporate this additional survey information into the annual Federal stock assessment and forecasting process.

—Increase biological sampling through the expansion of State and Tribal port sampling in Westport, La Push and Neah Bay to ensure complete coverage of all groundfish fisheries (such as sablefish, flatfish and lingcod), of which rockfish are a component of the catch.

—Complete multi-beam side-scan sonar mapping and surveying of the seabed off the Olympic coast in cooperation and partnership with the Olympic Coast National Marine Sanctuary.

—Collaborate on a research plan with the Olympic Coast National Marine Sanctuary and assist in completing the sonar mapping of seafloor relief and substrate.

—Develop a State and Tribal collaborative effort to address emerging ecosystem management concerns such as the status and abundance of deep-water coral and sponge communities that benefit the entire region.

The economic value associated with effective marine resource protection is huge. Not only are marine areas crucial for our natural resources and those that use them; they are bridges of commerce between nations and continents. Healthy oceans are essential if we value stable climates that will sustain our economies and our lives. Tribes must be partners in the efforts to research, clean up and restore the environs necessary to deal with identified problems.

BACKGROUND

When our ancestors signed treaties, ceding millions of acres of land to the United States government, they reserved fishing, hunting and gathering rights in all traditional areas. These Constitutionally-protected treaties, the Federal Trust Responsibility and extensive case law, including the *U.S.* vs. *Washington* Decision of 1974, all consistently support the role of Tribes as natural resource managers, on and off reservation. In Washington State, these provisions have developed into a generally successful co-management process between the Federal, State and Tribal governments. The co-management route is the one and only path that leads to true sustainability in our region, and is the tool that must be used to meet the many environmental challenges we face, such as polluted and over-appropriated waters, species decline and climate change. Treaties are nation-to-nation accords, and Tribes have always been outstanding natural resource managers and stewards of the land.

However, the Federal government has chosen to cut funding to natural resource management programs over the past six years. There is no question that this jeopardizes the bond of trust between our governments. It also jeopardizes management programs and infrastructure critically important to co-management and to the health and vitality of natural resources, and the Tribal and non-tribal people they sustain. The timing of funding cuts could not have been worse. We are facing many environmental and natural resource management challenges in the Pacific Northwest, caused by human population expansion and urban sprawl, increased pollution problems ranging from storm water runoff to de-oxygenated or “dead” areas in the Hood Canal, parts of Puget Sound and in the Pacific Ocean. The pathway to the future is clear to us. The Federal, State and Tribal governments must strengthen our bond and move forward, together, with the determination and vigor it will take to preserve our heritage. Together, we must focus on the needs of our children, with an eye on the lessons of the past.

OUR MESSAGE

Our message to you now is that achieving such objectives requires adequate funding. The Tribes strive to implement their co-management authority and responsibility through cooperative and collaborative relationships with the State and local communities. We constantly seek ways to restore and manage these precious natural resources in a manner that can be supported by all who live in this area. The work the Tribes do benefits all the citizens of the State of Washington, the region and the nation. But the increasing challenges I have described and the growing demand for our participation in natural resource/environmental management requires increased investments of time, energy and funding. Restoring and protecting these natural resources is essential to the economy and the quality of life that is so valued by those who live in the Northwest.

We are sensitive to the budget challenges that Congress faces. We recognize that this Administration has greatly reduced the allocation to discretionary domestic spending during the last several years, which makes it increasingly difficult to address the many requests you receive. Still, we urge you to maintain and increase the allocation and appropriations for priority ecosystem management initiatives. The need for an ecosystem-based management approach for Washington's marine waters have come into sharp focus in recent years with major studies by the U.S. Commission on Ocean Policy and the Pew Charitable Trust. In its report, "An Ocean Blueprint for the 21st Century," the Ocean Commission essentially concluded that the oceans are sick, and estimated the costs for reversing declines and restoring coasts and oceans nationwide at about $4 billion annually. Follow through on that report has obviously not approached that level of investment—and it might not for some time. But, for the sake of sustainable health, economies and the natural heritage of this resource, it is critically important for Congress to do more than it has, and to direct Federal agencies to do even more to coordinate their efforts with State and Tribal governments.

As frequently attributed to Chief Seattle (Sealth), Tribes believe all things are connected. That is why we believe only through a holistic ecosystem management approach can we find success in achieving a healthy environment and robust natural resources. However, all of this requires adequate funding.

CONCLUSION

Clearly, Western Washington Tribes are leaders in the Northwest salmon recovery effort. The Tribes possess the legal authority, technical and policy expertise, and effective programs to address impacts on wild salmon from harvest and hatcheries.

The Tribes are strategically located in each of the major watersheds, and no other group of people is more knowledgeable about the natural resources than the Tribes. No one else so deeply depends on the resource for their cultural, spiritual and economic survival. Tribes seize every opportunity to coordinate with other governments, and non-governmental entities, to avoid duplication, maximize positive impacts and emphasize the application of holistic ecosystem management. We continue to participate in resource recovery and habitat restoration on an equal level with the State of Washington and the Federal government because we understand the great value of such cooperation.

We ask that the Senate help us in our efforts to protect and restore our great natural heritage and support our funding requests. Thank you.

PREPARED STATEMENT OF THE UNITED STATES SECTION OF THE PACIFIC SALMON COMMISSION

Mr. Chairman, my name is W. Ron Allen and I serve as an Alternate Commissioner on the Pacific Salmon Commission (PSC) and as the Chair of the Budget Committee for the U.S. Section of the Commission. The Pacific Salmon Treaty (Treaty) between the United States and Canada was established in 1985. An Agreement was concluded in June of 1999 (1999 Agreement) that established new abundance-based fishing regimes under the Treaty and made other improvements in the Treaty's structure. During fiscal year 2009, the PSC will implement new Treaty fishing regimes that are currently being renegotiated. The U.S. Section recommends that Congress:

—fund the Pacific Salmon Treaty Line Item of the National Marine Fisheries Service at $8,000,000 for fiscal year 2009, restoring $1,000,000 previously provided by Congress in fiscal year 2005. This funding provides the technical support for the states of Alaska, Washington, Oregon and Idaho and the National Marine Fisheries Service to implement the salmon stock assessment and fishery management programs required to implement the Treaty fishing regimes. Included within the total amount of $8,000,000 is $400,000 to continue a joint Transboundary River Enhancement Program as required by the Treaty.

—fund the Pacific Salmon Treaty Chinook Salmon Agreement line item of the National Marine Fisheries Service for fiscal year 2009 at $1,844,000, level funding from what was provided by Congress for fiscal year 2008. This funding continues to be necessary to acquire the technical information to implement abundance-based Chinook salmon management program provided for under the Treaty.

The base Treaty implementation projects include a wide range of stock assessment, fishery monitoring, and technical support activities for all five species of Pacific salmon in the fisheries and rivers from Southeast Alaska to those of Washington, Oregon, and Idaho. The states of Alaska, Washington, Oregon, and Idaho, and the National Marine Fisheries Service (NMFS), are charged with carrying out a major portion of the salmon fishery stock assessment and harvest management actions required under the Treaty. Federal funding for these activities is provided through NMFS on an annual basis. The agency projects carried out under PSC funding are directed toward acquiring, analyzing, and sharing the information required to implement the salmon conservation and sharing principles of the Treaty. A wide range of programs for salmon stock size assessments, escapement enumeration, stock distribution, and catch and effort information from fisheries, are represented. The information from many of these programs is used directly to establish fishing seasons and harvest levels.

Congress increased this funding in fiscal year 2005 to a total of $8,000,000 to provide for programs needed to implement the new abundance-based fishing regimes established under the 1999 Agreement, but the level was reduced in subsequent years. The U.S. Section recommends that $8,000,000 be restored in fiscal year 2009 to allow full implementation of Treaty provisions. The 1999 Agreement and the fishery regimes currently being renegotiated, include fishing arrangements and abundance-based management approaches for Chinook, southern coho, Northern Boundary and Transboundary River fisheries. The $400,000 that has been provided since 1988 for a joint Transboundary River enhancement program with Canada is included in this amount.

In 1996, the United States adopted an abundance-based approach to managing Chinook salmon fisheries in Southeast Alaska. Under this approach, Chinook harvest levels are based on annual estimates of Chinook abundance. This system replaced fixed harvest ceilings agreed to in 1985, which did not respond to annual fluctuations in Chinook salmon populations. Under the 1999 Agreement, this abundance-based management approach was expanded to all Chinook fisheries subject to the Treaty. Beginning in fiscal year 1998, Congress provided $1,844,000 to allow for the collection of necessary stock assessment and fishery management information to implement the new approach. Through a rigorous competitive technical review process, the states of Alaska, Washington, Oregon, and Idaho, and the twenty-four treaty tribes are using the funding to support research and data collection needed to implement abundance-based Chinook salmon management coast-wide under the new Agreement. The U.S. Section recommends level funding of $1,844,000 for fiscal year 2009 to support the implementation of abundance-based Chinook salmon management.

The United States and Canada agreed in 1988 to a joint salmon enhancement program on the Transboundary Rivers, which rise in Canada and flow to the sea through Southeast Alaska. Since 1989, Congress has provided $400,000 annually for this effort through the National Marine Fisheries Service International Fisheries Commission line item under the Conservation and Management Operations activity. Canada provides an equal amount of funding and support for this bilateral program. This funding is included in the $8,000,000 the U.S. Section is recommending for the fiscal year 2009 NMFS Pacific Salmon Treaty line item.

This concludes the statement of the U.S. Section of the PSC submitted for consideration by your Committee. We wish to thank the Committee for the support that it has given us in the past.

SUMMARY OF PROGRAM FUNDING FOR THE U.S.-CANADA PACIFIC SALMON TREATY

	Amount
Department of Commerce: Pacific Salmon Treaty Line Item:	
Fiscal year 2007 appropriation	$7,000,000
Fiscal year 2008 appropriation [1]	5,592,000
Fiscal year 2009 administration request	5,616,000
Fiscal year 2009 U.S. Section recommendation	8,000,000
Pacific Salmon Treaty—Chinook Salmon Agreement Line Item:	
Fiscal year 2007 appropriation	1,844,000
Fiscal year 2008 appropriation	1,844,000
Fiscal year 2009 administration request	1,844,000
Fiscal year 2009 U.S. Section recommendation	1,844,000

[1] The recommended fiscal year 2008 amount includes $400,000 provided for the Joint Transboundary River Enhancement Program previously funded under the NMFS International Fisheries Commission account.

PREPARED STATEMENT OF THE INDEPENDENT TRIBAL COURTS REVIEW TEAM

Thank you and I am honored for the opportunity to submit this testimony on behalf of the Independent Tribal Court Review Team. I would like to address the serious funding needs of Tribal Courts and our requests and recommendations for the fiscal year 2009 budget for the Office of Tribal Justice in the Department of Justice.

For the past two years, our Independent Review Team, under a commercial contract by the BIA, has been traveling throughout Indian Country reviewing 25 Tribal and CFR Courts. The scope of our research project, the first of its kind, was to: (1) Provide assistance to Tribes by performing an assessment of their Tribal Courts; and (2) provide information to the BIA and Office of Management and Budget (OMB) regarding the status of Tribal Courts.

We are confident that this is the most comprehensive information compilation effort ever undertaken, and completed, regarding Tribal Courts and it is the strong recommendation of the Independent Tribal Courts Review Team that the Federal Tribal Courts budget be substantially increased in the fiscal year 2009 budget. Our Team has been to 25 Tribal Courts and we feel safe in saying that there is no one with more awareness of the current needs of Tribal Courts than our Review Team.

Budget Priorities, Request and Recommendations—$70.0 Million

+$58.4 million authorized under the Indian Tribal Justice Act of 1993, Public Law 103–176, 25 USC 3601 and re-authorized in year 2000 Public Law 106–559 (no funds to date).

+$11.6 million above the fiscal year 2008 enacted level for Tribal Courts.

Support the continuance of set-asides in the Office of Tribal Justice Programs.

Justification

There are approximately 299 tribal judicial systems in Indian country and 156 of these tribal and BIA Courts of Indian Offenses, commonly referred to as CFR Courts (Code of Federal Regulations), are BIA funded. All Tribal Court operational costs are funded under contracts, which provide less than 74 percent of need.

The President's fiscal year 2008 enacted levels are inadequate to support the operations and utility of the Tribal Justice Systems. We respectfully request Congress to take a close look at these funding levels. Our research did not identify any area that could withstand a decrease without causing harm to Tribal Court systems and Indian people. Specifically, we request the following funding in the fiscal year 2009 budget above the fiscal year 2008 enacted levels:

Line Items	Fiscal Year 2008 Enacted	Fiscal Year 2009 Tribal Requests
Tribal Courts	$8.630 million	+$11.6 million
Tribal Grants:		
Youth Programs	14.1 million	+10 million
Indian Alcohol & Substance Abuse	5.180 million	+10 million
Construction	8.630 million	+10 million
Sex Offender	940,000	+5 million
Indian Country Detention Centers	8.630 million	+10 million

The Justice Department has developed grants for a variety of current Tribal Courts programs. Unfortunately, those grants will eventually run out and it is doubtful that most Tribes will have the funds to continue to provide those services. Some Tribes, unfortunately, do not place a priority on seeking grant funds for exactly this reason. In addition, some of those grants fund what are generally considered to be permanent Court needs, such as Judge or clerk. As Examiners, we mention to Tribes that they should not rely on grant funds as permanent funding. However, most Tribes have few other means to fund permanent positions. Federal resources used for temporary grant-funded Tribe Court initiatives too often turn out to be temporary programs. (We also note that the Tribes who need the most assistance tend to be the Tribes least able to acquire grant funds.) We wonder if it would be better if such funding were placed into a permanent Tribal Court funding account.

It is a positive thing if a Tribe has recognized some Court needs and used its grant writers to find grant money to address those needs. To decrease the potential for harm when those funds are discontinued, those programs should contain or require the Tribe to develop formal plans for when the funds no longer exist. This would include, for example, redistribution of a caseload, records transfer and seeking new continuation funding. We general recommend the Court develop formal plans to address what will happen to projects in planning for the eventual loss of grant funds, particularly for those projects and positions, which would otherwise be considered permanent.

It is to the credit of many Tribes that they do seek and have had success in obtaining grant funds for the Courts. Grant funds enable the Court to supplement staff or develop programs needed by the Tribe. Several areas, funded through grants, have proven to be successful, regardless of how brief the grant is and regardless of the relative size and wealth of the Tribe. This includes Computerization, Staff Development and Training, Code Development and grants curbing Methamphetamine Abuse.

Tribes are expected to make do with money from the Bureau of Indian Affairs (BIA). The elimination of these funds will be catastrophic to the Tribal Courts and Judicial Systems. The remaining funds will only assist a small number of Tribes, hardly the intent of the Indian Tribal Justice Act. It was the intent of all involved to examine and determine the adequacy of the current Federal funding levels for Tribal Courts. Our research indicates that Tribal Courts are at a critical stage in terms of need. Tribal Court systems have Trial and Appellate Courts, conduct jury trials, within Courthouses that need improvements, and Tribal Bar listings and fees. Nationwide, there are 156 Tribes with Courts that receive Federal Funding. These Tribes divide a mere $11.4 million in Federal funds. Tribal Courts must deal with the very same issues state and Federal Courts confront in the criminal context, including, child sexual abuse, alcohol and substance abuse, (namely Methamphetamine), gang violence and violence against women just to name a few. Tribal Courts, however, must address these complex issues with far less financial resources than their Federal and state counterparts.

It is clear that Tribal Courts and justice systems are vital and important to the communities where they are located. Tribes value and want to be proud of their Court systems. There are many positive aspects about Tribal Courts. After decades of existence, many Tribal Courts, despite minimal funding, have achieved a level of experience and sophistication approaching, and in some cases surpassing, local non-Indian Courts. Tribal Courts, through the Indian Child Welfare Act, have mostly stopped the wholesale removal of Indian children from their families. Indian and Non-Indian Courts have developed formal and informal agreements regarding jurisdiction. Tribal governments have recognized the benefit of having law-trained Judges, without doing away with Judges who have cultural/traditional experience. Judicial training that addresses the existing problems in Indian Country, while also being culturally sensitive, is essential if our efforts are to be effective in deterring and solving crime in Indian communities.

With the passage of the Indian Tribal Justice Act, Public Law 103–176, 25 U.S.C. § 3601 et seq. (the "Act"), Congress found that "[T]ribal justice systems are an essential part of tribal governments and serve as important forums for ensuring public health, safety and the political integrity of tribal governments." 25 U.S.C. § 3601(5). Congress found that "tribal justice systems are inadequately funded, and the lack of adequate funding impairs their operation." 25 U.S.C. § 3601(8). In order to remedy this lack of funding, the Act authorized appropriation of base funding support for tribal justice systems in the amount of $50 million for each of the fiscal years 1994 through 2000. 25 U.S.C. § 3621(b). An additional $500,000 for each of the same fiscal years was authorized to be appropriated for the administration of Tribal Judicial Conferences for the "development, enhancement and continuing operation of tribal justice systems . . ." 25 U.S.C. § 3614.

Our research also indicates that grant programs at Justice were only moderately effective. Tribes often did not have funding to maintain grant funded programs after the conclusion of the grant. These programs were often eliminated after the conclusion of the grant. We did, however, identify several areas where grants were, or could be effective. These are grants providing for:

—*Computer Upgrade, Training and Court Management Software*.—Tribes generally do not have available funds to upgrade their use of computer technology. Increased use of computer technology improves the function of the Court and even may result in Court staff savings due to the decreased staff time needs.

—*Digitizing of Tribal Codes*.—Tribes most often collect their Codes in very large three ring binders. Everyone does not always receive new law. It is difficult to obtain a copy of the Code. If Codes are digitized, they can be easily distributed on CD and even be placed on the Tribal website. The result is a more efficient system

—*Development of MOU/MOAs with Local Non-Indian Jurisdictions*.—There is a large and growing problem resulting from the Oliphant Case. Tribal jurisdictions have no control over unlawful acts committed by non-Indian offenders. This has specifically resulted in drug dealers and methamphetamine labs moving on to Indian lands. Many Tribes and non-Indian jurisdictions have developed MOU/MOAs that provide for jurisdictional compromise between Law Enforcement and Courts. More of these agreements should be encouraged.

—*Administration of Tribal Courts*.—Tribal legislatures and Administration generally have several areas of relationship; including hiring, payroll, and financial administration of the Court. Often, Tribal governments are confused and very concerned about where to draw the line regarding the relationship with the Court. They do not want to violate the Courts independence. Tribes need help to formally develop the relationship between the Courts and other governmental entities. This may include such things as development of an over-site committee and a judicial employment contract.

Independent Tribal Court Review Team Report Findings

The Independent Tribal Court Review Team completed the Tribal & CFR Court Reviews Project Fiscal Year 2006 Final Report. The Report contains 132 findings regarding all areas involving Tribal Courts. Many of the findings support the recommendations made above, including several indicating that Tribal Courts are under-funded. We list some of these below:

—*Finding #38*.—The Federal Funds are inadequate to fund most Court needs. Other Court needs such as technology, supplies, travel and training, are usually assumed by the Tribe. These needs are often provided by decreasing available funds for Tribal Programs. Or, the needs are simply not provided and the Courts must make due without these services.

—*Finding #32*.—Almost all Courts are under-funded. Court budgets vary widely. When you get beyond the few Tribes with very successful economic development ventures, a substantial number of the Courts, approximately 90 percent, are under-funded. They are missing staff positions and common items such as a safe, a Court recording system, telephone systems, or security systems. Almost every Court that is under-funded is still mostly functional.

—*Finding #33*.—Many are under-funded at a critical level. Some contracted Courts are very poor. There are Courts with only a part-time Judge and a Clerk. They must rely on Administration for simple items, such as printer ink. There is no training. Salaries are below the poverty level. We have seen Courts that operate on less than $25,000 per year. We have seen groups of Tribes with low Federal funding numbers joined into a single overworked Court system that can only provide limited service.

—*Finding #6*.—A very small number of Tribes have large amounts of available economic development funds. These Tribes (about 10 percent) are those few with very successful economic development ventures. These Tribes contribute 90 percent or more of the funding to their Courts. These Tribes pay well, they have several Attorneys on staff, including on the Court staff and have fully funded law enforcement. These Tribes are better trained and experientially and financially able to deal with Court matters, including criminal matters, than local city, county and state governments.

—*Finding #5*.—Most Tribal economic development funds provide jobs and pay for a modest amount of other governmental services. The biggest fallacy about Indian Nations is that gaming has made all Tribes rich. (This fallacy isn't always bad. It often encourages non-Indian governments and law enforcement to work with the Tribe.) The vast majority of Tribes has limited economic development that (1) funds itself and (2) can modestly assist Tribal programs and the Court budgets. A portion of Tribes has no economic development or economic development that only funds itself.

Finally, the Indian Civil Rights Act: A Report of the United States Civil Rights Commission, June 1991 found that "the failure of the United States Government to provide proper funding for the operation of tribal judicial systems . . . has continued for more than 20 years." The Commission also noted that "[f]unding for tribal judicial systems may be further hampered in some instances by the pressures of competing priorities within a tribe." Moreover, they opined that "If the United States Government is to live up to its trust obligations, it must assist tribal governments in their development . . ." More than sixteen years ago, the Commission "strongly support[ed] the pending and proposed Congressional initiatives to authorize funding of Tribal Courts in an amount equal to that of an equivalent State Court" and was "hopeful that this increased funding [would] allow for much needed increases in salaries for judges, the retention of law clerks for tribal judges, the funding of public defenders/defense counsel and increased access to legal authorities."

We are still hopeful that these recommendations will come to fruition!

On behalf of the Independent Tribal Court Review Team: Charles D. Robertson Jr., Esquire, the Honorable Philip D. Lujan, Court Reporter Myrna Rivera and the

Honorable Elbridge Coochise, thank you again for your consideration of these requests. Should you have any questions, please feel free to contact Team Leader Elbridge Coochise at 602–418–8937 or Charles D. Robertson, Jr. at 605–390–0061.

PREPARED STATEMENT OF THE AMERICAN CHEMICAL SOCIETY

The American Chemical Society (ACS) appreciates the opportunity to submit public testimony to the Commerce, Justice, Science and Related Agencies Subcommittee on the fiscal year 2009 budget for the National Science Institute of Standards and Technology (NIST).

The ACS is a nonprofit scientific and educational organization, chartered by Congress in 1937, with more than 160,000 chemical scientists and engineers as members. The world's largest scientific society, ACS advances the chemical enterprise, increases public understanding of chemistry and science, and brings its expertise to bear on state and national matters.

Investments in NIST advanced research, measurement methods, and standards are vital to American industry as well as the nation's economic competitiveness and security. Increased funding is necessary to meet ongoing private sector needs for NIST measurements and standards, as well as the growing needs in homeland security, advanced manufacturing, climate, and nanotechnology. America's future competitiveness will be enhanced through sustained, predictable federal investments in science agencies like NIST.

Specifically, the ACS urges Congress to support the $634 million funding level (5.5 percent increase over fiscal year 2008) for the NIST core programs as outlined in the President's fiscal year 2009 budget request. While this falls short of the level authorized to enhance U.S. innovation and competitiveness in the America COMPETES Act passed last summer with overwhelming bipartisan support, we hope that Congress will strive to return to this funding blueprint over time. Additionally, the ACS supports the $535 million request for NIST laboratories (21.3 percent increase over fiscal year 2008). However, we strongly dissent from the proposed termination of the Technology Innovation Program (TIP) and urge Congress to fund the program at its authorized level of $131.5 million.

NIST Laboratories

NIST laboratories serve as the technological nerve center for countless products and services across industries. By advancing research and extremely accurate measurement technology, NIST enables universal quality-control technologies that undergird industrial productivity, efficiency improvements, and faster product development. NIST also plays a critical role in advancing public health and safety, environmental progress, and national security. For example, NIST's calibration and related measurement methods are critical in areas such as emission control, fuel-composition control, laser eye surgery, smoke-detector sensitivity, electricity-meter readings, energy-efficiency measurement, and the operation of fiber optics. The ACS strongly supports the $535 million request for NIST laboratories.

However, we remain concerned that recent cuts in standards-related programs have hampered NIST's ability to promote U.S. standards and to facilitate global trade. Without NIST's consensus-based measurement standards, companies would be less innovative, less efficient, and less competitive. Independent studies show that every dollar invested in NIST measurement and standards returns at least three dollars in national economic benefit.

Additionally, the ACS supports the request for $99 million for NIST facilities. These funds support facility improvements and acquisition of cutting-edge equipment in Boulder, Colorado, and Gaithersburg, Maryland. In previous years, in excess of $100 million was used annually to support projects peripheral to the NIST mission. As a result, NIST facilities are suffering to the point of becoming ineffective for cutting-edge research.

Technology Innovation Program

The ACS continues to support NIST's Technology Innovation Program (TIP), established to support, promote, and accelerate innovation in the United States through high-risk, high-reward research in areas of critical national need. This program enables small- and medium-sized businesses to work in joint ventures and with universities to commercialize high-risk technologies. Without this program, the United States would continue to be at a global competitive disadvantage if these businesses, the traditional incubators of innovation, could not pursue high-risk opportunities. ACS strongly opposes the administration's proposed termination of TIP. We urge Congress to fully fund TIP (as was the practice to restore funding to the

Advanced Technology Program—TIP's predecessor) at the $131.5 million level authorized by the America COMPETES Act (Public Law 110–69) for fiscal year 2009.

PREPARED STATEMENT OF THE AMERICAN GEOLOGICAL INSTITUTE

To the Chairwoman and Members of the Subcommittee: The American Geological Institute (AGI) supports fundamental Earth science research sustained by the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), the National Institute of Standards and Technology (NIST) and the National Aeronautics and Space Administration (NASA). Frontier research on Earth, energy and the environment has fueled economic growth, mitigated losses and sustained our quality of life. The Subcommittee's leadership in expanding the federal investment in basic research is even more critical as our nation competes with rapidly developing countries, such as China and India, for energy, mineral, air and water resources. Our nation needs skilled geoscientists to help explore, assess and develop Earth's resources in a strategic, sustainable and environmentally-sound manner and to help understand, evaluate and reduce our risks to hazards. AGI supports a total budget of $7.32 billion for NSF (as authorized in the America COMPETES Act of 2007—Public Law 110–69); $542 million for Scientific and Technical Research and Services at NIST (as authorized in America COMPETES Act); $4.5 billion for NOAA (an increase of $400 million over the request to maintain core programs and infrastructure), and $4.869 billion for the Science Mission Directorate at NASA (an increase of about $428 million over the request to maintain core research and missions).

The President's American Competitiveness Initiative and the America COMPETES Act of 2007 supports a doubling of physical science research at NSF and NIST, while noting the importance of robust research and science education programs at NASA and NOAA. AGI strongly supports both initiatives and the inclusion of Earth science in such efforts.

AGI is a nonprofit federation of 44 geoscientific and professional societies representing more than 100,000 geologists, geophysicists, and other Earth scientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice for shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources and interaction with the environment.

NSF

We applaud the President's request for a 13 percent increase for an overall budget of $6.854 billion for NSF and the Administration's commitment to the American Competitiveness Initiative. We hope that the Subcommittee can strengthen our research and science education initiatives by funding NSF at an overall budget of $7.32 billion which is consistent with the amount authorized in the America COMPETES Act of 2007. NSF remains under funded and would benefit from an increase of about $466 million over the request in fiscal year 2009. AGI believes that such a forward-looking investment in tight fiscal times will pay important dividends in future development and innovation that drives economic growth, especially in critical areas of sustainable and economic natural resources and reduced risks from natural hazards.

NSF Geosciences Directorate.—The Geosciences Directorate is the principal source of federal support for academic Earth scientists and their students who are seeking to understand the processes that ultimately sustain and transform life on this planet. The President's budget proposal requests an increase of about 13 percent (about $96 million) for a total budget of about $849 million, which AGI strongly supports.

The President's request for fiscal year 2009 asks for $260.58 million for Atmospheric Sciences, $177.73 million for Earth Sciences, $353.5 million for Ocean Sciences and $56.82 million for Innovative and Collaborative Education and Research (ICER) within the Geosciences Directorate. Much of the geosciences research budget is for understanding that is critical for current national needs, such as climate change, water and mineral resources, energy resources, environmental issues and mitigation of natural hazards. AGI asks the Subcommittee to strongly support these essential investments and requests that these investments be used for research.

A significant concern for NSF and GEO is the rising costs of materials, infrastructure, and operations and maintenance. Costs for drilling, ships, instrumentation and raw materials are sky-rocketing as the supply and demand for these has increased in the public and private sector. Unexpected shortages, increasing competition and growing demand is significantly increasing the cost of basic research in GEO. This is one reason for NSF's decision to defer the Alaska Region Research Vessel (ARRV) and the Ocean Observatories Initiative (OOI) which would receive no funding from the Major Research Equipment and Facilities Construction (MREFC) account, but would instead receive about $7.5 million from the GEO Research and Related Activities account for planning.

Infrastructure and operation and maintenance costs for facilities are coming directly from the research budget within GEO. Among the major facilities, the Academic Research Fleet would receive $87.96 million, EarthScope Operation would receive $26.29 million, Incorporated Research Institutions for Seismology (IRIS) would receive $12.2 million, Ocean Drilling Activities would receive $47.4 million, Ocean Observatories would receive $10.5 million and the National Center for Atmospheric Research would receive $95.42 million. These facilities are essential for not only basic research but also for addressing critical issues facing the nation, such as climate change, energy and mineral resources, water resources and hazards mitigation. Funding for these facilities, many of which have been operating for decades, must remain robust and require an infusion of funds approaching $300 million. Therefore AGI strongly supports the congressionally mandated budget of $7.32 billion for NSF in fiscal year 2009 and asks that a significant fraction of the $466 million increase relative to the President's request be used to support facilities, whose operating funds are coming from the research budget of GEO.

We would encourage the general increase for GEO to focus on funding research, which means providing essential support to the faculty, staff, post-doctoral researchers, graduate students and undergraduate students at universities and other educational/research institutions across the nation. The outstanding facilities being maintained by GEO require investments in outstanding human capital through competitive research grants. Now is the time to boost Earth science research and education to fill the draining pipeline of skilled geoscientists and geo-engineers working in the energy industry; the construction industry, particularly on levees and dams; the environmental industry; the academic community, particularly on understanding natural hazards and the sustainability of our natural resources; the primary federal Earth science agencies, such as the United States Geological Survey; and in all areas of education.

NSF Support for Earth Science Education.—Congress can improve the nation's scientific literacy by supporting the full integration of Earth science information into mainstream science education at the K–12 and college levels. AGI supports the Math and Science Partnership (MSP) program, a competitive peer-reviewed grant program that funds only the highest quality proposals at NSF. The NSF's MSP program focuses on modeling, testing and identification of high-quality math and science activities whereas the Department of Education MSP program does not. The NSF and Department of Education MSP programs are complementary and are both necessary to continue to reach the common goal of providing world-class science and mathematics education to elementary and secondary school students. AGI opposes the transfer of the MSP from NSF to the Department of Education.

NOAA

AGI appreciates the President's request for increased funding for NOAA for a total budget of $4.1 billion. Unfortunately, NOAA's funding has remained flat, at $3.9 billion since fiscal year 2005 and based on an annual inflation rate of 3 percent a budget of $4.4 billion in fiscal year 2009 would leave the agency's budget level in constant dollars. NOAA cannot support its core mission services including weather and severe storm forecasting, spill response, ocean observing, habitat restoration and conservation, and research on climate change, fisheries, and coastal and marine ecosystems without a more robust budget. We ask that the Subcommittee provide small increases (about 10 percent increases to their total budgets) rather than proposed cuts to the National Ocean Service, the National Marine Fisheries Service and the Office of Atmospheric Research following the recommendations of the U.S. Commission on Ocean Policy. AGI also supports the additional increased funding for the National Weather Service for analysis, modeling and upgrading of observing systems and additional increases for the National Environment Satellite, Data and Information Service for the development of the Geostationary Operational Environmental Satellite (GOES–R) and the National Polar-Orbiting Operational Environmental Satellite System (NPOESS). Both satellite systems will maintain a global view of the planet to continuously watch for atmospheric triggers of severe weather conditions such as tornadoes, flash floods, hailstorms, and hurricanes.

NIST

We applaud the President's request for a 22 percent increase in research and related funding for NIST in fiscal 2009. Basic research at NIST is conducted by Earth scientists and geotechnical engineers and used by Earth scientists, geotechnical engineers and many others on a daily basis. In particular, we strongly support increases for Measurements and Standards for the Climate Change Science Program ($5 million), Disaster Resilient Structures and Communities ($4 million) and the National Earthquake Hazards Reduction Program (NEHRP) ($3.3 million). The climate change research will improve the accuracy of climate change measurements, may reduce satellite costs and may help to guide climate change policy. The hazards research will help to reduce the estimated average of $52 billion in annual losses caused by floods, fires and earthquakes. NIST is the lead agency for NEHRP, but has received only a small portion of authorized and essential funding in the past. AGI strongly supports a doubling of the NIST budget over 5 to 7 years as authorized in the America COMPETES Act of 2007, so that core research functions at NIST are maintained, while needed funding for climate change and hazards are protected.

NASA

AGI supports the vital Earth observing programs within NASA. Currently the topography of Mars has been measured at a more comprehensive and higher resolution than Earth's surface. While AGI is excited about space exploration and the President's Vision for Exploration, we firmly believe that NASA's Earth observing program is effective and essential to solving global to regional puzzles about Earth systems, such as how much and at what rate is the climate changing. AGI strongly supports the requested increase for Earth Science and Planetary Science programs within the Science Mission Directorate.

The Science Mission Directorate, which includes Earth Science, Planetary Science, Astrophysics and Heliophysics, would receive $4.441 billion in the fiscal year 2009 proposal, a decline of 6 percent or $265 million compared to fiscal year 2008 enacted levels. The President's fiscal year 2009 budget request would provide $1.3675 billion for NASA's Earth Science program, a 6.8 percent increase over the fiscal year 2008 appropriation to continue with current missions and begin development of new missions. AGI is very grateful to see an increase for Earth science. Unfortunately, about $570 million of the increase created for the decadal survey missions is funded through the transfer of funding from other science divisions, resulting in reductions in the Mars Exploration Program, a delay to the Solar Probe mission and other programmatic cuts. In addition the funding outlook does not come close to meeting the $500 million annual increase recommended by the National Academies decadal survey report to bring the program back to its fiscal year 2000 funding level and enable the decadal recommendations.

AGI asks for a budget of $4.869 billion for the Science Mission Directorate at NASA or an increase of about $428 million over the President's request. The increase would eliminate the $265 million deficit compared to fiscal year 2008 enacted budget for the Science Mission Directorate in the President's proposal and would include an additional $163 million for the Earth Science program (for a total of $1.530 billion in fiscal year 2009). This would bring the Earth Science program up to an increase of $250 million about half of what is needed to meet the priorities of the decadal survey, but enough to keep key missions on track under tight fiscal constraints. We strongly urge the Subcommittee to return spending levels for Earth science within NASA to fiscal year 2000 levels (eliminating a 30 percent cut over the past 6 years) and implement the priorities of the National Academies Earth Science and Applications from Space Decadal Survey.

I appreciate this opportunity to provide testimony to the Subcommittee and would be pleased to answer any questions or to provide additional information for the record. I can be reached at 703–379–2480 ext. 228 (voice), 703–379–7563 (fax), rowan@agiweb.org, or 4220 King Street, Alexandria VA 22302–1502.

Prepared Statement of the American Museum of Natural History

Overview

Recognizing its potential to support NASA in its goals to pioneer the future in space exploration, scientific discovery, and aeronautics research; to develop a balanced overall program of science, exploration, and aeronautics; and to establish new and innovative programs to enhance understanding of our Earth, other planets, asteroids, and comets in our solar system, as well as the search for life around other stars, the American Museum of Natural History (AMNH) seeks $3.5 million to advance its successful multi-year collaboration with NASA to contribute its unique science, education, and technological capacity to helping the Agency to meet these goals.

About the American Museum of Natural History

The American Museum of Natural History (AMNH) is one of the nation's preeminent institutions for scientific research and public education. Since its founding in 1869, the Museum has pursued its joint mission of science and public education. It is renowned for its exhibitions and collections of more than 32 million natural specimens and cultural artifacts. With some 4 million annual on-site visitors—approximately half of them children—it is one of the largest, fastest growing, and most diverse museums in the country. Museum scientists conduct groundbreaking research in fields ranging from all branches of zoology, comparative genomics, and informatics to Earth science, biodiversity conservation, and astrophysics. Their work forms the basis for all the Museum's activities that seek to explain complex issues and help people to understand the events and processes that created and continue to shape the Earth, life and civilization on this planet, and the universe beyond.

The American Museum—NASA Partnership

NASA and the AMNH for many years engaged in a partnership founded on a joint commitment to cutting-edge research and the integration of that research into unique educational tools and resources. The AMNH has worked with the Agency to develop innovative technologies and resources that provide an unparalleled platform for interpreting, displaying, and distributing NASA content to audiences nationwide.

—The Museum has built a set of singular national resources that bring cutting-edge science and integrated NASA content to total audiences of more than 16 million in New York City, across the country, and around the world. In the New York area alone, the Museum reaches nearly four million annual visitors, including more than 450,000 children in school groups and more than 5,000 teachers, with millions visiting online.

—We have created Science Bulletins—technologically innovative, immersive multimedia science encounters, presenting space, Earth, and life science news and discoveries in visually stunning feature documentaries, data visualizations, and weekly updates.

—We have launched a successful program to disseminate project resources to informal learning venues nationally and internationally, with Science Bulletins already on view in 40 locations across the country (including eight NASA visitor centers), with more being added.

—The Museum has made numerous technological breakthroughs—it has established leadership in science visualization and high resolution renderings of massive data sets; it has converted its Space Shows to digital format, making the AMNH the only full planetarium dome content provider that crosses all major platforms; it has pioneered a unique online distribution network that each week streams new science content in HD MPEG2 encodes to partners across North America and most recently, has simplified the technical requirements of the network, including new server and/or lower bandwidth for downloading, so that content is more accessible to more venues.

—AMNH routinely hosts major events celebrating NASA's mission highlights and milestones. Recent events have included live, large-scale events of broadcasts of the New Horizons launch, Stardust sample return, and Mars Reconnaissance Orbiter arrival at Mars.

—The Museum's educational mission is fueled by and reflects cutting-edge science, including the work of our scientists in collaboration with NASA centers and researchers.

Building on this foundation, the Museum seeks in fiscal year 2009 to advance the AMNH–NASA collaboration—with a particular focus on scaling up to reach even larger audiences—with a program for communicating current science content, and content about NASA science and missions in particular, to diverse national audiences. The Museum's activities will include the development of current NASA science education resources, such as Science Bulletins, and continuing to scale up their national distribution for presentation in public spaces and for classroom use.

Science Bulletins (SB) is a nationally distributed, multimedia science exhibition program targeted to informal learning settings. It presents cutting-edge research and discoveries in visually compelling feature documentaries and updates in flexible, large-screen, high-definition video and interactive kiosk versions, as well as in a free online version adapted for classroom use. Our SB program for the following year includes expanding dissemination significantly, developing new visualization methods for use in the development and distribution of SB, and reaching out in diverse ways to the formal education sector to maximize access to the Science Bulletins at the K–12 level.

Museum activities for the next year also include R&D on new techniques for visualizing massive space science data sets, creating visualization tools for presenting

NASA missions and other dynamic science stories, and for advancing innovative solutions to technical challenges in presenting digital planetarium shows. AMNH will conduct extensive internal and external evaluation of this program's activities.

PREPARED STATEMENT OF THE AMERICAN MUSEUM OF NATURAL HISTORY

Overview

Recognizing its potential to support NOAA in its goals to understand and predict changes in the Earth's environment; to conserve and manage coastal and marine resources; and to protect, restore, and manage the use of coastal and ocean resources to meet our Nation's economic, social, and environmental needs, the American Museum of Natural History (AMNH) seeks $2 million to advance a partnership with the agency to promote the environmental education, outreach, and research so pivotal to the health of our nation and our planet.

About the American Museum of Natural History

The AMNH is one of the nation's preeminent institutions for scientific research and public education. Since its founding in 1869, the Museum has pursued its mission to "discover, interpret, and disseminate—through scientific research and education—knowledge about human cultures, the natural world, and the universe." It is renowned for its exhibitions and collections of more than 32 million natural specimens and cultural artifacts. With nearly four million annual visitors, its audience is one of the largest, fastest growing, and most diverse of any museum in the country. Museum scientists conduct groundbreaking research in fields ranging from zoology, comparative genomics, and informatics to Earth, space, and environmental sciences and biodiversity conservation. Their work forms the basis for all the Museum's activities that seek to explain complex issues and help people to understand the events and processes that created and continue to shape the Earth, life and civilization on this planet, and the universe beyond.

The Museum's Center for Biodiversity and Conservation, founded in 1993, is dedicated to enhancing the use of scientific data to mitigate threats to global biodiversity, and to integrating this information into the conservation process and disseminating it widely. It conducts conservation-related field projects around the world, trains scientists, organizes scientific symposia, presents public programs, and produces publications geared toward scientists, policy makers, and the lay public. Each spring, the CBC hosts symposia that focus on conservation issues. The 2007 symposium, Small Matters: Microbes and Their Role in Conservation, brought together a diverse group of microbiologists and conservation biologists to explore broad questions of the planet's microbial diversity and how conservation practices take microbial life into account. The 2008 symposium, Sustaining Cultural and Biological Diversity in a Rapidly Changing World: Lessons for Global Policy will seek to bridge gaps, address challenges and opportunities, and help to forge a long-term multi-dimensional vision for sustaining biological and cultural diversity.

The Museum's renovated Hall of Ocean Life, reopened in spring 2003, is a major focal point for public education on marine science issues. Drawing on the Museum's world-renowned expertise in Ichthyology as well as other areas of Vertebrate as well as Invertebrate Zoology, the Hall is pivotal in educating visitors about the oceans' key role in sustaining life on our planet. The renovated Hall of Ocean Life, together with the new Halls of Biodiversity, Planet Earth, and the Universe and the rebuilt Hayden Planetarium (part of the new Rose Center for Earth and Space) provide visitors with a seamless educational journey from the universe's beginnings to the formation and processes of Earth to the extraordinary diversity of life on our planet.

Common Goals of NOAA and AMNH

The National Oceanic and Atmospheric Administration (NOAA) is committed to understanding and predicting changes in the Earth's environment and to conserving and managing coastal and marine resources to meet the nation's needs. NOAA's Education Plan outlines a broad vision for reaching various audiences to build awareness and knowledge of issues related to the world's atmosphere, climate, oceans, and coastal ecosystems. Addressing the needs of teachers, students, and policy makers as well as the general public, the agency's goals include enhancing environmental literacy and knowledge, application of NOAA science, and development of a capable and diverse workforce for environmental science.

The American Museum of Natural History shares NOAA's commitment to these environmental goals and to the scientific research and public education that support them. Since its founding in 1869, the American Museum has pursued its mission of scientific investigation and public education. Its exhibitions and collections serve as a field guide to the entire planet and present a panorama of the world's cultures. Museum collections of some 32 million specimens and cultural artifacts provide an irreplaceable record of life. More than 200 Museum scientists conduct groundbreaking research in fields as diverse as systematic and conservation biology, astrophysics, and Earth and biodiversity sciences. The work of scientific staff fuels exhibitions and educational programming that reach annually an on-site audience of nearly four million visitors—nearly half of them children.

Environmental Literacy Initiative

In fiscal year 2004, as a result of Congressional leadership, the Museum entered into a partnership with NOAA that launched a multi-year marine science and education initiative. Support for this initiative, which encompassed a broad range of education and research activities closely aligned with NOAA goals and purposes, was continued in fiscal year 2005 (and recommended in the fiscal year 2007 Senate report), and further leveraged by Museum scientists who successfully secured competitive NOAA education and research funding.

Building upon this strong foundation, and in concert with the strategic priorities of NOAA and the Museum, we seek $2 million in fiscal year 2009 to join with NOAA in education, outreach, and research activities that promote environmental literacy, particularly concerning climate. Over a one-year period, the Museum will seek to advance the nation's climate literacy by carrying out a rich agenda of public education and outreach activities, many in conjunction with a major national exhibition on climate change. These activities will include presenting current climate-related issues and news in the Museum's nationally distributed Science Bulletins program; developing advanced visualization tools and techniques for presenting environmental data to the public in varied formats; developing on-site and online professional development offerings, exchanges, and resources for teachers, children, families, and students; presenting programs for the general public; and carrying out research that advances conservation of marine ecosystems systems.

PREPARED STATEMENT OF THE AMERICAN PHYSIOLOGICAL SOCIETY

The American Physiological Society (APS) thanks the Subcommittee for its commitment to scientific research at the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA). Scientific research plays an important role in technological innovation and economic development and therefore is critical to the future of our nation. The APS recognizes that the NSF has benefited from recent budget increases, but is disappointed that the agency has fallen behind the budget levels endorsed by Congress and the Administration in the America COMPETES Act passed in 2007. The APS recommends that the NSF be funded at the authorized level of $7.33 billion in fiscal year 2009, which will keep the agency on track to double its budget over the next several years. While the overall budget for NASA continues to grow, the APS remains concerned about the lack of consistent funding for research into the effects of spaceflight on humans. The APS recommends that funding for NASA's Human Research Program (HRP) be reinvigorated with increased funds in fiscal year 2009.

The APS is a professional society dedicated to fostering research and education as well as the dissemination of scientific knowledge concerning how the organs and systems of the body work. The Society was founded in 1887 and now has more than 10,000 members who do research and teach at public and private research institutions across the country, including colleges, universities, medical and veterinary schools. Many of our members conduct physiology research that is supported by funds allocated through the NSF and NASA. In this testimony, the APS offers its recommendations for fiscal year 2009 funding for both agencies.

NSF

The basic science initiatives funded by the NSF are driven by the most fundamental principles of scientific inquiry. Although at times NSF-funded research may seem to be exploring questions that lack immediate practical application, we have learned again and again that the relevance of the knowledge gained becomes apparent over time. The NSF provides support for approximately 20 percent of federally funded basic science and is the major source of support for non-medical biology research, including integrative, comparative, and evolutionary biology, as well as interdisciplinary biological research.

The majority of the funding NSF provides is awarded through competitive, merit-based peer review, which ensures that the best possible projects are supported. NSF has an excellent record of accomplishment in terms of funding research endeavors that have produced results with far-reaching potential. Listed below are just a few of NSF's most recent advances in biological research.[1]

—Scientists have developed computational methods to catalog genes involved in memory and learning.

—Research into the molecular characteristics of degenerative neurological diseases such as Alzheimer's, Parkinson's and the human version of Mad Cow disease has revealed similar molecular pathology underlying all three diseases.

—Novel imaging techniques have been developed that could aid in the earlier diagnosis of pancreatic cancer, a disease that is especially deadly due to delayed detection.

—Studies of abnormally developed frogs led to the discovery that nutrient runoff from agriculture fuels parasitic infections that lead to developmental deformities in amphibians.

—Researchers studying flatworms (planaria) found that the connections between cells play a role in regulating how adult stem cells contribute to injury repair.

In addition to funding innovative research in labs around the country, the NSF also fosters the next generation of scientists through education programs. The APS has benefited from this support which allows us to provide training opportunities and career development activities to enhance the participation of underrepresented minorities in science. The APS was recognized for its efforts in 2003 with a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM), funding for which was provided by NSF and was reinvested in our education programs. We believe that NSF is uniquely suited to administer science education programs of the highest quality, and we recommend that Congress continue to provide federal funds for science education through the NSF.

Passage of the America COMPETES Act showed that Congress is committed to fostering the NSF not only through increased appropriations, but also through explicit support for the agency's respected education programs. We thank Congress for the passage of the America COMPETES Act and join the Federation of American Societies for Experimental Biology (FASEB) in recommending that the NSF be funded at the full authorized level of $7.33 billion in fiscal year 2009.

NASA

The Human Research Program (HRP) at NASA conducts research and develops countermeasures with the goal of enabling safe and productive human space exploration. During prolonged space flight, the physiological changes that occur due to microgravity, increased exposure to radiation, confined living quarters, and alterations in eating and sleeping patterns can lead to health problems and reduced ability to perform tasks. APS scientists are actively engaged in research that explores the physiological basis of these problems, with the goal of contributing to the development of countermeasures.

Given NASA's current focus on manned space exploration, it is critical that resources be devoted to research into the health effects of prolonged space flight. NASA is the only agency whose mission includes addressing the biomedical challenges of manned space exploration. Over the years, the amount of money available for conducting this kind of research at NASA has dwindled, and this year the budget request for the Human Research Program stands at only $151.9 million. The cuts are especially troubling given the Administration's commitment to returning humans to space. NASA and the National Institutes of Health signed a memorandum of understanding in 2007 that provides a framework for the two agencies to work together and move health research forward. While the agreement does not involve any funding obligations, we are hopeful that the agencies will develop plans to take advantage of the opportunities for collaboration. The APS joins FASEB in applauding Congress' call in the fiscal year 2008 Omnibus bill for NASA to "establish and ongoing relationship" with the National Academies for the purpose of "independent project review." Independent review will help ensure that resources are appropriately directed towards critical research programs.

The APS urges Congress and NASA to increase support for peer-reviewed research into the health risks of long-term space flight and development of appropriate countermeasures at a rate that meets or exceeds the biomedical research and development price index (BRDPI).

[1] Research examples from http://www.nsf.gov, accessed March 18, 2008.

PREPARED STATEMENT OF THE AMERICAN SOCIETY OF AGRONOMY, CROP SCIENCE SOCIETY OF AMERICA, SOIL SCIENCE SOCIETY OF AMERICA

The American Society of Agronomy, Crop Science Society of America, Soil Science Society of America (ASA–CSSA–SSSA) are pleased to submit the following funding recommendations for fiscal year 2009. ASA/CSSA/SSSA understand the challenges the Senate Commerce, Justice, Science, and Related Agencies Appropriations Subcommittee faces with the tight agriculture budget for fiscal year 2009. We also recognize that the Commerce, Justice, and Science Appropriations bill has many valuable and necessary components, and we applaud the efforts of the Subcommittee to fund mission-critical research through the National Science Foundation.

With more than 25,000 members and practicing professionals, ASA–CSSA–SSSA are the largest life science professional societies in the United States dedicated to the agronomic, crop and soil sciences. ASA–CSSA–SSSA play a major role in promoting progress in these sciences through the publication of quality journals and books, convening meetings and workshops, developing educational, training, and public information programs, providing scientific advice to inform public policy, and promoting ethical conduct among practitioners of agronomy and crop and soil sciences.

Biological Sciences Directorate

Molecular and Cellular Biosciences (MCB)

The Molecular and Cellular Biosciences division of NSF Biology directorate provides funding for critical research that contributes to the fundamental understanding of life processes at the molecular, subcellular, and cellular levels. Programs such as the Microbial Observatories increase the understanding of microbial distribution in a variety of ecosystems—the first step in evaluating microbial impact on ecosystem function. ASA–CSSA–SSSA support the proposed increase for MCB to $126 million, yet, disagree with the proposed change in priorities. Historically, the division focused on understanding living networks and complex molecular and cellular systems, microbial biology, and fundamental plant biology research. However, priorities for fiscal year 2009 focus on metagenomics, theoretical and mathematical modeling, synthetic biology, small RNA biology, and the role of intracellular environment on the dynamic structure and function of complex biomolecules. We agree that considerable advances investigating interactions between microbial communities and plants have been made, however critical gaps do remain requiring additional study to understand the complex, dynamic relationships existing between plant and microbial communities.

Integrative Organismal Systems (IOS)

The emergence of a bioeconomy requires greater reliance on plants and crops, further expanding their use into the energy sector. To meet the increased demands and develop more robust crops, additional fundamental understanding regarding the basic biology of these crops is needed. The Plant Genome Research Program (PGRP) accomplishes these objectives by supporting key NSF projects. The Developing Country Collaborations in Plant Genome Research program links U.S. researchers with partners from developing countries to solve problems of mutual interest in agriculture and energy and the environment. Additionally, in collaboration with the U.S. Department of Energy and the U.S. Department of Agriculture, the Plant Genome Research Program has financed the Maize Genome Sequencing Project—a sequencing project for one of the most important crop grown globally. Finally, the International Rice Genome Sequencing Project, published in 2005 the finished DNA blueprint for rice, a crop fundamental to populations worldwide. To continue the discovery of new innovative ways to enhance crop production for a growing population, sustained funding is needed for similar projects. It is therefore critical the fiscal year 2009 decision to transfer the Plant Genome Research Program to IOS does not adversely impact PGRP. ASA–CSSA–SSSA are concerned that dedicated funding for the Plant Genome Research Program may be directed towards other programs, such as the Arabadopsis 2010 Program. ASA–CSSA–SSSA recommend that the Plant Genome Research Program continue to receive the funding intended for it. To ensure adequate funding for all of the programs under IOS, we recommend that it receive an overall 10 percent increase to $220.86 million.

Emerging Frontiers (EF)

The Emerging Frontiers division supports multidisciplinary research opportunities and networking activities whereby new initiatives will be fostered and subsequently integrated into core programs. The Plant Science Cyberinfrastructure Collaborative is a critical program funded under EF. Established in fiscal year 2008, this center establishes multi-disciplinary teams of computational science experts and plant science experts to address evolving critical questions in plant science. ASA–CSSA–SSSA offer full support for the President's proposed $2.48 million increase (37.4 percent) over fiscal year 2008 funding levels for the Plant Science Cyberinfrastructure Collaborative.

Geological Sciences Directorate

Atmospheric Sciences (ATM)

Changes in terrestrial systems will have great impact on biogeochemical cycling rates. The Atmospheric Sciences division funds critical programs, such as Atmospheric Chemistry, that increase understanding of biogeochemical cycles. Soils and plants make up one of the largest sinks and sources for several environmentally important elements. ASA–CSSA–SSSA support the President's proposed 13.6 percent increase in funding for the Atmospheric Science division to $260.58 million.

Earth Sciences (EAR)

The Earth Sciences division supports research emphasizing improved understanding of the structure, composition, and evolution of the Earth, the life it supports, and the processes that govern the formation behavior of the Earth's materials. Fiscal year 2009 priorities will support theoretical research, including the biological geosciences, the hydrologic sciences, and the study of natural hazards. Important programs funded within this division are the Critical Zone Observatories, which focus on watershed scale studies that advance understanding of the integration and coupling of Earth surface processes as mediated by the presence and flux of fresh water. ASA–CSSA–SSSA support the $750,000 increase to this project.

Engineering Directorate

Chemical, Bioengineering, Environmental and Transport Systems (CBET)

CBET supports research that enhances the protection of U.S. national health, energy, environment, security, and wealth. CBET supports programs, such as the Biotechnology, Biochemical, and Biomass Engineering, which offer critical solutions to global environmental problems associated with climate change. The continual funding of the Biotechnology, Biochemical, and Biomass Engineering program is essential if we are to develop genetically engineered biofuel feedstocks that are more feasible for conversion into biofuels. ASA–CSSA–SSSA agree with the President's recommend $42.34 million increase for CBET to $173.34 million in fiscal year 2009.

Directorate for Education and Human Resources

Division of Graduate Education

ASA–CSSA–SSSA are dedicated to the enhancement of education, and concerned about recent declines in enrollment for these sciences. To remain competitive, scientific fields need to find new, innovative ways to reach students. The programs offered in the Education and Human Resource Directorate accomplish this goal. The Graduate Teaching Fellows in K–12 Education offers graduate students interested in teaching, an opportunity to get into the classroom and teach utilizing new innovative ways of teaching the material. ASA–CSSA–SSSA support the $2 million increase to $49 million in the President's budget for this program, but request a 10 percent increase over fiscal year 2008 funding levels to $51.7 million. Graduate students are the next crop of scientists, therefore opportunities for study must be increased with increasing demands of science. Global problems rely on scientific discovery for their amelioration; therefore it is critical that the United States continue to be a leader in graduate education. The ASA–CSSA–SSSA recommend an increase to the Integrative Graduate Education and Research Traineeships (IGERT) from no change from fiscal year 2008 to an increased level of $30 million (20 percent increase) in fiscal year 2009. Education is the key for our future competitiveness; therefore it is essential increases in education funding remain on par with goals set forth by ACI, so ASA–CSSA–SSSA recommend an overall increase of 15 percent in fiscal year 2009 over fiscal year 2008 to $832.44 million.

Division of Undergraduate Education

Advanced Technological Education (ATE) program focuses on the education of technicians for the high-technology fields that drive our nation's economy. We support continued funding for this program. ASA–CSSA–SSSA recommend that this program receive a 20 percent increase over fiscal year 2008 to $62 million in fiscal year 2009.

NSF-Wide Programs

Dynamics of Water Processes in the Environment

Providing an adequate supply and quantity of water for human use, while maintaining the integrity of natural ecosystems, is one of the greatest challenges facing the country. ASA–CSSA–SSSA support the creation of the multi-disciplinary, multiscale research program, Dynamics of Water Processes in the Environment with $10 million in fiscal year 2009.

Climate Change Science Program

The Climate Change Science Program, initiated in 2002, provides the Nation and the world with the science-based knowledge to predict, change, manage risk, and take advantage of opportunities resulting from climate change and climate variability. Biological systems are critical to mitigating the impacts and effects of climate change. Additional research is needed to examine potential crop systems, plant traits, wetland properties, and other ecosystem adaptations to help manage climate change. The basic sciences of agro-ecosystems, plant improvement, soils, and riparian and wetland ecology need support. Therefore while ASA–CSSSA–SSSSA maintain the importance of the President's proposed increase to CCSP funding to $220.6 million in fiscal year 2009; however additional funding is needed for the Biological Sciences. Therefore, ASA–CSSSA–SSSA recommend a 10 percent increase in the current funding level from BIO to $16.6 million.

As you lead the Congress in deliberation on funding levels for the National Science Foundation, please consider American Society of Agronomy, Crop Science Society of America, Soil Science Society of America as supportive resources. We hope you will call on our membership and scientific expertise whenever the need arises.

Thank you for your thoughtful consideration of our requests. For additional information or to learn more about the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America (ASA–CSSA–SSSA), please visit www.agronomy.org, www.crops.org or www.soils.org or contact ASA–CSSA–SSSA Director of Science Policy Karl Glasener (kglasener@agronomy.org, kglasener@crops.org, or kglasener@soils.org).

PREPARED STATEMENT OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

The National Science Foundation (NSF) Task Force of ASME's Technical Communities is pleased to provide comments on the NSF fiscal year 2009 budget request, in support of this year's proposed funding level of $6.85 billion for the NSF. Founded in 1880 as the American Society of Mechanical Engineers, ASME is a worldwide engineering society of over 127,000 members focused on technical, educational and research issues. It conducts one of the world's largest technical publishing operations, holds approximately 30 technical conferences and 200 professional development courses each year, and sets many industry and manufacturing standards.

NSF Fiscal Year 2009 Budget Request Overview

With its commitment to broad-based, cross-cutting programs that advance the boundaries of science and engineering, the NSF is essential in guiding the nation's non-defense-related research and education. As recognized by the Administration and Congress, in order for the United States to remain competitive in the integrated global marketplace, the nation must "support and promote innovation research in the United States through high-risk, high-reward projects that meet fundamental scientific and technological challenges." To implement this vision, the America COMPETES Act, which was signed into law in August 2007, includes the NSF as one of three key federal science and engineering agencies targeted for budget doubling over 10 years. To this end, ASME strongly endorses the NSF's investments in the requisite acquisition of new knowledge and in the development of talent whereby transformative research is supported and a world-class science and engineering workforce is built, inciting innovation, encouraging economic growth, addressing critical national needs, and establishing our nation's role as a global leader.

The total fiscal year 2009 NSF budget request is $6.85 billion representing an $882 million or 13.6 percent increase over the fiscal year 2008 estimate of $6.03 billion. It is worth noting that the original fiscal year 2008 request was $6.43 billion, which was reduced to $6.03 billion (representing only a 2 percent increase over fiscal year 2007) in the final fiscal year 2008 omnibus spending measure. Thus, after setbacks in fiscal year 2007 and fiscal year 2008, the present budget request places NSF back on the path of budget doubling set forth in the President's American Competitiveness Initiative (ACI) and the America COMPETES Act.

Research and Related Activities (RRA) comprises the dominant portion of the total NSF request at $5.6 million, representing a 16 percent increase over the fiscal year 2008 estimate of $4.8 million. After flat funding in fiscal year 2008, all of NSF's research directorates would receive considerable increases in fiscal year 2009, recovering from post-2004 NSF budget cuts to reach all-time highs in inflation-adjusted dollars. Funding for the Engineering Directorate (ENG) would increase by 19.2 percent over the current year estimate to $759 million, of which $127 million is budgeted (through mandate) for the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs that ENG administers for all of NSF.

ENG consists of the following disciplinary-area divisions: Chemical, Bioengineering, Environmental, and Transport Systems (CBET), up 32.3 percent to $173 million; Civil, Mechanical and Manufacturing Innovation (CMMI), up 26.3 percent to $202 million; Electrical, Communications and Cyber Systems (ECCS), up 13 percent to $94 million; Industrial Innovation and Partnerships (IIP), up 15.8 percent to $141 million; Emerging Frontiers in Research and Innovation (EFRI), up 16 percent to $29 million; and Engineering Education and Centers (EEC), up 3.4 percent to $120 million.

A portion of the ENG budget (allocated from the constituent divisions) will continue to support research and education efforts related to broad, Foundation-wide investments in a number of areas, including the Administration's interagency R&D priorities. Under ENG, three new priority areas are funded in fiscal year 2009, i.e. Adaptive Systems Technology ($3.49 million), Dynamics of Water Processes in the Environment ($0.53 million), and Science and Engineering Beyond Moore's Law ($4 million). The following continuing areas also receive increases: National Nanotechnology Initiative (up 2.2 percent to $140 million), Cyberinfrastructure (up 7.1 percent to $60 million), and Networking and Information Technology R&D (up 45.9 percent to $28 million—$16.8 million of which is Cyber-enabled Discovery and Innovation). Climate Change Science Program ($1 million) funding remains level, and the Human and Social Dynamics initiative concluded in fiscal year 2008, with funds returning to core programs for continued support.

The ASME NSF Task Force Position

Affirmation and Endorsement

The ASME NSF Task Force maintains its high endorsement of NSF's crucial role in directing the fundamental research and education that keeps America at the leading edge of science, engineering, and technology. NSF has an outstanding record of supporting a broad range of high-quality research, from "curiosity-driven" science to targeted initiatives. This achievement has been made possible only through strict adherence to the independent peer review process for merit-based awards. ASME recognizes the significance and relevance of NSF's investment areas that address major national needs for the 21st century. The increases proposed under the America COMPETES Act would allow NSF to properly sustain and expand these efforts and commitments, honing the nation's competitive edge.

The fiscal year 2009 budget request represents a 13.6 percent increase over the fiscal year 2008 estimate. Over three-quarters of the total $882 million increase for NSF is in R&D funding, totaling $5.6 billion, a gain of $772 million or 16 percent over the fiscal year 2008 estimate. After flat funding in fiscal year 2008, this request would bring R&D investment to an all-time high in inflation-adjusted dollars, allowing the research directorates to recover from the budget cuts that occurred after 2004. In a competitive, multifaceted, and ever-changing global setting, adequate investment in basic science and engineering research, that involves both established and emerging areas, is essential in recognizing and nurturing innovation, in preparing the next generation of scientific talent and leaders, and in producing the products, processes, and services that improve health, living conditions, environmental quality, energy conservation, and national security for all Americans.

Overall, the Task Force also supports and commends activities within ENG. NSF's vision of "advancing discovery, innovation, and education beyond the frontiers of current knowledge" is exemplified within ENG. It is important to recognize that it is through such fundamental science and engineering research by which next generation technologies are frequently engendered. Examples of successes emerging from ENG include the fabrication of nanowires for optical applications, presenting the potential to miniaturize microphotonic devices and transform telecommunications. ENG's SBIR program has developed lightweight, flexible, low-cost, and more efficient solar cells—plastic reels coated with layers of dye-sensitized titania nanoparticles, enabling capture of larger portions of the visible spectrum and absorption of more energy. ENG has also funded pioneering work on embedding transistors into microcantilevers, where deflections resulting from the binding of target molecules in a specific environment, create measurable changes in drain current of the transistor. This technique allows for a unique sensor system that could potentially detect the presence of heart disease from a person's drop of blood or detect the presence of chemicals used for explosives.

NSF leads the U.S. nanotechnology research effort, and ENG is the focal point within NSF for this key national research endeavor. ASME has strongly supported the National Nanotechnology Initiative (NNI) since its inception as an NSF investment area in fiscal year 2000. Increased funding amounts are requested for research at the fundamental level, as well as in environmental, health, and safety aspects. Within the total NSF-wide investment for NNI, ENG's contribution will increase by $3 million to a total of $140 million.

Finally, ASME continues to support NSF's vision to "empower future generations in science and engineering." In coordination with the Department of Education, NSF will continue funding for the Math and Science Partnership program (at $51 million), aimed at improving K–12 science, technology, engineering, and mathematics (STEM) education and teaching. Funding for the Faculty Early Career Development (CAREER) awards, which support exceptionally promising college and university junior faculty who are most likely to become the academic leaders of the 21st century, will increase $14.2 million to $181.9 million. The fiscal year 2009 request provides $245.9 million for NSF's three flagship graduate fellowship and traineeship programs: $124.8 million for the Graduate Research Fellowship (GRF) program, $63.8 million for the Integrative Graduate Education and Research Traineeship (IGERT) Program, and $57.3 million for the Graduate Teaching Fellowships in K–12 Education (GK–12) program. This funding will enable NSF to support an estimated 5,450 graduate students. NSF supports the Research Experiences for Undergraduates program (REU) at $61.6 million, and the Research Experiences for Teachers program (RET) at $9.7 million. NSF continues to broaden participation in science and engineering, with support totaling $674.4 million. This includes efforts to reach all states and regions, e.g. the Experimental Program to Stimulate Competitive Research (EPSCoR), which increases to $113.5 million, as well as efforts that focus on underrepresented groups.

Questions and Concerns

ASME's key questions and concerns arising from the fiscal year 2009 budget request center on: the need to fund NSF at the appropriate level as specified in the America COMPETES Act; a more even funding distribution for ENG with respect to other Directorates within NSF; a balance between manufacturing and services R&D within ENG; and increased funding for non-priority-area core disciplinary research within ENG.

NSF is the only federal agency mandated "to strengthen the health and vitality of U.S. science and engineering and support fundamental research and education in all scientific and engineering disciplines." While comprising only 4 percent of the total federal budget for R&D, NSF provides 45 percent of the federal support given to academic institutions for non-medical basic research. Moreover, while NSF does not directly support medical research, its investments do provide the technologies in diagnosis, medicine, manufacturing pharmaceuticals, and drug delivery that are essential for the medical sciences and related industries. Given recent budget cuts at the appropriations stage, the ASME NSF Task Force believes that NSF is severely under funded, with the immediate and future welfare of our nation at stake.

Recognizing the urgency in preserving the nation's past success in leading-edge discovery and innovation, Congress and the Administration enacted the America COMPETES Act in August of 2007, laying out a bold path toward revitalizing basic research in the physical sciences and engineering. Beginning with the release of the National Academies' report, Rising Above the Gathering Storm, the America COMPETES Act was the culmination of a growing consensus among policy makers, engineers, and scientists that substantial national efforts related to R&D funding in the physical sciences and engineering are needed to preserve the nation's competitiveness. The America COMPETES Act was a bipartisan bill supporting the doubling of funding over ten years at three key federal science agencies (NSF, the Department of Energy's Office of Science, and the Department of Commerce's National Institute of Standards and Technology). However, despite an increase for NSF and the other two agencies, the proposed fiscal year 2008 increase for NSF was far from met in the final appropriation. As a result, the ASME NSF task force urges Congress to recommit to the ideals of the America COMPETES Act, and to fund NSF at the level of the fiscal year 2009 President's request, i.e. $6.85 billion, which is commensurate with the intended doubling plan.

ENG is the single largest source of federal funding for university-based, fundamental engineering research—providing 40 percent of the total federal support in this area. However, ENG (less SBIR/STTR) is still only fifth in total funding (at $632 million) of the six Directorates within NSF, despite receiving the second largest percentage increase of the Directorates at 19.6 percent and matching CISE for the second largest total amount increase at $104 million. At the same time, ENG supports 23 percent of the total NSF REUs, which give U.S. undergraduates research experience to encourage them to pursue doctoral studies. ENG also supports over 50 percent of the total NSF RETs, which give K–12 teachers and community college faculty research experience so that they can extend their experience into classrooms. It's important to note that ENG supports these two activities at the highest percentages among the Directorates within NSF. Our Nation's long-standing global prominence in technological innovation may be at risk, if such investments in basic engineering research and education are constrained by lack of federal funding in engineering.

Driving new innovation, knowledge-intensive industries comprising both services and manufacturing are critical in surviving in the worldwide economy. However, since 2002, the nation's decades-long comparative advantage in the trade balance of high-technology products has shifted from surplus to deficit. Of concern is the transformation of the United States from a sustainable "making products" economy to an unsustainable "selling products" economy. As found in a study by the World Technology Evaluation Center, Inc. (WTEC) on American Manufacturing, globalization of manufacturing and the low level of government investment in manufacturing R&D have stripped the United States of its position as the recognized leader in manufacturing innovation and the commercialization of new technologies. Given the need for local manufacturing for national security, wealth generation, and quality of life (e.g. health care products compromised by unknown sources), the portfolio balance of manufacturing versus services R&D within ENG should be examined.

Encouragingly, the 16 percent growth in RRA allows for the support of 1,370 additional research grants NSF-wide. For ENG, 454 additional grants are anticipated, along with a funding-rate increase from 16–20 percent and a $2,000 increase in average annualized award size, for unsolicited fundamental research proposals for individual investigators and small group activities. Although we are moving in the right direction, the total funding for non-priority-area core disciplinary research (from which new priority areas and even new disciplines are often conceived) within ENG should still be examined. Not counting the SBIR/STTR program, the funding for investment priority-areas constitutes over 40 percent of the budget request for ENG. The Task Force does not advocate for the redistribution of monies from investment priority-areas into non-priority core areas, but rather significant increases for completely flexible core funds in order to develop the creative and novel ideas that feed the comprehensive fundamental Science, Engineering, and Technology knowledge base, which serves as a foundation for this nation's greatness.

Closure

The ASME NSF Task Force urges Congress to support the Administration's request at a minimum of $6.85 billion for fiscal year 2009, and enthusiastically commends the National Science Foundation's leadership in projecting the nation's basic research and development vision. We applaud Congress for its recent passage of the House budget resolution, which includes significant increases that would bring NSF into full compliance with the America COMPETES Act. A substantial increase in the NSF's budget, by increasing both the number and size of its awards, especially in core disciplinary research and education, will enable the NSF to better position itself to fulfill its leadership responsibility in directing the nation's research and development activities. As Congress considers the fiscal year 2009 appropriations bills, we hope that the aforementioned resolution is effected, ensuring that the necessary basic R&D funding is secured for future U.S. competitiveness in science and technology.

This testimony represents the considered judgment of the NSF Task Force of ASME's Technical Communities and is not necessarily a position of ASME as a whole.

PREPARED STATEMENT OF BELL INCORPORATED

On behalf of Bell Incorporated, a global packaging manufacturer, located in Sioux Falls, South Dakota, I would like to thank the Committee for allowing our organization to submit this testimony for the record. I am writing to respectfully request that the Hollings Manufacturing Extension Partnership program be provided the authorized $122 million within the fiscal year 2009 Commerce, Justice, Science and

Related Agencies Appropriations Bill. This requested level of funding for 2009 was provided for in the recently enacted America COMPETES Act. As you know, the Hollings Manufacturing Extension Partnership (MEP) is a program within the Department of Commerce, National Institute of Standards and Technology, a program authorized to improve competitiveness of America's manufacturing community.

The MEP is one of the most successful partnerships in the country. In addition to public support, a value proposition to improve manufacturer's global competitiveness is supported by those companies who receive benefit. In South Dakota, the Dakota MEP provides assistance to companies in continuous improvement, innovation, strategic growth, technology and workforce development—all major needs of our companies. Several years ago, our company began our commitment to continuous improvement with the assistance of Dakota MEP.

As a Dakota MEP Director, I would also like to report that the average company benefits and impacts realized in the Dakota MEP improvement work with manufacturers mirrors the national MEP average at $1.4 million per engagement. These benefits have been realized by manufacturers who've partnered with Dakota MEP over the past six years.

Manufacturing continues to diversify and grow the economies of the Dakotas. It currently is 10 percent of the gross state product in North Dakota and 11 percent in South Dakota. The industry has nearly 1,900 firms employing 69,000 in the Dakotas exporting over $2 billion. Manufacturing brings new wealth to our country, our states and communities which, in turn, generate other economic activity and opportunities.

Manufacturing must remain one of our country's economic strengths and the MEP is an invaluable program to help the industry better compete. Without unwavering strong federal support, the MEP will be unable to maintain its mission of serving America's small manufacturers' increasing needs. At a time when our economic strength and global competitiveness are national priorities, the MEP continues to be a wise investment. We respectfully request that you appropriate $122 million for the MEP in fiscal year 2009.

Prepared Statement of the National Association of State Universities and Land-Grant Colleges (NASULGC)

On behalf of the NASULGC Board of Natural Resources (BNR), we thank you for your support of science and research programs within the National Science Foundation. As members of the scientific academic community we encourage you to support an appropriation of at least $6.85 billion for the National Science Foundation, including at least $675 million for the Directorate of Biological Sciences (BIO). The fiscal year 2008 enacted level for NSF is $6.07 billion. The administration's fiscal year 2009 request is $6.85 billion for NSF and $675 million for BIO. Furthermore, within BIO, we ask that you support the President's budget request for the National Ecological Observatory Network (NEON) at $26 million in fiscal year 2009.

While we are pleased that the NSF received an increase (3 percent) in fiscal year 2008 over fiscal year 2007 enacted level, we are concerned that when adjusted for inflation, the NSF is still receiving less funding than in previous years. The BNR supports a 13 percent increase for the NSF over the 2008 enacted level to keep it above the level of inflation over the past several years and fulfill the promises of the America COMPETES Act.

State universities and land-grant colleges truly welcome and are excited by the passage of the America Competes Act and the renewed national focus on scientific research and education. Education and scientific research have served as the infrastructure and foundation for much of Nation's economic and national security. We are also extremely pleased with the administration's proposal to double funding in the physical sciences at NSF over the next 10 years; however, we feel that biological sciences are equally important to America's competitiveness.

Better support for the BIO Division of Environmental Biology is a very serious need. NSF's BIO support represents 63 percent of all federal funding for basic research in environmental biology. Of the non-medical aspects of the biological sciences, BIO is the dominant federal supporter of basic research at academic institutions—providing 66 percent of all support. NSF's contribution to a broad array of the biological sciences is critically important—particularly in such areas as environmental biology and plant sciences.

If continued increased investments are not made in environmental biology, the younger generation of ecological scientists at our universities will be shut out of graduate study, and the contributions they should be making to our improved understanding of the environment will never happen. These young scientists need to be empowered to help us recognize the value of our natural capital, better equipping us to protect the America's long term economic and environmental interests.

Using the University of Alabama as one example out of many BIO-supported universities, BIO's Division of Environmental Biology has been the major source of funding that has supported research and education associated with the Aquatic Biology Program and the Center for Freshwater Studies for the past 15 years. The Ecosystem Science, Ecological Biology, and the Systematic Biology and Inventories clusters have been especially important in supporting individual investigator and interdisciplinary, collaborative projects. These funded projects have been instrumental in furthering our understanding of the important Mobile River System, the largest river system that drains into the Gulf of Mexico, east of the Mississippi River. Additionally, these projects have also supported over 100 undergraduate, graduate, and post-doctoral students at our institution.

Many recent graduate students that received support from the NSF Division of Environmental Biology are already greatly contributing to the field, especially in recovery efforts in the Gulf Coast. The knowledge gained from their NSF funded projects is especially valuable at a time when both coastal and inland areas along the Gulf coast are increasingly being affected by major hurricanes such as Katrina and Rita. An understanding of the roles of river floodplains and wetlands in mediating major floods and storm surges is critical to effective management and restoration of these environments.

Another program that deserves much support is the NSF-National Ecological Observatory Network (NEON), which is envisioned as a continental-scale research and infrastructure platform that will provide unprecedented advances in ecological forecasting and prediction. NEON will transform the way we conduct science by enabling the integration of research and education from natural to human systems, and from genomes to the biosphere. NEON will address many issues critical to the nation's environmental and economic health, including land use and climate change, invasive species, and hurricane effects. We support the current NSF budget request for funding for NEON in the Directorate for Biological Sciences (e.g., Division of Biological Infrastructure and Emerging Frontiers).

Issues of national importance related to the environment, economy, agriculture, and human welfare require an understanding of how living organisms function and interact with nonliving systems. Advancing fundamental scientific discovery in all aspects of life—from molecules to whole ecosystems—is supported within NSF, where the ability to integrate the range of biological sub-disciplines is unique.

About NASULGC

NASULGC is the nation's oldest higher education association. Currently the association has over 200 member institutions—including the historically black land-grant institutions—located in all fifty states. The Association's overriding mission is to support high quality public education through efforts that enhance the capacity of member institutions to perform their traditional teaching, research, and public service roles.

About the Board on Natural Resources

The Board's mission is to promote university-based programs dealing with natural resources, fish and wildlife, ecology, minerals and energy, and the environment. Most NASULGC institutions are represented on the Board. Present membership exceeds 500 scientists and educators, who are some of the nation's leading research and educational expertise in environmental and natural-resource disciplines.

This testimony was developed for the BNR by the Chair of the BNR's Ecology Section, Dr. Amy Ward, Professor of Biological Sciences, University of Alabama.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES (NASULGC)

On behalf of the National Association of State Universities and Land-Grant Colleges' Board on Oceans and Atmosphere, thank you for the opportunity to provide recommendations for the fiscal year 2009 budgets for the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautic and Space Administration (NASA), and the National Science Foundation (NSF). All three agencies support research at our member institutions that provides critical information to policy-makers and communities across the country. That is why we strongly recommend $4.5 billion for NOAA; $380.6 million in the NASA Earth Science Research Account; and $6.85 billion for NSF. Furthermore, within NOAA, we recommend $471 million for the Ocean and Atmospheric Research (OAR), including $72 million for the National Sea Grant Program; $930.7 million for the National Weather Service (NWS);

$29.5 million for the National Ocean Service (NOS) Ocean and Coastal Research Program and the NOS Oceans and Human Health Initiative; $96 million for the Integrated Ocean Observing Systems (IOOS); and $1.2 billion for the National Environmental Satellite, Data and Information Service (NESDIS). Within NSF, we recommend $848.7 million for the Geosciences Directorate; $98 million for the Academic Research Fleet; and $244.74 million for the Major Research Equipment & Facilities Construction account, including $38 million for the Integrated Ocean Drilling Program (IODP), and $31 million for the Ocean Observatories Initiative (OOI) .

About NASULGC

NASULGC is the nation's oldest higher education association. Currently the association has over 200 member institutions—including the historically black land-grant institutions—located in all fifty states. The Association's overriding mission is to support high quality public education through efforts that enhance the capacity of member institutions to perform their traditional teaching, research, and public service roles.

About the Board on Oceans and Atmosphere

The BOA's primary responsibility is to advance research and education in the marine and atmospheric sciences through a federal relations program. The board currently has approximately 200 regionally distributed members, including some of the nation's most eminent research scientists, chief executive officers of universities, marine and atmospheric scientists, academic deans, and directors of Sea Grant programs.

NOAA

In order to maintain our country's homeland security, scientific leadership, and economic competitive edge, we must have a diverse portfolio of federally supported science research and programs. Consequently, we are concerned about the significant cuts made to NOAA in fiscal year 2006, 2007, and 2008. The science-based work of NOAA protects and impacts every American citizen, everyday. NOAA is the third largest source of funds for academic marine research in the federal government. As a member of the Friends of NOAA Coalition, NASULGC strongly recommends $4.5 billion for NOAA in fiscal year 2009.

BOA recommends a portion of the $4.5 billion be used to support the following programs:

$471 million for Oceanic and Atmospheric Research (OAR), including $72 million for the National Sea Grant College Program (Sea Grant). The fiscal year 2008 enacted level is $380 million while the President's fiscal year 2009 request is $382 million. The research conducted through OAR and partnering universities helps us understand climate variability, provide better protection for coastal resources, contribute to our Nation's commerce, and support our transportation systems. OAR supports such important programs as the Ocean Exploration, the National Undersea Research Program, U.S. THORPEX medium-range forecast improvement research program, transition research for new operational forecast models, Climate Operations and Sea Grant.

For Sea Grant, the fiscal year 2008 enacted is $57.1 million while the President's fiscal year 2009 request is $55 million. In constant dollars, the program is at its lowest funding levels since its inception four decades ago. Sea Grant is the flagship program between NOAA and the academic community, supporting the work of 31 colleges located in coastal and Great Lakes states and serving as the core of a national network of more than 300 institutions involving more than 3,000 scientists, educators, students, and outreach experts.

BOA supports the President's request of $930.7 million for the National Weather Service (NWS). The fiscal year 2008 enacted is $805.3 million. NWS provides weather, hydrologic, and climate forecasts and warnings for the United States, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, academia, the private sector, the public, and the global community.

$29.5 million for the extramural portions of both the NOS ocean and coastal research program and the Oceans and Human Health Initiative (OHHI). The fiscal year 2008 enacted level is $3 million while the President's fiscal year 2009 request is $1 million. Within the NOS, BOA supports restoration of the drastic cuts in competitive extramural research, bringing funding back to the more sustainable and effective level provided in fiscal year 2005. In addition, we support the appropriation of sufficient funds for full NOAA participation in collaborative NOS science programs, particularly OHHI. NOS support for extramural research conducted in cooperation with NOAA scientists is leading to improved knowledge and forecasts to address complex problems such as harmful algal blooms, hypoxia, coastal stressors and ecosystem-based management of fisheries.

$96 million for the Integrated Ocean Observing System (IOOS), (including $50 million for Regional Ocean Observing Systems (ROOS), $10 million for data management and communications, $30 million for IOOS enhancements and $6 million for global ocean observing system enhancements). Fiscal year 2008 enacted is $26.4 million while the President's fiscal year 2009 request is $6.5 million for NOAA IOOS and $14.6 million for IOOS Regional Observations (competitive funding). IOOS is critical to improving predictions of climate change and weather, improving the safety of maritime operations, and reducing public health risks. While BOA is supportive of NOAA's inclusion of IOOS in its budget request, funding still falls short of last year's funding by $5 million, and we prefer placing the vast majority of funding for IOOS into competitive funding for the ROOS.

BOA supports the President's fiscal year 2009 request of $1.2 billion for NESDIS. BOA strongly supports the building and strengthening of NOAA's satellite systems, because these programs are extremely important to timely and accurate weather forecasts that directly affect public safety, protection of property, and economic health and development. In supporting this request, however, BOA is concerned that the increase in satellite budget for the Geostationary Operational Environmental Satellite not come at the expense of other programs within NOAA. Money directed to satellite programs should be in addition to funding of other NOAA programs.

NASA

Last year, the National Research Council released its report, "Earth Science and Applications from Space: National Imperatives for the Next Decade and Beyond." The report found that between 2000 and 2006, funding for Earth Sciences (ES) has fallen from $2 billion to $1.5 billion annually. ES research is absolutely critical to understanding global climate change, such as the decline of Earth's ice sheets or the health of the global oceans. BOA generally supports the findings of this report, and we urge the committee to increase the ES funding levels consistent with the report's recommendations so that future missions as well as research and analysis (R&A) are supported. It is also critical to continually evaluate the scientific priorities of future missions so that mission priorities can be adjusted to provide the most benefit and imminent gaps in capabilities and systematic observations can be addressed. For this reason, BOA recommends additional funding to support a gap analysis of critical systematic and emerging science priorities and to adjust mission strategies as appropriate, including the development of new mission plans where appropriate.

ES activities currently fall within the agency's Science Mission Directorate. We continue to see ES activities, such as R&A in the past five years, being cut because of other agency priorities. ES investments in university-based research have resulted in valuable advances in weather forecasting, improved climate projections, and understanding of Earth ecosystems. Furthermore, the R&A program within ES is the primary mechanism for funding to the academic community. Through its support for young scientists and graduate students, the R&A program supports innovation in ES and technology using NASA's satellite missions. New sensor concepts, new data processing algorithms, and new approaches to global-scale ES are the legacy of the research funded by the R&A program. In view of the rapid changes taking place in global climate, weather, ice cover, carbon cycle science and ecosystems, it is essential that NASA maintain a strong level of R&A funding to derive maximum benefit from today's missions as well as to support the innovation needed to develop the missions of tomorrow. To ensure the viability and effectiveness of our ES R&A programs, BOA supports restoring Earth Sciences funding to fiscal year 2000 levels, an increase of approximately 33 percent.

NSF

BOA welcomes the renewed national focus on scientific research and education as illustrated by the passage of the American COMPETES Act. BOA supports the President's NSF fiscal year 2009 budget request of $6.85 billion. The fiscal year 2008 enacted is $6.06 billion.

BOA recommends that a portion of that $6.85 billion be used to support the following program:

BOA supports the President's request of $848.7 million for the Geosciences Directorate. No specific numbers for the Geosciences Directorate were enacted for fiscal year 2008. As the principal source of federal funding for university-based fundamental research in the geosciences, GEO addresses the Nation's need to understand, predict, and respond to environmental events and changes. GEO-supported research also advances our ability to predict natural phenomena of economic and human significance, such as climate changes, weather, earthquakes, marine ecosystem change, and disruptive events in the solar-terrestrial environment.

$244.74 million for the Major Research Equipment & Facilities Construction Account, (MREFCA) and within MREFCA, $31 million for the Ocean Observatories Initiative (OOI) and $38 million for the Integrated Ocean Drilling Program (IODP). The fiscal year 2008 enacted for MREFCA is $220.74 million, while the President's fiscal year 2009 request is $147.51 million. No specific fiscal year 2008 numbers were enacted for OOI or IODP. The President's fiscal year 2009 request is $10.50 million for OOI and $47.74 million for IODP.

The OOI will provide the oceanographic research and education communities with continuous, interactive access to the ocean. Through a global-scale array, a regional-scaled cabled network, and a network of coastal observatories, scientists will be able to study real-time data transmission and visual images from the seafloor multiple, interrelated processes over variable timescales. OOI will also provide the ideal platform for training a new generation of oceanographers skilled in the use and manipulation of large, oceanographic, time-series datasets, a necessity given the planned establishment of the National Integrated Ocean Observing System (IOOS).

The IODP is an international partnership of scientists, research institutions, and agencies using ocean drilling to explore the evolution and structure of Earth as recorded in the ocean basins. As part of its co-leadership of IODP with Japan, NSF will provide a light drillship and science support services for high-resolution studies of environmental and climate change, observatory and biosphere objectives. The contracting, conversion, outfitting and acceptance trials of a new Scientific Ocean Drilling Vessel will enable NSF to move forward with its portion of IODP.

$98 million for the Academic Research Fleet (ARF). Finally, to optimize the potential of these ocean research infrastructures, operating and maintenance funding will be required. No specific funding was enacted for ARF in fiscal year 2008. The administration's fiscal year 2009 request is $83.96 million.

Prepared Statement of the California State Coastal Conservancy

SUMMARY

On behalf of the California State Coastal Conservancy, I want to thank the Subcommittee for this opportunity to present our priorities for fiscal year 2009. The Conservancy respectfully requests the following funding levels needed from the listed NOAA accounts for the implementation of the California Seafloor Mapping Program (CSMP). Our requests during fiscal year 2009 are as follows: $1,000,000 for the Office of Coast Survey; $300,000 for the NOAA National Marine Fisheries Service Southwest Fisheries Service Center and $3,500,000 for the NOAA Coastal Services Center. The Conservancy is also seeking a $1 million appropriation for the NASA Ames Research Center located in the Silicon Valley section of California in support of our efforts with the South San Francisco Bay Salt Ponds Restoration. In totaling our requests the Conservancy is asking for $5.8 million in funding during fiscal year 2009 from accounts under the subcommittees jurisdiction.

CONSERVANCY BACKGROUND

The California State Coastal Conservancy, established in 1976, is a state agency that uses entrepreneurial techniques to purchase, protect, restore, and enhance coastal resources, and to provide access to the shore.

To date, the Conservancy has undertaken more than 950 projects along the 1,100 mile California coastline and around San Francisco Bay. Through such projects, the Conservancy: protects and improves coastal wetlands, streams, and watersheds; works with local communities to revitalize urban waterfronts; assists local communities in solving complex land-use problems and protects agricultural lands and supports coastal agriculture to list a few of our activities.

Since its establishment in 1976, the Coastal Conservancy has: helped build more than 300 access ways and trails, assisted in the completion of over 100 urban waterfront projects, joined in partnership endeavors with more than 100 local land trusts and other nonprofit groups and completed projects in every coastal county and all nine San Francisco Bay Area counties.

CALIFORNIA SEAFLOOR MAPPING PROGRAM

The California State Coastal Conservancy, in conjunction with numerous state and federal partners, is ambitiously pursuing the mapping of the entirety of the seafloor directly off the coast of the state of California. This project will produce detailed bathymetric maps of some of the most productive ocean waters in the United States and the world and as such is critical for a multitude of reasons.

A large number of ocean management decisions can be made more effectively with accurate statewide mapping of seafloor substrate, marine habitat types, and bathymetry (underwater topography) of California's coastal and nearshore waters. This information will inform the designation of new marine reserve areas as well as the monitoring of all reserve areas along the California Coast. High resolution sea floor maps will distinguish underwater habitats and highlight faults, chasms, fissures, crevices and pinnacles and will help identify and understand known and unknown fault dynamics along the seismically active California Coast. This information will then be utilized by scientists and resource managers to identify potential biological hot spots to aid their understanding of the highly productive and diverse ecosystem along the California Coast. Further, information concerning the size and extent of activity associated with known and unknown underwater fault lines will allow our communities to better prepare for the possibility of cataclysmic seismic activity of the California Coast.

In addition, the project will provide extensive navigational benefits as it will identify hidden reefs, sunken obstacles and other navigation hazards in California's near and offshore waters. This information is essential for the safety of maritime commerce vessels, and subsequently the economies of California and the nation. These maps will provide greater knowledge and understanding of navigational channels and hazards surrounding the Ports of Los Angeles, Long Beach, and Oakland, the nations 1st, 2nd and 4th busiest port facilities respectively, which collectively are responsible for 50 percent of the nation's total container cargo volume.

Examples of some additional applications that would benefit from marine mapping and data include: understanding sediment transport and sand delivery, identifying dredging and dumping sites, regulation of offshore coastal development, and illuminating the dynamics of fisheries and other marine species. Detailed bathymetric maps are also critical in the development of an ocean circulation model that will allow us to better predict ocean response to natural and human-induced changes.

We are committed to the success and completion of the project and have secured $12.5 million from the State of California Ocean Protection Council (OPC) for the advancement of the project to date. The OPC also intends to appropriate an additional $7.5 million in fiscal year 2009 if funds become available. We are also working with the Packard Foundation to determine the potential of financial support.

In support of the project the California Coastal Conservancy is seeking $1,000,000 from the Office of Coast Survey (OCS) in the National Oceanographic and Atmospheric Administration. OCS has been surveying the coastal waters of the United States and producing navigational charts for our nation's ports and waterways for nearly two centuries. Federal funds would be used to augment state funds to collect remaining data in California's state waters. OCS committed $2,000,000 to the program in fiscal year 2008.

In addition, we are seeking $300,000 in funding from the National Marine Fisheries Service Southwest Fisheries Science Center. Habitat differences of biological and geological significance cannot always be discerned from remotely sensed data. Some physical (grab samples) or visual (video) sampling is required to meet International Hydrographic Organization standards. Working in cooperation with the USGS and the CA Department of Fish and Game, federal funds and staff time for NMFS are needed to assure biological accuracy of the mapping effort. An additional $1.5 million will be requested from the U.S. Geological Survey Coastal and Marine Geology Program for scientific data collection (hydrographic surveys of the seafloor, video ground-truthing of remotely collected data to verify habitats and geologic structure, and seismic profiling to determine geologic stability) and for final map production. Although most of the hydrographic survey data will be collected by private industry, the Coastal and Marine Geology Program of the USGS is uniquely qualified to ground truth the accuracy of the data, and in coordination with the CA Geological Survey, create finished map products.

We are also seeking $3,500,000 in funding for the establishment of a NOAA West Coast Coastal Services Center. This is essential as the CSMP will produce vast amounts of data and maps. An established Coastal Service Center in this region will allow NOAA to work with the state to ensure managers have access to essential data and to develop decision-making tools for resource managers. These tools will help local and state managers make connections between coastal land use and marine resources and better understand climate change and sea level rise impacts on our coastal and ocean resources. The establishment of the West Coast Services Center will also enhance the federal support for the West Coast Governors' Agreement on Ocean Health such as the development of social economic baselines for coastal communities and West Coast-wide mapping products, tools, and technical training through the Digital Coast effort.

Finally, the subcommittee should know that the CSMP enjoys broad support from a multitude of local, state, and federal agencies. These entities include: NOAA, USGS, Mineral Management Service, U.S. Coast Guard, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, CA Department of Fish and Game, CA State Lands, CA Coastal Commission, and CA State Water Resources Control Board. The CSMP is also supported by the federal Integrated Ocean Observing Program and the two regional associations within California, the Central and Northern Coastal Ocean Observing System (CeNCOOS) and the Southern CA Coastal Ocean Observing Program (SCCOOS). Seafloor mapping is included as a major priority in the OPC's strategic plan and in the West Coast Governor's Agreement on Ocean Health. Furthermore, the Interagency Working Group on Ocean and Coastal Mapping, established by the Joint Subcommittee on Ocean Science and Technology, is currently drafting a National Ocean and Coastal Mapping Strategic Action Plan that will highlight the state-federal partnerships developed for CSMP as a model for the country.

SOUTH SAN FRANCISCO BAY SALT PONDS RESTORATION—NASA AMES RESEARCH CENTER

The California State Coastal Conservancy in conjunction with the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, NOAA, the Santa Clara Valley Water District and Alameda County Flood Control and Water Conservation District is pursuing the restoration of over 15,100 acres of salt ponds formerly owned by the Cargill corporation. The project, known as the South San Francisco Salt Ponds Restoration Project, is the largest wetlands restoration initiative on the west coast of the United States and the 2nd largest restoration project in the nation, trailing only the Comprehensive Everglades Restoration Program in size and scope.

The project will provide dramatic benefits to the region, state and nation by transforming 15,100 acres of salt ponds formerly owned by the Cargill Corporation into a vibrant wetlands area that will provide extensive habitat for federally endangered birds, fish and wildlife. In addition, the project will improve wildlife oriented recreational opportunities including fishing, hunting, environmental education and bird-watching.

In addition, the project will provide increased public access to areas of the South San Francisco Bay that were previously unreachable through the creation of new bay trails and other associated undertakings. The construction of one particular segment of bay trail runs adjacent to the NASA Ames Research facility. The facility, currently well removed from public access, will need upgraded security features to safeguard its personnel and contents in advance of increased public access to the area. As such, we are seeking a $1 million in increased funding for the facility for the construction of this fence. Of this amount $661,800 will be for 13,236 linear feet of fencing, $50,000 for 10 double swing gates valued at $5,000 per gate and $60,000 is required for the installation of closed circuit monitoring technologies.

This request is supported by the center and all our project partners. Specifically, the South San Francisco Bay Salt Ponds Project is supported by a great number of respected organizations including: the San Francisco Bay Joint Venture, the City of San Jose, The Bay Institute, Save the Bay, the Bay Trail Program, the National Audubon Society, and many other local governments, environmental groups, community groups, businesses, and recreation organizations.

PREPARED STATEMENT OF THE POPULATION ASSOCIATION OF AMERICA/ASSOCIATION OF POPULATION CENTERS

Introduction

Thank you, Chairwoman Mikulski, Ranking Member Shelby and other distinguished members of the Subcommittee, for this opportunity to express support for the Census Bureau and the National Science Foundation (NSF), two agencies important to the Population Association of America and the Association of Population Centers (PAA/APC). PAA and APC request that you support the administration's budget for the Census Bureau at $2.6 billion and for NSF at $6.8 billion.

Background on the PAA/APC and Demographic Research

The PAA is an interdisciplinary, scientific organization comprised of over 3,000 research professionals, including demographers, economists, sociologists, and statisticians. The APC is a similar organization comprised of over 30 universities and research groups that foster collaborative demographic research and data sharing, translate basic population research for policy makers, and provide educational and training opportunities in population studies.

Demography is the study of populations and how and why they change. Demographers, as well as other population researchers, collect and analyze data on trends in births, deaths, immigration and disabilities as well as racial, ethnic and socioeconomic changes in populations. Among the major policy issues, population researchers study the demographic causes and consequences of population aging, trends in fertility, marriage, divorce and their effects on the health and well being of children, and immigration and migration and how these patterns affect the ethnic and cultural diversity of our population and the nation's health and environment.

PAA/APC members rely on a number of federal agencies charged with funding demographic research and generating reliable, accessible data. The ability of our members to produce meaningful research, often used to inform policy decisions, requires the use of substantial data sets and support for research projects and research training. Both the Census Bureau and National Science Foundation (NSF), which are under your subcommittee's jurisdiction, are key to the success of our field.

The Census Bureau

The Census Bureau is the most comprehensive source of demographic and economic data on every facet of our nation's population and communities. PAA and APC members rely on accessible data produced by the Census Bureau to conduct their research. Thus, we support the Administration's request of $2.6 billion for the Census Bureau in fiscal year 2009 and hope the Subcommittee will as well. This funding is necessary to support the significant ramp-up activities in the final preparation year for the 2010 decennial census and to support the agency's ongoing survey operations, too.

We recognize the fiscal year 2009 request is double the fiscal year 2008 appropriation of $1.3 billion. However, as you know, the Census Bureau's budget is cyclical and must increase dramatically in the years immediately preceding the decennial census to pay for necessary preparations. In fiscal year 2009, these activities include:

—Opening and staffing 150 "early" local census offices;
—Canvassing all neighborhoods and rural areas to verify addresses (on the Master Address File) and geographic locations (in the TIGER system);
—Finalizing data capture, data processing, and telecommunications systems;
—Printing hundreds of millions of census questionnaires and other forms; and
—Conducting promotional activities, including the Regional Partnership Program, to assure the greatest possible level of participation in 2010.

The groundwork done in the final year before the census will, to a large extent, determine the success of the 2010 Census. The Census Bureau must receive, at a minimum, the President's requested funding level, to ensure vital preparations are thorough and timely.

Fiscal year 2009 is also a pivotal year for the American Community Survey (ACS), which has replaced the traditional census long form. In 2010, the ACS will provide the first demographic, economic, and housing characteristics data for areas as small as census tracts and block groups, based on five years worth of data collection for households (2005–2009). To assure the data collected in the last year are as accurate as in previous years, the Census Bureau needs sufficient funding to continue sampling three million households that receive the ACS annually.

The Administration's request also will enable the agency to continue its other ongoing surveys, which measure changes in individual and household demographic and economic conditions. For example, in fiscal year 2009, the Census Bureau will tabulate and publish data from the 2007 Economic Census, launch an initiative to improve the collection of economic statistics on the growing service sector, and continue the Survey of Income and Program Participation. Continuation of these activities is particularly important in the current difficult economic climate, as these data provide a basis for key economic indicators and help Congress assess the prudence of fiscal policy proposals.

National Science Foundation (NSF)

PAA and APC, as members of the Coalition for National Science Funding, support the President's fiscal year 2009 budget request for NSF of $6.8 billion. This budget will enable the NSF Social, Behavioral and Economic Science Directorate (SBE) to continue its support of social science surveys and a rich portfolio of population research projects.

The mission of NSF is to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. The demography of our population directly impacts the health, prosperity, welfare, and security of our nation. NSF's support of demographic research, particularly its support of large-scale longitudinal surveys, such as the General Social Survey and Panel Study of Income Dynamics, is central to the agency's mission and essential for the field of demographic research. NSF is the funding source for approximately 20 percent of all federally supported basic research conducted by America's colleges and universities, including basic behavioral and social research. Demographic research also depends on support from NSF for support of individual research projects and research centers.

The Census Bureau and the National Science Foundation support, indirectly and directly, the collection and availability of rich data sources important to PAA/APC members. Our demographers, economists, sociologists, and statisticians rely on federally supported data to conduct sound research and inform public policy. Investments in these data sets are investments in good policy.

Thank you for considering our requests and for supporting federal programs that benefit the field of demographic research.

Prepared Statement of the Consortium of Social Science Associations (COSSA)

Mr. Chairman and Members of the Subcommittee: The Consortium represents over 110 professional associations, scientific societies, universities and research institutes concerned with the promotion of and funding for research in the social, behavioral and economic sciences. COSSA functions as a bridge between the research world and the Washington community. A list of COSSA's membership is attached.

Like you, COSSA was disappointed in some of the final numbers in the fiscal year 2008 Consolidated Appropriations Act. We had hoped the Administration and the Congress could agree on an overall number that would have allowed you to maintain some of the early promising increases for the National Science Foundation and other agencies. We hope the fiscal year 2009 process will work more smoothly.

We appreciate the opportunity to comment on the proposed fiscal year 2009 budgets for the National Science Foundation (NSF), for which we recommend at least $6.85 billion; the Bureau of Economic Analysis, for which we support the proposed budget of $86.9 million; the Census Bureau, for which we recommend whatever funds, both regular and “emergency” appropriations, that may be necessary to ensure a fair and accurate Census and protect the Bureau's other data collection activities; the National Institute of Justice (NIJ), for which we seek $50 million in program funds, and Bureau of Justice Statistics (NIJ), for which we urge $50 million in program funds. COSSA is well aware that each year you confront difficult choices among competing agencies under the Subcommittee's jurisdiction. We hope that you will give these agencies' needs generous consideration.

NATIONAL SCIENCE FOUNDATION (NSF)

COSSA strongly recommends that NSF receive at least the President's request of $6.85 billion in fiscal year 2008. We recognize that this is below the authorized level of $7.33 billion, that would double NSF's budget in seven years, but we are realistic. We also strongly support the Research and Related Activities request of $5.594 billion.

We realize the NSF fiscal year 2009 budget proposal is driven by the Administration's American Competitiveness Initiative (ACI). And we know that the ACI grew out of the National Academies' Rising Above the Gathering Storm (RAGS) report. Both of these have asserted that reinvigorating the physical sciences and engineering are a national priority. Yet, there are admonitions from the RAGS report, from the language in the fiscal year 2008 appropriations report, for which we are grateful to this Subcommittee, and from the COMPETES Act, that the social, behavioral and economic (SBE) sciences should not be left behind. COSSA believes the NSF's fiscal year 2008 allocation and the fiscal year 2009 request suggest that is what is happening. There is no apparent increase in the fiscal year 2008 current plan for the SBE directorate and its fiscal year 2009 proposed increase of $18 million pales in comparison to the $235 million boost for the physical and mathematical sciences. NSF is extremely important for federal support for basic research in the SBE sciences. For some fields in these sciences, NSF is the only source of federal support for basic research and infrastructure development.

Now is also a time when advances in methodologies, computing power, and interdisciplinary cooperation are helping SBE scientists produce significant results. We need sustained support for the new modes of research, such as collaborations, economic and political laboratories, merged databases, functional MRIs, and virtual centers that have transformed SBE research.

The social and behavioral research portfolio is enormous and supports science of tremendous intellectual excitement and substantial societal importance. Let me list a number of areas, far from a comprehensive list, where social and behavioral research plays a significant role in addressing America's and the world's problems.

—The Brain/Behavioral Interface—neuroeconomics, law and neuroscience, biomarkers
—Ethical, Legal and Social Implications (ELSI)—
  —Information Technology—privacy, human-machine interfacing
  —Nanotechnology—regulatory and safety considerations
—Climate Change
  —Human Dimensions, International Politics, Land Use, Coupled Natural and Human Systems
—Energy
  —Behavior Changes for Conservation
  —Biofuel Impact on Rural America
—Developing Human Capital
  —Language and Other Learning, Skill Formation, Changing Workforce.
—Social Networks—terrorism, teen sexual behavior
—Decision Making—under uncertainty, risk taking and risk aversion
—Organizational Change—virtual organizations, flat pyramids, telecommuting
—Public Health—obesity, health disparities, lifestyle choices
—A Fair Society—broadening participation and enhancing diversity
—A Safe Society—crime and criminal justice
—Changing Demographics
  —International Aspects—global aging, migration, birth and death Rates
  —U.S.—internal shifts, immigration
  —Changing Family Structure
—Global Issues—Conflict and Cooperation, Terrorism, Differential Economic Growth, Compatibility of Economic and Political Freedom

As you can recognize, many of these are issues the Congress deals with constantly. Social and behavioral research provides you with answers to many of these vexing problems. Yet, at budget time, we are relatively poor orphans.

Admittedly, not all of these issues are related to NSF's agenda. However, basic research on individual, group, and societal behavior is the underpinning for much of the knowledge and insight that policy makers bring to coping with these issues. Of course, we understand, as political science studies have shown, that research results are not the only consideration used by policy makers.

Some specific SBE-related programs continue, such as the initiative on the Science of Science and Innovation Policy (SciSIP). These studies examine how national research and development systems work, how to measure and nurture innovation, and how to direct the nation's investments. Two major competitions have been solicited, generating high demand, and more will follow. Unfortunately, the fiscal year 2008 lack of a spending increase affected the ability of this program to fund some excellent proposals.

The Foundation-wide, SBE-managed, priority called Human and Social Dynamics (HSD) has come to an end. HSD supported projects that investigated the dynamics of human action and development, as well as knowledge about organizational, cultural, and societal adaptation and change. It utilized multidisciplinary research teams and comprehensive, interdisciplinary approaches across the sciences. Two major HSD foci will continue as part of the core programs within SBE: environmental research and the development of international, integrated, microdata sets to enhance analysis of both national and global attitudes and trends.

SBE maintains its support for major long-term data bases such as the Panel Study on Income Dynamics, the General Social Survey, and the American National Election Studies. These three extraordinary sets of time-series data continue to paint a portrait of American's economic, social, and political attitudes and behavior over five decades, while updating their methodology and expanding their scope.

With regard to the Education and Human Resources directorate (EHR), COSSA believes that broadening participation in science, across all the sciences, is a worthy endeavor. We support NSF's programs to ensure that all students get a chance to become scientists; including SBE scientists. COSSA recently organized and led a full-day retreat on Enhancing Diversity in the Sciences with the participation of representatives from professional associations, scientific societies, NSF, and NIH. Information about the retreat can be found at www.cossa.org.

We strongly support the 32 percent proposed budget increase for NSF's Graduate Education programs to provide more fellowships. These have been extremely important for budding scientists across all the disciplines. We also believe in programs that will enhance the quality of teaching in our K–12 system, not only for math and science, but for all subjects. It is clear from NAEP and other tests that American students need help across-the-board.

We also strongly support funding for EHR research that evaluates the effectiveness of these programs and enhances their ability to get the job done right. We also believe that STEM education cannot be done in isolation from social, economic, and cultural factors that influence our education system and its students. The SBE sciences are in the forefront of providing research and evidence for improving how our children learn and survive in the modern, complex societies in which we live. NSF's Science of Leaning Centers program is an important part of this and COSSA strongly supports the continued funding of these Centers found in the Integrated Activities account.

THE U.S. CENSUS BUREAU AND BUREAU OF ECONOMIC ANALYSIS

COSSA is a member of the 2010 Census Advisory Committee and as we move toward that redesigned short-form Census, the large increase proposed for the Bureau's fiscal year 2009 budget becomes imperative if we are to get the count right. We are aware that there are difficulties surrounding the preparations for 2010, particularly with regard to the use of handheld devices to verify addresses and to conduct the nonresponse follow up. We hope that Congress and the Bureau can cooperate to ensure that these problems are straightened out.

Nonetheless, the Census is constitutionally mandated and has an important impact on reapportionment, redistricting, and the distribution of federal and state funds. So we must make every effort and spend whatever is necessary to make sure we get a fair and accurate count.

In addition, the other regular activities at the Census Bureau should not suffer as a result of the difficulties with the preparations for 2010. The American Community Survey (ACS) has allowed the decennial to become a short-form census and ACS' annual data collections also provide timelier information for use by state and local governments and businesses. The other Bureau activities are also important to maintaining our economic statistical databases that play an important role in employment policy, housing policy, and economic policy and their funding should be sufficient.

COSSA also supports the increase proposed for the fiscal year 2009 Bureau of Economic Analysis (BEA) that continues the development of measures of investment in R&D and other knowledge-based activities in order to incorporate them into the nation's GDP. BEA also maintains the nation's current income accounts, an important tool for economic policy making.

NATIONAL INSTITUTE OF JUSTICE (NIJ) AND THE BUREAU OF JUSTICE STATISTICS (BJS)

At the House CJS Subcommittee hearing with the Office of Justice Programs there were many references to the studies and data collections of NIJ and BJS. The problem has been that these references do not necessarily translate into increased budget support. In recent years, these agencies have seen their budgets stagnate and in some years go down. We appreciate this Subcommittee's support of the fiscal year 2008 increase for BJS and the strong report language regarding the importance of the National Crime Victimization Survey (NCVS). We ask for enhanced resources for these agencies in fiscal year 2009, $50 million in program funds for each agency. The cost of crime to victims and to society is far out of proportion to the budget for research studies and the collection and analysis of data that are essential to understanding how to effect change with regard to crime and criminal justice.

Recently, the National Academies' Committee on National Statistics has been reviewing BJS' programs. In early January they released their report Surveying Victims: Options for Conducting the National Crime Victimization Survey. In many years, NCVS takes up to 60 percent of the BJS budget.

The Committee found that "as currently configured and funded, the NCVS is not achieving and cannot achieve BJS' legislatively mandated goal to 'collect and analyze data that will serve as a continuous and comparable national social indication of the prevalence, incidence, rates, extent, distribution, and attributes of crime.'" They recommend that BJS needs additional funds to "generate accurate measures of victimization, which are as important to understanding crime in the United States as the UCR measure of crimes reported to the police." Additional resources will also permit NCVS to provide sub-national data, a sticking point for many practitioners regarding the NCVS.

Recent increases in crime are not uniform across America. Many large cities continue to show declines, while medium-size cities and rural areas are experiencing difficulties. There are many possible explanations and the sorting out process continues. But it is clear that strategies that worked in some places, "hot spots," community policing, crime mapping, are not working in others. The re-entry of former prison inmates into the general population creates more concerns. COSSA sponsored a session on April 4 on Violent Crime: What's Happening and Why in which distinguished criminologists and a former judge discussed these problems. NIJ needs more resources to support further explorations of this differentiation that now marks criminal activity.

The National Academies' has also begun a study of NIJ's research activities. COSSA testified to that panel in December of last year. The NIJ social science portfolio has been limited in recent years, as budgets have decreased and the fascination with technological fixes continues. COSSA has nothing against technology, but as has been proven in so many areas, human behavior and social conditions often thwart technology-driven solutions and thus the focus, we believe has to shift.

In July of each year, NIJ convenes a large R&D conference that examines major issues facing the criminal justice community. It is a special opportunity to bring together scientists, practitioners, and policy makers to interact and cooperate on setting research agendas.

Again, I understand that this is expected to be another difficult year for the appropriations' process. COSSA hopes that when you consider the fiscal year 2009 funding for the agencies I discussed, you will treat them as generously as you can.

Thank you for the opportunity to present our views.

CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

Governing Members

American Association for Public Opinion Research
American Economic Association
American Educational Research Association
American Historical Association
American Political Science Association
American Psychological Association
American Society of Criminology
American Sociological Association
American Statistical Association
Association of American Geographers
Association of American Law Schools
Law and Society Association
Linguistic Society of America
Midwest Political Science Association
National Communication Association
Rural Sociological Society
Society for Research in Child Development

Membership Organizations

American Agricultural Economics Association
American Association for Agricultural Education
Association for Asian Studies
Association for Public Policy Analysis and Management
Association of Research Libraries
Council on Social Work Education
Eastern Sociological Society
International Communication Association
Justice Research and Statistics Association
Midwest Sociological Society
National Association of Social Workers
National Council on Family Relations
North American Regional Science Council
North Central Sociological Association
Population Association of America
Social Science History Association
Society for Behavioral Medicine
Society for Research on Adolescence
Society for the Psychological Study of Social Issues
Society for the Scientific Study of Sexuality
Sociologists for Women in Society
Southern Political Science Association
Southern Sociological Society
Southwestern Social Science Association

Colleges and Universities

Arizona State University
Brown University
University of California, Berkeley
University of California, Davis
University of California, Irvine
University of California, Los Angeles
University of California, San Diego
University of California, Santa Barbara
Carnegie-Mellon University
University of Chicago
Clark University
Columbia University
Cornell University
Duke University
George Mason University
George Washington University
University of Georgia
Harvard University
Howard University
University of Illinois
Indiana University
University of Iowa
Iowa State University
Johns Hopkins University
John Jay College of Criminal Justice, CUNY
Kansas State University
University of Kentucky

University of Maryland
Massachusetts Institute of Technology
Maxwell School of Citizenship and Public Affairs, Syracuse
University of Michigan
Michigan State University
University of Minnesota
Mississippi State University
New York University
University of North Carolina, Chapel Hill
North Carolina State University
Northwestern University
Ohio State University
University of Oklahoma
University of Pennsylvania
Pennsylvania State University
Princeton University
Purdue University
Rutgers, The State University of New Jersey
University of South Carolina
Stanford University
University of Tennessee
State University of New York, Stony Brook
University of Texas, Austin
Texas A & M University
Tulane University
Vanderbilt University
University of Virginia
University of Washington
Washington University in St. Louis
West Virginia University
University of Wisconsin, Madison
University of Wisconsin, Milwaukee
Yale University

Centers and Institutes

American Academy of Political and Social Sciences
American Council of Learned Societies
American Institutes for Research
Brookings Institution
Center for Advanced Study in the Behavioral Sciences
Cornell Institute for Social and Economic Research
Institute for Social Research, University of Michigan
Institute for the Advancement of Social Work Research
Institute for Women's Policy Research
National Bureau of Economic Research
National Opinion Research Center
Population Reference Bureau
Social Science Research Council

PREPARED STATEMENT OF CRARY INDUSTRIES INC.

On behalf of Crary Industries Inc., manufacturer of agricultural and outdoor equipment, located in West Fargo, North Dakota, I would like to thank the Committee for allowing our organization to submit this testimony for the record. I am writing to respectfully request that the Hollings Manufacturing Extension Partnership program be provided the authorized $122 million within the fiscal year 2009 Commerce, Justice, Science and Related Agencies Appropriations Bill. This requested level of funding for 2009 was provided for in the recently enacted America COMPETES Act. As you know, the Hollings Manufacturing Extension Partnership (MEP) is a program within the Department of Commerce, National Institute of Standards and Technology, a program authorized to improve competitiveness of America's manufacturing community.

The MEP is one of the most successful partnerships in the country. In addition to public support, a value proposition to improve manufacturer's global competitiveness is supported by those companies who receive benefit. In North Dakota, the Dakota MEP provides assistance to companies in continuous improvement, innovation, strategic growth, technology and workforce development—all major needs of our companies. We have worked on a variety of improvement projects with the assistance of Dakota MEP.

As a Dakota MEP Director, I would also like to report that the average company benefits and impacts realized in the Dakota MEP improvement work with manufacturers mirrors the national MEP average at $1.4 million per engagement. These benefits have been realized by manufacturers who've partnered with Dakota MEP over the past six years.

Manufacturing continues to diversify and grow the economies of the Dakotas. It currently is 10 percent of the gross state product in North Dakota and 11 percent in South Dakota. The industry has nearly 1,900 firms employing 69,000 in the Dakotas exporting over $2 billion. Manufacturing brings new wealth to our country, our states and communities which, in turn, generate other economic activity and opportunities.

Manufacturing must remain one of our country's economic strengths and the MEP is an invaluable program to help the industry better compete. Without unwavering strong federal support, the MEP will be unable to maintain its mission of serving America's small manufacturers' increasing needs. At a time when our economic strength and global competitiveness are national priorities, the MEP continues to be a wise investment. We respectfully request that you appropriate $122 million for the MEP in fiscal year 2009.

PREPARED STATEMENT OF THE SOCIETY FOR NEUROSCIENCE

Introduction

Mr. Chairman and members of the subcommittee, I am Eve Marder, Ph.D., President of the Society for Neuroscience (SfN) and the Victor and Gwendolyn Beinfield Professor of Neuroscience at Brandeis University. It is my honor to submit this testimony on behalf of SfN in support of the National Science Foundation.

My research focuses on understanding how circuit function arises from the intrinsic properties of individual neurons and their synaptic connections. Of particular interest is the extent to which similar circuit outputs can be generated by multiple mechanisms, both in different individual animals, or in the same animal over its lifetime. To address this, my lab studies the central pattern generating circuits in the crustacean stomatogastric nervous system, such as those found in crabs and lobsters. Central pattern generators are groups of neurons found in vertebrate and invertebrate nervous systems responsible for the generation of specific rhythmic behaviors such as walking, swimming, and breathing. I am the recipient of federal support from the National Institutes of Health, and from the National Science Foundation for research and the training of the next generation of scientists.

Fiscal Year 2009 Budget Request

The Administration requests a budget of $6.85 billion for NSF in fiscal year 2009, a 13 percent increase from fiscal year 2008. The administration's request for the Research and Related Activities (R&RA) account, where all NSF grant funding resides, is $5.59 billion, an increase of 16 percent from fiscal year 2008. The scientific community applauds this strong support for the agency—it is a crucial step in keeping the United States competitive in science and technology.

SfN is advocating a budget of $7.33 billion for NSF in fiscal year 2009, the amount authorized by the House in the America COMPETES Act. This represents a 20.8 percent increase for NSF. While this increase seems large, we ask that the Subcommittee consider the following:

—NSF accounts for nearly 25 percent of federal support of basic research at U.S. academic institutions.

—This is effectively a two-year increase. NSF received an increase of just 1.3 percent for fiscal year 2008 after Congress passed much larger amounts in their spending bills.

—In some cases, directorates not covered under the American Competitiveness Imitative actually saw funding decreases in the last fiscal year, including the Biological Sciences Directorate (–2.9 percent).

SfN supports such dramatic budgetary action because it represents a necessary step in the advancement of physics, computer science, mathematics, chemistry, engineering, as well as biology. These fields, and scientists trained in them, are crucial for us to understand the brain and the way it controls behavior. Through NSF grants and cooperative agreements with colleges, universities, K–12 school systems, and other research organizations throughout the United States, neuroscientists can continue to conduct the basic research that advances scientific knowledge and leads to tomorrow's treatments and cures. Additionally, SfN recognizes the leadership role that NSF plays in driving innovation in science education.

Basic Research—Fundamental Science

Continued investment in basic research at NSF is essential to laying the groundwork for discoveries that will inspire scientific pursuit and technological innovation for future generations. As reflected in the America COMPETES Act, aggressive investment in technology and scientific research is crucial to ensure America sustains its global leadership and competitiveness. Science is now a truly global enterprise that has the potential to revolutionize the human experience, health and activity—the question is whether America will maintain its role leading the next generation of scientific advances.

Future scientific progress requires the kinds of quantitative and interdisciplinary training that NSF fosters. NSF programs such as the Integrative Graduate Education and Research Traineeship Program (IGERT) are producing a cohort of scientists who have learned to work cooperatively, and have learned to learn across disciplinary boundaries, ensuring that the workforce is provided highly trained scientists who are unafraid of the challenges of the future.

NSF-funded biologists and neuroscientists are discovering fundamental mechanisms important to understanding how humans and other animals behave, develop, communicate, learn, and process information. Understanding the neuroscience of animal diversity is necessary as we confront environmental and agricultural changes in the future. NSF-funded physicists, mathematicians, computer scientists and engineers have done ground-breaking work that enables the analysis of EEG data, the development of brain prosthetic devices, and other technologies that will assist in the rapid diagnosis and treatment of epilepsy and stroke. NSF-funded statisticians are developing new methods for analysis of the large amounts of genome data, on humans and other organisms, and developing better statistical tools for looking at the effects of the environment on human and animal populations. NSF-funded chemists have developed new methods that allows for the extremely accurate measurement of very small amounts of brain hormones.

Indeed, many of the new findings in neuroscience can be traced back to fundamental work in these other fields that has contributed to new technologies of all kinds. This allows us to carry out new kinds of experiments not imaginable even 5–10 years ago. Consider these recent advances in neuroscience made possible by discoveries in other fields:

Artificial Cochlea.—NSF-funded researchers at the University of Michigan developed an artificial cochlea to assist the hearing-impaired. The device, made mainly of Pyrex glass, silicone oil and silicon nitride, works by converting vibrations into electrical pulses that the brain is able to process. Via cochlear implants, nearly 120,000 people have had partial hearing restored.

Brain Mapping.—Scientists at the College of William and Mary used NSF funding to create real-time, dynamic maps of patients' brains to be used during neurosurgery. Computers use images taken prior to surgery combined with live data feeds from the patient's brain during the procedure to show changes and assist neurosurgeons with quicker, more accurate medical procedures that will result in lives saved.

These discoveries have great potential to improve the lives of Americans and almost certainly would not have been made without the strong commitment to interdisciplinary research at NSF.

What is the Society for Neuroscience?

The Society for Neuroscience is a nonprofit membership organization of basic scientists and physicians who study the brain and nervous system. Recognizing the field's tremendous potential, the Society was formed in 1969 with less than 500 members. Today, SfN's membership numbers more than 38,000 and it is the world's largest organization of scientists devoted to the study of the brain. Neuroscience advances the understanding of human thought, emotion, and behavior. Our member neuroscientists work to understand animal and human nervous systems, how they develop, learn, and how they interact with their environment. Our membership includes investigators from backgrounds as diverse as physics, chemistry, engineering, mathematics, biology, biochemistry, and psychology, brought together to understand all aspects of brain function, from molecules and genes to cognition.

SfN is devoted to education about the latest advances in brain research, and to raising awareness of the need to make neuroscience research a funding priority. Many SfN members are committed to developing educational innovations that take advantage of new neuroscience research.

Conclusion

The scope of the challenge of understanding the human mind requires a bold approach and the ability to undertake high-risk, high-reward projects. With proper funding, the NSF can do both. By laying the groundwork for revolutionary discoveries and advances in neuroscience with interdisciplinary research, NSF is poised to keep the United States competitive in the 21st century and beyond.

We urge the subcommittee to support and approve a 20.8 percent increase to the NSF budget for fiscal year 2009. Thank you for the opportunity to submit this testimony.

PREPARED STATEMENT OF THE AMERICAN SOCIETY OF PLANT BIOLOGISTS

Thank you, Mr. Chairman for the opportunity to present this testimony on behalf of the American Society of Plant Biologists (ASPB). Founded in 1924, ASPB is a non-profit society of 5,000 plant scientists. My name is Rob McClung. I am Associate Dean of the Sciences at Dartmouth College and President of ASPB. ASPB urges Subcommittee support for the fiscal year 2009 budget request of the National Science Foundation (NSF) of $6.85 billion, including $5.59 billion for NSF Research and Related Activities and $790 million for NSF Education and Human Resources. ASPB urges a 16-percent increase for the NSF Directorate for Biological Sciences, which is the average of increases for all directorates in the fiscal year 2009 request.

ASPB joined with 17 other science societies in a March 17 letter to the Chairman and Ranking Member expressing appreciation for your leadership in supporting NSF and comparable increases for all science disciplines. As noted in the letter, we are concerned that the NSF fiscal year 2009 budget request again tries to distinguish among the disciplines in its proposed increases for the research directorates.

The Consolidated Appropriations Act of 2008 indicates that the "Committees also believe the Foundation should maintain comparable growth in fiscal year 2008, to the extent possible for the biological sciences and social, behavioral, and economic sciences directorates. Each of the science disciplines is valuable in maintaining U.S. competitiveness." This reflects language in the House Report. Thank you, Mr. Chairman and Mr. Ranking Member for your leadership on this provision.

Your position is supported by the America COMPETES Act, which treats all disciplines as priorities. In addition, "Rising Above the Gathering Storm" said there should not be a disinvestment in such important fields as the life sciences and social sciences.

We join with 17 other science societies in asking that the Subcommittee include report language in the fiscal year 2009 Appropriations report that asks NSF to ensure that the biological sciences, geosciences and social, behavioral and economic sciences directorates receive increases in fiscal year 2009 that are comparable to the other directorates.

It is only through advances in all science disciplines that the nation will take advantage of the full range of innovation the science community has to offer.

Investment in world leading basic research sponsored by NSF contributes to U.S. leadership in the world in science and technology. U.S. leadership in a wide range of science disciplines is needed for U.S.-based development of new technologies that will help U.S. industries and workers compete and survive in the highly competitive global market.

Support for NSF is an investment in the knowledge base of our nation. Existence of a highly educated workforce is a major consideration for businesses in determining what part of the world they will start or expand their operations. Despite the attractions of lower costs for wages, land, buildings and related costs to companies considering moving jobs offshore, it is the highly skilled workforce in the United States that plays a major role in contributing to job starts and business expansions here at home.

The students, post doctoral students, assistant professors and professors supported at universities across the nation by NSF research and education grants make up a valuable talent pool highly prized by business and industry. In addition to the United States, other nations are aware of the contributions the science community can make to its economy.

Educating and training its citizens to be world leading scientists and providing a reasonable opportunity for success in a science academic career have been keys to success for the U.S. science community and its related industries. Support provided by NSF for research proposals selected based on the highest scientific merit as determined through peer review is essential to development of the nation's scientific talent base. We're concerned that the high rate of rejection of even the highly rated biology proposals by NSF, will discourage some talented young students from pursuing a career in science.

Grant approval rates at 21 percent for the NSF Directorate for Biological Sciences are below the average of 23 percent for all directorates in NSF Research and Related Activities. We appreciate the 10.3 percent increase in the budget request for the Directorate for Biological Sciences. We request that the Subcommittee increase funding for the Directorate for Biological Sciences to the 16-percent average increase for Research and Related Activities in the budget request. This would make possible the granting of more awards for a greater number of high quality research proposals.

The NSF Directorate for Biological Sciences is the major source of support for fundamental non-medical biology research conducted at universities across the nation. Increased support for non-medical biology research could strengthen the nation's world standing and competitive strength in this important area of research. This would in turn strengthen U.S.-based industries dependent upon basic biological research, including biotechnology, bioenergy, biosafety, biodefense and agriculture.

In concert with maintaining preeminence in science and technology, one of the keys to maintaining world leadership for the United States will be to assure a reliable and affordable energy supply for industry and consumers. Basic plant research supported by the NSF Directorate for Biological Sciences is providing knowledge that is contributing to bioenergy research capabilities of the U.S. Department of Energy and U.S. Department of Agriculture. For example the Plant Genome Research Program (PGRP) and 2010 Project are producing a treasure trove of knowledge of plant gene structure and functions.

As projected in a report prepared by DOE and USDA in April 2005, advances in plant and related research will enable the United States to produce more than 1.3 billion tons of biomass "enough to produce biofuels to meet more than one-third of the current demand for transportation fuels." The report is titled "Biomass as Feedstock for a Bioenergy and Bioproducts Industry: The Technical Feasibility of a Billion-Ton Annual Supply." The report can be found at: http://www1.eere.energy.gov/biomass/pdfs/final__billionton__vision__report2.pdf.

A letter to the editor I wrote on "The next generation of biofuels" that was published in The Washington Times March 6, 2008 and is appended to my statement commends the Congress and President for initiating needed investments in new generation biofuels. We encourage additional investment in all phases of plant research. This will hasten the day when biofuels make up 33 percent instead of three percent of the transportation fuels used in the United States.

Plant genome research has helped propel plant science into a new modern era with far more capabilities in biology, bioinformatics, computational biology, modeling systems, systems biology and other areas. Findings in future years through the Plant Genome Research Program and 2010 Project will further enhance research capabilities with plants. As the primary source for food, fiber and feed and a promising clean alternative energy source, increased knowledge of plant structure and function is essential to meeting life-sustaining human needs.

A recent report of the National Academies found many important contributions from the NSF-sponsored National Plant Genome Initiative. The report found that basic plant genome research serves a wide diversity of agricultural and environmental purposes, as well as contributing to basic scientific discovery. For example, by increasing knowledge of how plants cope with extreme environmental stresses, plant genomics research can help scientists more precisely breed or engineer plants that can thrive as climates change. This knowledge is particularly important with respect to how water is used to grow crops. Economically viable production of fuels from plant biomass, in quantities that could contribute to a reversal of the world's dependence on fossil fuels, will require increases in plant productivity and advances in plant biomass-to-fuel conversion.

A key to maintaining the health and security of the United States and its citizens is to continue to provide secure food supplies. NSF support for basic plant research contributes to the local economies nationwide, including rural areas, while helping to secure the food supply of all Americans. As the first step of every food chain, plants and research on plants plays an essential role in meeting the nutritional needs of people here and abroad.

The NSF Directorate for Biological Sciences sponsors examination of basic research questions on plants and other organisms that will lead to technologies to continue a secure supply of domestically produced food and bioenergy.

Thank you again for this opportunity to present our testimony before the Subcommittee.

[From The Washington Times, March 6, 2008]

LETTERS TO THE EDITOR

THE NEXT GENERATION OF BIOFUELS

Oil closed at $100 a barrel Feb. 19 for the first time. The Washington Times reported on Feb. 20 ("Oil tops $100 on refinery, OPEC," Business) that fears that the Organization of the Petroleum Exporting Countries may cut production contributed to the price increase.

Some analysts see this $100 mark as just a stop on the way to $200-per-barrel oil, possibly by the end of this decade. The reason cited is similar to newspaper reports on the bump to $100 per barrel—OPEC's control of supply.

In addition to the economic and political challenges imposed by our reliance on foreign oil, we also need to be concerned that greenhouse gas (GHG) emissions associated with the use of fossil fuel contribute significantly to global warming, evident from observed increases in global air and ocean temperatures, widespread melting of snow and ice and a rising global average sea level. Is there a large-volume alternative to the use of increasingly costly oil with its high GHG emissions? There will be.

We are at the early stages of research on the next generation of biofuels using plant cellulose. Plant stems, stalks and leaves will become low-cost feedstocks for biofuels. A 2005 report from the U.S. Department of Agriculture and the U.S. Department of Energy projects that there will be enough biomass (cellulose) to meet more than one-third of the current U.S. demand in transportation fuels.

At the same time, next-generation biofuels will greatly lower emissions of stored carbon compared to gasoline. Biofuels will be better for Americans' pocketbooks and the environment.

The President and Congress are to be commended for initiating needed investments in new-generation biofuels research. Additional investment is needed in all phases of plant research. This will help hasten the day when biofuels make up 33 percent instead of 3 percent of the transportation fuels used in the United States.

Prepared Statement of the Institute of Makers of Explosives

Interest of the IME

The IME is the safety and security association of the commercial explosives industry. The production, distribution, storage and use of explosives are highly regulated. ATF is one of the agencies that play a primary role in assuring that explosives are identified, tracked, and stored only by authorized persons. The ability to manufacture, distribute and use these products safely and securely is critical to this industry. We have carefully reviewed the Administration's fiscal year 2009 budget request for ATF and have the following comments about its impact on the commercial explosives industry.

Addressing Statutory Mandates

The commerce of explosives is one of the nation's most heavily regulated activities. As noted above, ATF plays a key role in this regulatory scheme through its implementation of Federal Explosives Law (FEL). Yet, ATF seems to have forgotten its statutory mandate to "protect interstate and foreign commerce"—which is the business of the commercial explosives industry—in its quest to be a lead terrorist/criminal agency.[1] ATF states that it is "dedicated to preventing terrorism, reducing violent crime, and protecting our Nation."[2] ATF's own data, however, suggests that commercial explosives are not a "preferred tool" of criminals or terrorists.[3] While ATF claims to work "with . . . industry members . . . to make regulation less burdensome", the needs of the legitimate explosives industry are secondary to the agency's criminal enforcement interests.[4] By statute, ATF is supposed to "take into consideration . . . the standards of safety and security recognized in the explosives industry" when issuing rules and requirements.[5] But, our recommendations are increasingly bypassed—we believe to the detriment of safety and security. Finally, we see ATF reaching out to regulate in areas that are not the Bureau's primary area of responsibility at a time when ATF is not keeping up with the responsibilities already on its plate. With this perspective, we offer the following comments on ATF's budget request and program performance.

Adequacy of Budget Resources

As contrasted with the fiscal year 2008 budget justification, ATF's fiscal year 2009 budget request does not disclose the level of funding slated for its explosives regulatory program. Last year, the amount was $63.6 million or 23 percent of its entire Arson and Explosives (A&E) budget.[6] Inasmuch as the fiscal year 2009 budget request anticipates no increase to current services, we expect that the allocation to the explosives regulatory program is roughly the same or $62.5 million of the $267.2 million request for the A&E program.[7] While the budget request anticipates an increase of four FTE for the A&E program, the justification indicates that the revised

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[1] Public Law 91–452, Sec. 1101.

[2] ATF Fiscal Year 2008 Budget Submission, page 1.

[3] Over half of substances used in illegal bombing incidents are not regulated by ATF. Only 18 percent involve explosives subject to FEL requirements, and of these, 91 percent are common fireworks or components. "Implementation of the Safe Explosives Act", OIG, DOJ, Report Number I–2005–005, page 59.

[4] ATF Fiscal Year 2009 Budget Submission, page 39.

[5] 18 U.S.C. 842(j).

[6] ATF Fiscal Year 2008 Budget Submission, page 47 & 14, and ATF Fiscal Year 2009 Budget Submission, Exhibit G: Crosswalk of 2008 Availability.

[7] ATF Fiscal Year 2009 Budget Submission, page 39.

FTE is only to maintain current services.[8] As discussed below, we are concerned that ATF has not directed additional FTE to address the regulatory needs of the commercial explosives industry. Absent a reprogramming of resources, however, the Bureau's ability to perform its regulatory functions in a timely manner is jeopardized.

Protect Commerce

Our industry relies on ATF to efficiently and effectively perform a number of functions to ensure that the legitimate commerce of explosives can go forward safely and unimpeded.[9] In this regard, we support all necessary resources for these essential services. However, the budget justification contains information suggesting that ATF will fall short of its three-year statutory obligation to inspect 100 percent of its licensee/permittees as required by law.[10] We are also disappointed not to see a performance measure concerning investigation of explosives thefts.

Industry Standards

We take seriously the statutory obligation that ATF take into account industry's standards of safety when issuing rules and requirements. We have endeavored to fulfill this obligation through the development of industry best practices for safety and security, participation in relevant standard-setting organizations, and forums for training. We have offered ATF recommendations that we believe will enhance safety and security through participation in the rulemaking process, in the Bureau's research efforts, and in other standard setting activities. Our interface with ATF in these settings prompts the following comments.

—*Rulemakings*.—Under the heading of "Explosives . . . Regulatory Programs," ATF states that it has "issued three rulings." [11] Two of these three rulings apply to the explosives industry.[12] While we are appreciative of these rulings, they are interpretive statements of agency policy and should not be confused with regulatory activity conducted pursuant to the Administrative Procedure Act (APA). Under the APA, ATF has six open rulemakings of interest and concern to the explosives industry, the same number of outstanding dockets as reported last year.[13] The oldest of these was proposed in 2001. Several are a result of the enactment of the 2002 Safe Explosives Act (SEA). Two of these rulemakings were issued as "interim final rules," which allows rules to be enforced without public input as to the effect of the rule on the regulated community. Subsequently, IME raised a number interpretative questions and concerns about these rules which are critical to the continued commerce of commercial explosives. Yet, ATF has delayed again the projected date for finalizing these rules until October 2008 and the projected dates for finalizing every other open rulemaking of significance to IME.

Last year, Congress directed ATF to address these long-standing rulemaking concerns.[14] Despite this fact, ATF has not requested additional staff to address its regulatory backlog or other pending requests for interpretive guidance and accommodations that are the day-to-day work of regulatory agencies. These regulatory tasks may be at odds with ATF's vision as a law enforcement agency, but they are critical to the lawful conduct of the commercial enterprises the Bureau controls.

—*Data*.—ATF is continuing efforts to enhance data capabilities. These efforts should be supported. We are only disappointed in one aspect. We rely on ATF's data collection and analysis capabilities. IME needs data about incidents and theft and losses to perfect our safety and security recommendations and practices. The latest full-year information we have about explosive incidents is from

[8] ATF Fiscal Year 2009 Budget Submission, Exhibit B.

[9] These functions include the issuance of licenses to companies engaged in the manufacture, importation, and distribution of commercial explosives, and permits to those that purchase and receive these materials, background checks of certain employees of licensees and permittees, and regulations to ensure that commercial explosives are stored safely and securely. Additionally, when explosives are stolen, lost, or used for illegal purposes, we rely on the ATF to recover products and investigate incidents as necessary.

[10] ATF Fiscal Year 2009 Budget Submission, page 48 and FN5.

[11] ATF Fiscal Year 2009 Budget Submission, page 44.

[12] The rulings allow for the use of computer records under certain conditions and storage options for residual amounts of bulk-blasting agents.

[13] Semiannual Agenda, http://www.reginfo.gov/public/do/eAgendaMain (December 10, 2007).

[14] Conference Report—Consolidated Appropriations Act, 2008, H.R. 2764/Public Law 110–161, page 257, citing, "Open Rules.—The Appropriations Committees concur with language in the House Report regarding open rulemakings and the delay in resolving the rules due to staff shortages. The ATF to report within two months after enactment of this Act on the status of all open rules and the ATF's plans to address the backlog."

2003. We urge the Subcommittee to ensure that ATF has the resources to gather and release this information in a timelier manner.

—*IMESAFR*.—IME prides itself in being the safety and security advocates for the commercial explosives industry. The technical expertise of our members is a resource we gladly share with government agencies. In this regard, IME has spent years and hundreds of thousands of dollars developing and validating a credible alternative to strict interpretation of quantity-distance tables used to determine safe setback distances from explosives in collaboration the Department of Defense Explosives Safety Board and Canadian and U.S. regulatory agencies, including ATF. The result is a windows-based computer model for assessing the risk from a variety of commercial explosives activities called IMESAFR.[15] Not only can IMESAFR determine the amount of risk presented, but it can also determine what factors drive the overall risk and what actions would lower risk, if necessary. The probability of events for the activities were based on the last 20 years experience in the United States and Canada and can be adjusted to account for different explosive sensitivities, additional security threats, and other factors that increase or decrease the base value. Following this effort, we expected that ATF would be willing to recognize this powerful assessment tool as an alternative for the regulated community to meet quantity-distance limitations, which limitations are themselves standards developed by the IME. However, this has not been the case. ATF has not taken advantage of opportunities to partner with IME and accept this risk-based approach to explosives safety. ATF's reluctance to recognize risk-based modeling is contrary to the norm practiced by all other federal agencies with regulatory responsibilities over the explosives industry. We believe that the consistency of risk analysis offered by IMESAFR is preferable to the haphazard "variance" approach ATF uses to address setback issues now.

Areas of Responsibility

ATF has used resources to venture into areas of regulatory authority that are not within its primary sphere of responsibility. In 2003, ATF chose to interpret FEL to give it authority to set clearance standards for workers involved in the transportation of commercial explosives. In 2005, there was a flurry of concern about the breadth of ATF security checklist documents that included standards for facility security such as surveillance, training, public and employee access, vehicle control, fencing and gates—areas of expertise reserved for the Department of Homeland Security (DHS). Since then ATF has advocated for authority or otherwise suggested a role to regulate ammonium nitrate and other easily purchased/unregulated materials used by terrorists in improvised explosive devices.[16]

While we respect ATF's expertise and authority to establish standards for explosives storage magazines, ATF's statutory authority does not reach to the security of ammonium nitrate or other explosive precursors.[17] Congress has tasked this responsibility to the DHS under its Chemical Facility Anti-terrorism Standards authority and through the enactment of the Secure Handling of Ammonium Nitrate Act of 2007.[18] Many materials can be manipulated to produce an explosive effect. However, in their unadulterated state they will not explode.[19] DHS is far better positioned to address the range of issues raised by the prevalence of these precursor materials. According to Homeland Security Presidential Directive 7, DHS is charged to identify, prioritize and coordinate protection of the nation's critical infrastructure, of which chemical manufacturing is one sector.[20] The Government Accountability Office, in a report on implementation of critical infrastructure programs, identifies no role for the ATF, or the Department of Justice, in developing a national infra-

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[15] IMESAFR was built on the DDESB's software model, SAFER. The DDESB currently uses SAFER and table-of-distance methods to approve or disapprove Department of Defense explosives activities.

[16] ATF Fiscal Year 2007 Budget Submission, pages 18, 21, 53, 54, 56 and 66. ATF Fiscal Year 2008 Budget Submission, pages 6, 7, 44, 45, and 49. ATF Fiscal Year 2009 Budget Submission, pages 7 and 45.

[17] "Implementation of the Safe Explosives Act", OIG, DOJ, Report Number I–2005–005, page ii.

[18] 72 FR 17688 (April 9, 2007) & 72 FR 65396 (November 20, 2007) and. The Consolidated Appropriations Act, 2008, H.R. 2764/Public Law 110–161, sec. 563.

[19] Containing the Threat from Illegal Bombings, NRC, 1998, page 130.

[20] Homeland Security Presidential Directive/HSPD–7, paragraphs 13 & 15, December 17, 2003.

structure protection plan or in guarding that infrastructure and its products.[21] IME supports chemical facility, hazardous materials transportation and ammonium nitrate security standards. However, we question ATF's involvement and attendant use of resources in these areas, when the Bureau consistently falls behind in its own vital regulatory responsibilities.

Performance Measure Improvements

For a number of years, IME has expressed concern about the lack of appropriate performance measures for the commercial explosives industry. Currently, ATF has three performance and two efficiency measures that apply to the commercial explosives industry.[22] Only one performance and one efficiency measure are directed at facilitating regulatory compliance. These measures are the number and percentage of explosives licensee/permittees that are inspected and the percent of perfected explosives applications acted on within 90 days. Yet, ATF is now proposing to delete the only efficiency measure applicable to the explosives industry because the "measure was never developed."[23] Not only should Congress direct the Bureau to restore and implement this measure, it should direct the agency to institute other measures of performance and efficiency for the explosives regulatory program. We have advocated for measures showing the number of background checks that ATF has performed, within what average timeframe, and of those, how many individuals failed to receive clearance, and of those, how many appealed the Bureau's findings; the number of rulemakings outstanding and their priority; turnover rates among agents and inspectors; and the number of individuals from which agencies that are trained through ATF programs. Absent information of this type, it is unclear how Congress can effectively oversee ATF's explosives operations and determine the adequacy of its budget request.

Leadership

The ATF has been without a director since August 2006. Director-designee Michael J. Sullivan has served with distinction for nearly a year. He came at a particularly challenging time and has overseen the agency's move to its new headquarters. We believe the Bureau has been too long without permanent leadership and we urge Congress to promptly act on this nomination.

Conclusion

The manufacture and distribution of explosives is accomplished with a remarkable degree of safety and security. We recognize the important role played by ATF in helping our industry achieve and maintain safe and secure workplaces. Industry and the public trust that ATF has the resources to fulfill its regulatory responsibilities. It is up to Congress and, in particular, this Subcommittee to ensure that ATF has the resources it needs. We strongly recommend full funding for ATF's explosives program.

Prepared Statement of the Association for Psychological Science

Summary of Recommendations

—APS supports the Coalition for National Science Funding recommendation of $7.326 billion for the National Science Foundation in fiscal year 2009.

—We ask for the Committee's support of Section 7018b of the America COMPETES Act (Public Law 110–69) which provides equal consideration for NSF's Social, Behavioral and Economic Sciences Directorate. This will ensure that the behavioral and social sciences share proportionately in the increases received by NSF, which is essential to strengthen the vital role of these sciences in achieving innovation and realizing the full potential of basic research to benefit our Nation.

—NSF-funded psychological scientists have won the Nobel Prize and the President's Medal of Science for their groundbreaking work. Greater funding for the SBE Directorate will result in more such breakthroughs and will ensure that the Nation continues as the world's leader in behavioral and social science research and training.

Mr. Chairman, Members of the Committee: Thank you for this opportunity to present the views of the Association for Psychological Science (APS) on the fiscal year 2009 appropriations of the National Science Foundation (NSF). APS is dedi-

[21] Agency Plans, Implementation, and Challenges Regarding the National Strategy for Homeland Security, January 2005, GAO–05–33, pages 18, 47, 78 and 133.
[22] ATF Fiscal Year 2009 Budget Submission, page 49.
[23] ATF Fiscal Year 2009 Budget Submission, page 49.

cated to the promotion, protection, and advancement of the interests of scientifically oriented psychology in research, application, teaching, and the improvement of human welfare. Our 20,000 members are scientists and academics at the Nation's universities and colleges. The NSF supports many members of APS, and a great deal of basic research in our field simply could not exist without NSF funding.

The Nation's Premiere Basic Research Enterprise

In the America COMPETES Act of 2007, Congress and the President agreed that basic science research budgets should be doubled. The fiscal year 2008 omnibus appropriation, however, did not provide the necessary funds to keep pace with this goal. The National Science Foundation received only a 2.5 percent increase for fiscal year 2008, $364 million less than the President's request. The continued underfunding of NSF constitutes a significant delay in this Nation's science and technology advancement—one we cannot afford in the face of rising global competitiveness.

A renewed commitment to basic research and educational programs at NSF is essential to capitalize on the enormous promise of scientific innovation, to train future scientists, and to ensure the success of multidisciplinary initiatives. The basic science community asks the Committee to make the underlying intent of this Act a reality. The increase we are recommending today, as a member of the Coalition for National Science Funding, is a critical step in offsetting the under-funding that has been a chronic condition for NSF.

The Social, Behavioral and Economic Sciences (SBE) Directorate

It is crucial to recognize the role the behavioral and social sciences play in fostering innovation. The President's Science Advisor and Director of the Office of Science and Technology Policy, John Marburger, has underscored the importance of our discipline in this endeavor, and your colleagues in the House, led by Subcommittee on Research and Science Education Chair Brian Baird, have asked NSF to comply with the statutory requirement in Public Law 110–69, Section 7018b to give equal consideration to the Social, Behavioral, and Economic Sciences (SBE) Directorate.

Under the Administration's budget plan, the SBE Directorate would receive $233.48 million, 8.5 percent over fiscal year 2008. While this stems the tide of below-average increases in previous years, it is unacceptably disproportionate to other Directorates, which are receiving between 10.3 and 20.2 percent increases. The America COMPETES Act specifically called on NSF not to disinvest in the behavioral and social sciences over the long term. We are concerned about this imbalance, given the enormous potential of behavioral science to address many critical issues facing the Nation, including global competitiveness. To offset previous years' under-funding, we ask the Committee to, at the very least, give the SBE Directorate the 8.5 percent increase the President proposed in this year's NSF budget request. We also ask that the SBE Directorate share proportionately in any such increases ultimately received by NSF.

An Overview of Basic Psychological Research.—NSF programs and initiatives that involve psychological science are our best chance to solve the enigma that has perplexed us for so long: How does the human mind work and develop? APS members include many scientists who conduct basic research in areas such as learning, cognition, and memory, and the linked mechanisms of how we process information through visual and auditory perception. Others study judgment and decision-making (which is the focus of a Nobel prize recently awarded to APS Fellow and NSF grantee Daniel Kahneman); mathematical reasoning (the focus of the recent President's Medal of Science awarded to APS Fellow and NSF Grantee R. Duncan Luce); language development; the developmental origins of behavior; and the impact of individual, environmental, and social factors in behavior.

What's more, basic psychological research supported by NSF and conducted by APS members ultimately has had a wide range of applications, including designing technology that incorporates the perceptual and cognitive functioning of humans; teaching math to children; improving learning through the use of technology; developing more effective hearing aids and speech recognition machines; increasing workforce productivity; and ameliorating social problems such as prejudice or violence. While this is a diverse range of topics, all these areas of research are bound together by a simple notion: that understanding the human mind, brain, and behavior is crucial to maximizing human potential. That places these pursuits squarely at the forefront of several of the most pressing issues facing the Nation, this Congress, and the Administration.

SBE Directorate Highlights

Research supported by the SBE Directorate has the potential to increase employee productivity, improve decision making in critical military or civilian emergency situations, and inform the public policymaking processes across a range of areas. To give just a few examples:

Developmental and Learning Sciences.—This program supports studies that increase our understanding of cognitive, linguistic, social, cultural, and biological processes related to children's and adolescents' development and learning. This kind of research adds to our basic knowledge of how people learn and the underlying developmental processes that support learning. For example, one recently funded study is identifying the cognitive, emotional, and social characteristics that make some children more suggestible than others with respect to legal questioning. The results of these studies will have important implications for developing scientifically sound interviews that produce the most accurate reports from children, and for constructing instruments to detect children who are prone to suggestive factors, which can be adapted for use in schools, mental health, medical, and forensic contexts.

Perception, Action, and Cognition.—The perception, action, and cognition program at NSF supports research on these three functions, and the development of these capacities. Topics include vision, audition, attention, memory, reasoning, written and spoken discourse, motor control, and developmental issues in all topic areas. One recent study funded by this program looks at the important role language plays in emotion perception, and understanding the mechanisms by which language might influence emotion perception. This research shows that the emotions you see in others are influenced by what you know about emotion (especially the language that you speak). It may well be the case that people can be taught to become better emotion perceivers, and hence, better communicators.

Cognitive Neuroscience.—Cognitive neuroscience, within the last decade, has become an active and influential discipline, relying on the interaction of a number of sciences, including psychology, cognitive science, neurology, neuroimaging, physiology, and others. The cross-disciplinary aspects of this field have spurred a rapid growth in significant scientific advances. The blooming field of social neuroscience is yielding research, for example, on the psychological and neural mechanisms involved in the experience of empathy. Brain imaging is being used to measure the effects of stigma, racial bias, similarity, and past shared experiences between oneself and others. This important research will yield a better understanding of the cognitive and neurological mechanisms involved in empathy as well as our ability to share feelings and care for others. Both the findings and the techniques will be of tremendous value to clinicians as well as other researchers.

Cross-Cutting Behavioral Initiatives at NSF

Cyber-enabled Discovery and Innovation.—This new, cutting-edge program supports research on computational thinking, complexity, and interacting systems. NSF expects that this ambitious new undertaking with potentially transformative results will revolutionize the field and shed light onto wide-ranging topics such as emergent phenomena and tipping points in human development. Research into the complexity of social systems will constitute a significant contribution to this endeavor. This investment will help maintain our Nation's expertise in information technology, an essential element for our future competitiveness.

Adaptive Systems Technology.—A new interdisciplinary initiative, this program recognizes the essential human element of exciting new technologies and machines. The human-machine interface is crucial to explore if we are going to make the best use of the latest technology. While biologists describe the trajectory from simple to complex systems and chemists explain the processes underlying complex neural organization, cognitive scientists explore how systems compute and behavioral scientists provide insights into how organisms learn and adapt to their environment. By working together, these scientists can reap the benefits of and develop new ideas through collaboration.

Science of Science and Innovation Policy (SciSIP).—In 2005, the President's Science Advisor, John Marburger, called for a national "science of science policy," asking for research on innovation and scientific discovery processes, as well as on how policymakers use science to shape policy. In response, NSF created the Science of Science and Innovation Policy (SciSIP) research program. By studying science as a social process, SciSIP's goal is the development of an evidence-based platform for science policy. One example of the kind of ideas materializing from this initiative is the measurement of well-being, which deals with such questions as: How can science policy and science outcomes be evaluated by measuring societal well-being? Can scientific priorities be based on well-being? Does well-being as an outcome lead to different science priorities than considering other outcomes? What about national competitiveness and productivity in relation to science and well-being? Addressing these questions has implications for health and the economy, both of which are linked to well-being.

In closing, I want to note that building and sustaining the capacity for innovation and discovery in the behavioral sciences is a goal of the National Science Foundation. We ask that you encourage NSF's efforts in these areas, not just those activities described here, but the full range of activities supported by the SBE directorate and by NSF at large. Your support will help NSF lay the groundwork for this long-overdue emphasis on these sciences. Thank you.

We would be pleased to answer any questions.

PREPARED STATEMENT OF THE AMERICAN SOCIETY FOR MICROBIOLOGY

The American Society for Microbiology (ASM) is pleased to submit the following testimony on the fiscal year 2009 appropriation for the National Science Foundation (NSF). The ASM is the largest single life science organization with more than 42,000 members. The ASM mission is to enhance the science of microbiology, to gain a better understanding of life processes, and to promote the application of this knowledge for improved health and environmental well-being.

The President requests a 13 percent increase in the NSF's budget for fiscal year 2009 for a total funding level of $6.85 billion. Included in this request is $5.6 billion for Research and Related Activities (R&RA), an increase of $773 million, or 16 percent above fiscal year 2008. With the 16 percent growth, NSF anticipates supporting an additional 1,370 research grants, which will help increase the overall funding rate to 23 percent from the 21 percent rate in fiscal year 2008. However, the success rates in many important biological sciences programs remain below 20 percent. The ASM, therefore, recommends a 16 percent, or $98 million, increase for BIO, consistent with the requested increase for R&RA. The ASM also recommends that the overall increase for R&RA be $808 million, or 16.8 percent, and the overall increase for NSF be 13.6 percent above fiscal year 2008, to cover ASM's recommended increase for BIO without affecting the requested increases for other programs.

The NSF plays a critical role in the discovery of new knowledge in the biological sciences. The Society has a number of concerns about BIO funding for the biological sciences, which are discussed below. Our nation's competitiveness in areas such as nanotechnology, climate change, water sustainability, and alternative energy sources depends on innovation in the biological sciences. It is essential that NSF continue strong support for the biological sciences to maintain and expand the contributions of biological sciences research for human, environmental, and economic well being.

The NSF has successfully leveraged its resources for over half a century to promote progress in all fields of science and to enhance its effectiveness and productivity. The NSF builds the nation's research capability through investments in advanced instrumentation and facilities, and by supporting excellence in science and engineering research and education through its competitive, peer-reviewed grants programs. These activities are essential for increasing the nation's economic and scientific competitiveness. Nearly 90 percent of the NSF's budget supports extramural grants, selected through a competitive merit review process, that meet the mission of the Foundation "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense . . ." The NSF has been especially responsive to and benefited from supporting individual investigators and investigator-initiated ideas.

The ASM particularly supports increased funding for R&RA. This funding will promote support for unsolicited grants that potentially advance the frontiers of learning and discovery. The ASM enthusiastically supports the continuation of the NSF's tradition of funding investigator-initiated research.

NSF Biological Sciences

The NSF provides 67 percent, about two-thirds, of federal support for U.S. academic basic research in non-medical biological sciences. This means that NSF's BIO, is arguably the most important source of non-medical funding for biological research, infrastructure, and education in the United States. Through its long history of productivity and innovation, biological research supported by the NSF has been critical for understanding issues of national importance such as the environment, economy, agriculture, and human welfare.

NSF funding is not only important for understanding the functions and behaviors of organisms, it is especially important for understanding how organisms, such as microbes, function and interact with physical and chemical systems. For example, basic biological research has provided physicists and chemists with model systems used in nanotechnology, chemical production and renewable energy generation, each of which are important for American competitiveness. Thus, it is essential to continue strong investments in the biological sciences, since they translate to advances in physical, mathematical, engineering, and computational sciences.

The Administration has proposed an fiscal year 2009 budget for BIO of $675 million, an increase of 10.3 percent over fiscal year 2008. This increase continues along the proposed track of the President's American Competitiveness Initiative (ACI). The ASM is concerned that funding for BIO since fiscal year 2003 has flattened and even decreased. The success rate of competitive awards for BIO in fiscal year 2009 is estimated at 19 percent, well below the overall NSF estimated funding rate of 23 percent. Additionally, some programs within BIO have funding rates less than 14 percent, such as the Microbial Observatories/Microbial Interactions and Processes (MO/MIP) programs, Assembling the Tree of Life program, and the Ecology of Infectious Diseases program. Funding rates for BIO research grants have been consistently lower than agency wide average research funding rates, and the gap between BIO and agency wide funding rates has increasingly widened in the last three years.

Scientific opportunities in the biological sciences are increasing significantly, illustrated by the estimated 20 percent increase in BIO research grant proposals from fiscal year 2003 through fiscal year 2007. However, as opportunities have steadily increased, BIO research grant funding rates have decreased significantly from 26 percent in fiscal year 2003 down to an estimated 19 percent in fiscal year 2007.

Growth in BIO is essential for progress in the biological sciences. Growth in the total NSF budget should be reflected by real growth in BIO as well as other NSF directorates. We, therefore, recommend an increase in the BIO budget consistent with the President's request for R&RA in fiscal year 2009, of 16 percent, for a total of $710 million.

Research in BIO is key to providing fundamental support that is needed for research supported by other NSF directorates. The rapid growth in knowledge by the biological sciences is resulting in the formation of new multi-disciplinary, interdisciplinary, and transdisciplinary efforts that often involve physical and chemical sciences and engineering. Advances in programs in bioenergy and biophysics now depend as much on biology as they do on other scientific disciplines. BIO supports scientific disciplines other than the biological sciences through programs such as Environmental Genomics, MO/MIP, and contributes to interagency priorities, such as climate change and the new NSF-wide program Dynamics of Water Processes in the Environment (WATER).

BIO MO/MIP

In addition to its general concerns about biological sciences funding, the ASM is concerned with a proposal to shift funding in fiscal year 2009 to strengthen core BIO programs and to eliminate support for the demonstrably highly successful Microbial Observatories (MO), Microbial Interactions and Processes (MIP) programs. These programs represent the only sustained national initiatives to describe broadly and understand the diversity of microbial life within the United States. Loss of these programs will mean that other nations with which the United States competes in biotechnology (e.g., China, Japan, Korea, Germany) will continue to support efforts to discover microbial diversity, while the US decreases support.

Differences in funding emphases between existing core programs and microbe-specific programs will likely lead to lower success rates and less funding for microbial researchers. Funding success rates for MO/MIP are already less than 10 percent. The ASM recommends that MO and MIP should be identified as a part of the core programs in BIO, rather than be discontinued. The ASM also recommends increased support for MO/MIP.

Maintaining programs such as MO/MIP is essential to ensure continued discovery of the microbial world, over 99 percent of which remains undescribed. Because they are ubiquitous and functionally more diverse than all plants and animals combined, microbes continue to offer enormous economic potential for industry, agriculture, and medicine. Bioprospecting has already led to many commercial applications, including probiotics, biofuels, and wastewater treatment. The wealth of bacteria, viruses, and other microorganisms that have yet to be cultivated or understood comprise an untapped resource for industry, agriculture, and medicine.

Loss of MO/MIP cannot help but reduce our nation's competitiveness and ability to sustain leadership in microbial biology. Loss of these programs will also adversely affect agricultural research involving a collaboration between USDA and NSF.

NEON

The ASM supports the establishment of the National Environmental Observatories Network (NEON), which will be the first national ecological measurement and observation system designed to answer fundamental regional- to continental-scale scientific questions about the current state of major ecosystems and their response to climate change and other disturbances. Full implementation of the NEON platform will transform our ability to detect and predict changes in ecosystems, and to provide information necessary to respond to change. Integration of microbial biology into the NEON framework also promises to provide a new level of understanding of the interactions between microbes, ecosystems and climate change. The ASM strongly encourages this integration through expanded funding in BIO, and expresses its concern that funding for NEON-related research not reduce the capacities of current BIO programs.

Support for Geosciences, Engineering, and Physical Sciences

Biology and microbial biology are important components of all the research directorates at NSF and should be strongly supported within them. The ASM supports the fiscal year 2009 proposed increases in funding for the research activities at the Geosciences Directorate (GEO), the Engineering Directorate (ENG), and the Mathematical and Physical Sciences Directorate (MPS).

The Geobiology and Low-Temperature Geochemistry program in GEO provides an example of the mutually beneficial relationship between biological sciences and geosciences. Among other areas, this program examines interactions between biological and geological systems at all scales of space and time, interactions between microbes and economically important resources, and interactions among microbes, minerals and groundwater. The Geobiology and Low-Temperature Geochemistry Program also facilitates cross-disciplinary efforts to harness new bioanalytical tools, such as those emerging from molecular biology. The ASM supports the proposed request of $178 million for Earth Sciences (EAR), an increase of $22 million, or 14 percent, above fiscal year 2008, with an emphasis towards increased support for the biological geosciences and $354 million for Ocean Sciences Funding (OCE), an increase of $43 million, or 14 percent above fiscal year 2008.

Similarly, the Engineering Directorate employs microbial research to examine problems involved in the processing and manufacture of economically important products, and in the efficient utilization of chemical resources and renewable bioresources. Much of this work depends on bioinformatics originating from genomic and proteomic studies. The ASM supports the proposed request of $173 million for Chemical, Bioengineering, Environmental, and Transport Systems (CBET), an increase of $42 million or 32 percent, above fiscal year 2008. High emphasis applications for the biological sciences within this program include postgenomic engineering, tissue engineering, biophotonics, nano-biosystems, and biotechnology, leading to improved biosensors, biomaterials, and controlled drug release.

Collaboration with other scientific disciplines is also very important for continued progress in physics, including biological physics at molecular and cellular levels. MPS supports interdisciplinary research that greatly benefits the physical sciences as well as the biological sciences by creating tools that assist in advancing biological research and other disciplines. The ASM also supports the NSF-wide investment, Dynamics of Water Processes in the Environment (WATER). WATER supports research on living organisms in freshwater ecological systems.

Workforce Development and Training

Support for science and engineering education, from pre-K through graduate school and beyond is an essential part of NSF's mission. Research funded by NSF is thoroughly integrated with education to help ensure that there will always be a skilled workforce to support new and future scientific, engineering, and technological fields, and a robust community of educators to train and inspire coming generations.

In fiscal year 2007 BIO alone, support approximately 13,000 people, including senior researchers, other professionals, postdoctorates, graduate students, undergraduate students, and K–12 teachers. Due to flat funding in fiscal year 2008, this number dropped to approximately 12,700. Increased support for the NSF is essential to fostering a competitive, well-trained scientific workforce. The proposed increase for BIO is estimated to support over 13,500 senior researchers, other professionals, postdoctorates, graduate students, undergraduate students, and K–12 teachers.

Conclusion

Support for the NSF is essential for maintaining and improving the nation's scientific and economic competitiveness. The ASM recommends a 13.6 percent increase in funding for the NSF, slightly above the President's request, but below the NSF's authorized level for fiscal year 2009. However, the ASM is concerned that BIO has suffered from flat funding over the last six years and we recommend at least a 16 percent increase for BIO, the same as the increase proposed by the President for the entire Research and Related Activities, of which BIO is a part. This increase will recapture ground lost to inflation, expand the currently successful programs, and take advantage of new scientific opportunities in the biological sciences, such as metagenomics. Increased funding for the NSF should ensure adequate funding for all areas of science. One of the primary strengths of the NSF is its ability to catalyze important interactions among research disciplines in the physical and biological sciences. Consequently, all science must be well funded and encouraged.

The ASM appreciates the opportunity to provide written testimony and would be pleased to assist the Subcommittee as it considers the fiscal year 2009 appropriation for the NSF.

PREPARED STATEMENT OF THE SEA GRANT ASSOCIATION

The Sea Grant Association (SGA)[1] respectfully submits for the official record this written testimony for fiscal year 2009 to the Senate Appropriations Subcommittee on Commerce, Justice, and Science. SGA joins with other stakeholders in urging the Subcommittee to recognize and support the vital programs of the National Oceanic and Atmospheric Administration (NOAA) and requests that the Subcommittee fund NOAA at $4.5 billion for fiscal year 2009. Further, SGA requests that within the overall fiscal year 2009 appropriation for NOAA, the Subcommittee appropriate $72 million for the National Sea Grant College Program, which is a key component of NOAA's extramural research, education and outreach enterprise playing a direct role in keeping our coastal communities safe, prosperous, and vibrant.

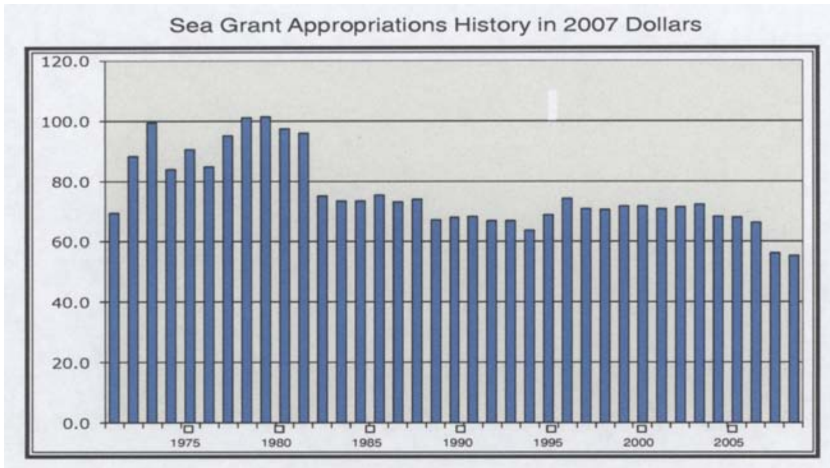
Growth of the National Sea Grant College Program (Sea Grant) has been stunted during that last few years, which over time has begun to directly impact the services delivered on a daily basis to our coastal communities. The constituents of the Sea Grant program—coastal resource managers, state and local governments, tourism sectors, fishing industries, and the general public to name a few—have come to expect and rely on a certain level of service and expertise from the Sea Grant program. However, as the needs of our coastal communities have increased, funding required for the Sea Grant program to support these needs has not kept pace. The SGA recommendation of $72 million is realistic and even represents an amount below that which is authorized for the program for fiscal year 2004[2]. The programmatic request of $72 million is also consistent with the amount requested in a Dear Colleague Letter for Sea Grant that was submitted to your Subcommittee earlier this month with 32 signatures. In addition, attached is a list of about 300 stakeholders who attest to the value of the Sea Grant program.

With the costs of research and education rising, the near flat-funding of Sea Grant during the last few years has forced programs to reduce staff and leave numerous high-quality research and outreach projects unsupported. An increased investment in Sea Grant will not only enhance its ability to meet these additional demands, it will also leverage additional state and university matching funds, reflecting its unique value as a federal-state partnership.

The Administration's request of $55 million for fiscal year 2009 would reverse the small progress made by the program last year by eliminating the modest growth provided by the Congress for fiscal year 2008 (for a total fiscal year 2008 budget of $57.1 million). At the level proposed by the Administration, the Sea Grant program would be asked to operate at its lowest level in its 40 year history in 2007 dollars (see the below chart).

[1] The Sea Grant Association is a non-profit organization dedicated to furthering the Sea Grant program concept. The SGA's regular membership consists of the academic institutions that participate in the National Sea Grant College Program, located within the National Oceanic and Atmospheric Administration (NOAA). SGA provides the mechanism for these institutions to coordinate their activities, to set program priorities at both the regional and national level, and to provide a unified voice for these institutions on issues of importance to the oceans, coasts and Great Lakes. The SGA advocates for greater understanding, use, and conservation of marine, coastal and Great Lakes resources.

[2] National Sea Grant College Program Act Amendments of 2002, Public Law 107–299.



The implications of what is essentially a freeze in funding for Sea Grant are significant with respect to the economy, sustainability of natural resources, and national safety and security. The Sea Grant network is severely strained and challenged to support its current activities, staff, and operations within this budget scenario, and has difficulty investing in important new research, education and outreach geared toward addressing emerging challenges in such areas as regional climate change and coastal community resiliency.

At present, only about 12 percent of the research proposals submitted for funding to the Sea Grant program are funded due to resource constraints. By contrast, the research funding success rate at the National Science Foundation is just over 20 percent. Sea Grant directors estimate that they receive enough high quality meritorious research proposals—of importance and relevance to NOAA's mission—to fund about 25 percent, or double what the program is currently able to support. Within the current budget for Sea Grant of $57.1 million, about $30 million is used to support research. The balance of the Sea Grant budget is used to support related extension, communication, education and program management. Based on this, the research portion of the Sea Grant program could responsibly manage between $60 million to $80 million annually—or double its current research budget. At this level, the Sea Grant program could support important research proposals that currently go unfunded to answer questions and provide new knowledge needed by ocean and coastal resource managers.

It is also important to remember that the success of the Sea Grant program is attributable to its unique ability to intimately tie research results to an extension, communication, and education process that is essential to ensure the use of science to meet the needs of our citizens. The current level of expenditure for extension, communication, and education in the Sea Grant program is approximately $25 million. A recent report to the NOAA Science Advisory Board [3] called on NOAA to substantially expand its extension, outreach, and education activities. Sea Grant has the experience and the "on-the-ground" network to fulfill that policy recommendation immediately if sufficient additional support from NOAA were forthcoming. As the research program expands to meet increasing demands, so too must the tools that put the research results in the hands of decision makers so that they can be utilized. The Sea Grant extension, communication, and education function should be increased commensurate with the level of research funding in the program from its current $25 million to between $40 million to $50 million to ensure the continued balanced approach when it comes to research, extension, communication, and education.

An Investment in the Economic, Environmental and Social Well-being of the Nation

Research and outreach programs supported by Sea Grant are based on competition, undergo rigorous peer-review, and are geared toward addressing the marine,

[3] Engaging NOAA's Constituents: A Report from the NOAA Science Advisory Board, March 2008.

coastal and Great Lakes challenges that face our citizens. The federal investment in Sea Grant enables a nationally coordinated network embedded in the best research universities to apply unparalleled intellectual capital to address these problems and opportunities while assisting NOAA in addressing its missions. Cost-effectiveness is enhanced by access to existing university management infrastructure.

Sea Grant serves the nation in many ways. Sea Grant's unmatched access to regional, state and local constituencies through its extension and outreach programs ensures that the federal investment is targeted at relevant issues. The Sea Grant model contributes to the missions of NOAA and other federal agencies, and state and local governments, to the benefit of the general public. In addition, marine education programs supported by Sea Grant funds reach from kindergarten to marine-related business people to elder hostels.

Sea Grant is a national program addressing national, regional, state and local needs. It is a partnership among government, academia, business, industry, scientists, and private citizens to help Americans understand and wisely use our precious coastal waters and Great Lakes for enjoyment and long-term economic growth. This network unites 32 Programs, over 300 universities, and millions of people. Sea Grant is an agent for scientific discovery, technology transfer, economic growth, resource conservation, and public education. It is government as our citizens want it—visible, tangible, relevant, efficient, and effective.

Informing Smart Policy through Sound Science

The interface between science and policy is precisely where the Sea Grant program applies its precious resources. As the program makes decisions on the funding of research projects, issues that are acutely important to local, regional and national decision-makers receive priority attention. Extension and educational resources are also deployed in ways that enhance the relevance and impact of the science and discoveries that result from Sea Grant-funded research.

There is a growing demand from our nation's decision makers and public for scientifically-sound decisions to many of today's complex problems. Sea Grant's integration of science and outreach allows for up-to-date and ongoing needs assessment that helps identify the most important and timely issues that benefit from science-based decision making. Technological and scientific approaches, though desirable, cannot solve all of society's problems, and Sea Grant's ability to embed itself within the communities it serves enables the social dynamics of human ecology to be incorporated thereby improving the utility and impact of investments through the Sea Grant program. Sea Grant's work is always fresh. Although the program has been in place for 40 years, the constant attention to societal needs through stakeholder interactions allows the program to be nimble and responsive, while also maintaining the rigor and reliability of a strategic enterprise.

In recent years, the work of two major national commissions[4] have brought into focus the importance of our oceans and coasts to our nation's natural heritage, security, and economy. With an offshore ocean jurisdiction larger than the total land mass of the United States, U.S. waters support rich and diverse systems of ocean life, provide a protective buffer, and support important commerce, trade, energy, and mineral resources. And in each example, Sea Grant is there.

—More than $1 trillion, or one-tenth, of the nation's annual gross domestic product (GDP) is generated within near-shore areas, the relatively narrow strip of land immediately adjacent to the coast. Looking at all coastal watershed counties, the contribution swells to over $6.1 trillion, more than half of the nation's GDP;

—In 2003, ocean-related economic activity contributed more than $119 billion to American prosperity and supported over 2.2 million jobs. Roughly three-quarters of the jobs and half the economic value were produced by ocean-related tourism and recreation. More than 13 million jobs are related to trade transported by the network of inland waterways and ports that support U.S. waterborne commerce;

—Annually, the nation's ports handle more than $700 billion in goods, and the cruise industry and its passengers account for $11 billion in spending;

—The commercial fishing industry's total value exceeds $28 billion annually, with the recreational saltwater fishing industry valued at around $20 billion, and the annual U.S. retail trade in ornamental fish worth another $3 billion; and

—Nationwide retail expenditures on recreational boating exceeded $30 billion in 2002.

[4] An Ocean Blueprint for the 21st Century, U.S. Commission on Ocean Policy, April 20, 2004; America's Living Oceans: Charting a Course for Sea Change, Pew Oceans Commission, June 2, 2003.

The SGA recognizes and appreciates the difficult funding tradeoffs the Subcommittee is forced to make each year. We urge you to consider Sea Grant as an investment in the future health and well-being of our coastal communities and support the program at $72 million for fiscal year 2009. Thank you for the opportunity to present these views.

For more information, please visit www.sga.seagrant.org or contact: Paul Anderson, SGA President, 207.581.1435, panderson@maine.edu; Rick DeVoe, SGA External Relations Committee Chair, 843.727.2078, rick.devoe@scseagrant.org; Joel Widder, Government Relations, 202.289.7475, jwidder@lewis-burke.com.

PREPARED STATEMENT OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

The American Psychological Association (APA), a scientific and professional organization of more than 148,000 psychologists and affiliates, is pleased to submit testimony for the record. Because our behavioral scientists play vital roles within the National Science Foundation (NSF), National Aeronautics and Space Administration (NASA) and the National Institute of Justice (NIJ) within the Department of Justice (DOJ), APA will address the proposed fiscal year 2009 research budgets for each of these agencies:

—APA recommends that the Subcommittee support the President's fiscal year 2009 request of $6.85 billion for NSF.

—APA requests that the Subcommittee provide $18.3 billion for NASA, including $671 million for NASA Advanced Capabilities (which houses the Human Research Program), and $594 million for NASA Aeronautics.

—APA urges the Subcommittee to reverse the trend of budgetary neglect for NIJ (within DOJ) by providing $50 million in fiscal year 2009 for NIJ programs.

National Science Foundation

Core Psychological Research at NSF

NSF is the only federal agency whose primary mission is to support basic research and education in math, engineering and science—including the behavioral and social sciences. NSF's investment in basic research across these disciplines has allowed for extraordinary scientific and technological progress, ensuring continued economic growth, improvements in the design, implementation and evaluation of public education, strengthened national security, and the generation of cutting edge new knowledge.

APA supports the Administration request of $6.85 billion for NSF in fiscal year 2009, and urges Congress to implement a doubling of the NSF budget over the next ten years. This is consistent with Administration and Congressional plans to invest substantially in federal science agencies with the capacity to stimulate global competitiveness and innovation. Within the overall NSF budget, APA supports a strong investment in psychological research throughout the research and education directorates foundation-wide, in order to address critical national challenges with an understanding of human behavior at their core. The America COMPETES Act specifically noted the importance of funding the social sciences and this must be reflected in an increase for NSF's behavioral and social science research portfolio comparable to proposed increases for other sciences at NSF.

Although psychologists receive funding from diverse programs within NSF, most core psychological research is supported by the Social, Behavioral and Economic Sciences Directorate (SBE), with its focus on the variables that determine human behavior across all ages, affect interactions among individuals and groups, and decide how social and economic systems develop and change. In addition to core behavioral research in cognitive neuroscience, human cognition and perception, learning and development, and social psychology, SBE also will continue to support the development of science metrics through its Science of Science and Innovation Policy (SciSIP) research program. Funding SciSIP research is fundamental to identifying processes by which investments in research are transformed into social and economic outcomes, and providing a more effective evaluation of the "return" on scientific investments.

The Biological Sciences Directorate at NSF also provides support for research psychologists who ask questions about the very principles and mechanisms that govern life at the level of the genome and cell, or at the level of a whole individual, family or species. In previous testimony, APA has expressed concern about diminishing support for key behavioral research programs within this Directorate, most notably those focused on learning and cognition. NSF recognizes the importance of learning and cognition to many branches of science already, and supports Foundation-wide initiatives and individual research projects that seek to understand the neural or genetic mechanisms by which learning occurs, that use learning as an assay for the effects of environmental change on a biological system, that construct and evaluate artificial learning systems, that conceptualize the role of learning in biodiversity and evolution and that apply learning principles to education and workforce challenges.

However, we hope that NSF's focus on transformational science will continue to recognize that behavior links everything from molecular biology to ecology because in a sense behavior is the ultimate genetic phenotype. Animals behave to eat, defend and reproduce, so an understanding of how the molecular processes within and beyond the central nervous system lead to behavior and how behavior serves an adaptive function seems essential to integrating biology across levels. Within the field of animal behavior and cognition there are clear demonstrations that this integration is occurring. For example, individual differences in gene expression can now be linked to individual differences in memory, attention, decision making, individual adaptation and fitness. The opportunity for understanding individual differences is unprecedented.

National Aeronautics and Space Administration

Behavioral Research is Critical for Space Exploration and Air Safety

Over the last 20 years, the NASA research budget has gone down steadily, with space exploration expanding at about the same rate. The result is an increasing gap in life sciences and human factors knowledge—knowledge that is critical for successful missions and for improving both the safety and efficiency of our current and future aerospace systems. Longer space missions place increasing demands on psychological health and performance in space. Psychological scientists are meeting these challenges head on by extending the information management capacity of individuals through computational systems—systems that can sense when the user is overloaded, or determine what needs to be done next and automatically adapt. Such systems improve human decision-making and allow humans to function in extremely challenging environments, such as space flight. The need for science-based practical principles to enhance systems, interfaces, team dynamics, decision-making, training, and psychological health continues to grow, but with a diminishing research budget, NASA behavioral scientists are ill equipped to take on this crucial task.

In 2005, Congress endorsed the Vision for Space Exploration (VSE) to send humans to the moon and then to Mars. An understanding of human performance in space is critical for VSE, and the ability to measure and predict human performance through all mission phases enhances mission safety and mission success. APA urges NASA to prioritize life sciences and human aeronautics research and to restore its support for these programs to a level commensurate with other NASA programs.

In the recently passed America COMPETES Act, NASA is directed to increase funding for basic STEM research to boost competitiveness and innovation. APA urges the Subcommittee to explicitly include social sciences in the STEM definition for NASA, consistent with the definition authorized in the America COMPETES Act in the section on NSF.

In the NASA Authorization Act of 2005, Congress authorized $18,686,300,000 for fiscal year 2008. The actual allocation for fiscal year 2008 shortchanged the agency by over $1 billion. At $17.6 billion, the President's fiscal year 2009 budget request again shortchanges the agency and fails even to keep pace with inflation. APA requests that NASA's budget be at least $18.3 billion in order for the agency to succeed in moving forward with the Vision for Space Exploration (VSE) while also sustaining its non-Exploration missions. In order to preserve the integrity of the agency's missions, APA further urges Congress to block transfer authority between budget accounts.

Human Research Program

Over the past several years, support for programs in the life sciences has diminished significantly, despite a renewed commitment in 2005 to extend human presence in space, and an unprecedented interest in behavioral research. Now, what remains of the Human Research Program is budgeted at $152 million, an increase of just 3.4 percent over fiscal year 2008. Human research must be securely and adequately funded and considered an integral component of space mission planning. A successful overall behavioral health program will require a broad perspective, multiple convergent research strategies, and a variety of settings, including space itself. APA therefore requests that NASA's budget for Advanced Capabilities, which houses the Human Research Program, be increased to the fiscal year 2008 level of $671 million.

Aviation Safety

Aeronautics research (including human factors) has long been a cornerstone of NASA. APA applauds NASA Ames Research Center for its historic attention to human factors research but continued cuts to aeronautics programming and a recent reorganization of the Aeronautics Research Mission Directorate threaten to dismantle this once world-class center for human factors research. The Aeronautics Research Mission has been re-oriented to emphasize disciplines such as aerodynamics over human performance and operational issues. Further, the agency's fiscal year 2008 allocation diminished the spending power of the aeronautics program by 40 percent compared to 2004, forcing NASA centers to cut jobs and university grants in aeronautics research, especially in the area of human performance and aviation safety. NASA's continual underfunding of aeronautics research also poses a significant threat to the Next Generation's (NextGen) schedule and budget. APA therefore recommends that Congress restore NASA's Aeronautics budget to at least the fiscal year 2006 level of $594 million.

Department of Justice—National Institute of Justice

Behavioral and social science research is also essential to improving the criminal justice system. The National Institute of Justice (NIJ) is the research, development, and evaluation arm of the Department of Justice. It funds research in a range of scientific disciplines, including behavioral and social science research aimed at identifying evidence-based solutions for reducing crime and increasing public safety. The Administration has proposed flat funding for NIJ in fiscal year 2009 for a total of $34.7 million, equal to its fiscal year 2008 level and a dramatic 32 percent decrease from the fiscal year 2007 level of $54.3 million. APA strongly urges the Committee to reverse this trend of budgetary neglect for NIJ and recommends providing $50 million in fiscal year 2009 for NIJ programs.

PREPARED STATEMENT OF THE GREAT LAKES INDIAN FISH AND WILDLIFE COMMISSION

Agency Involved: Department of Justice

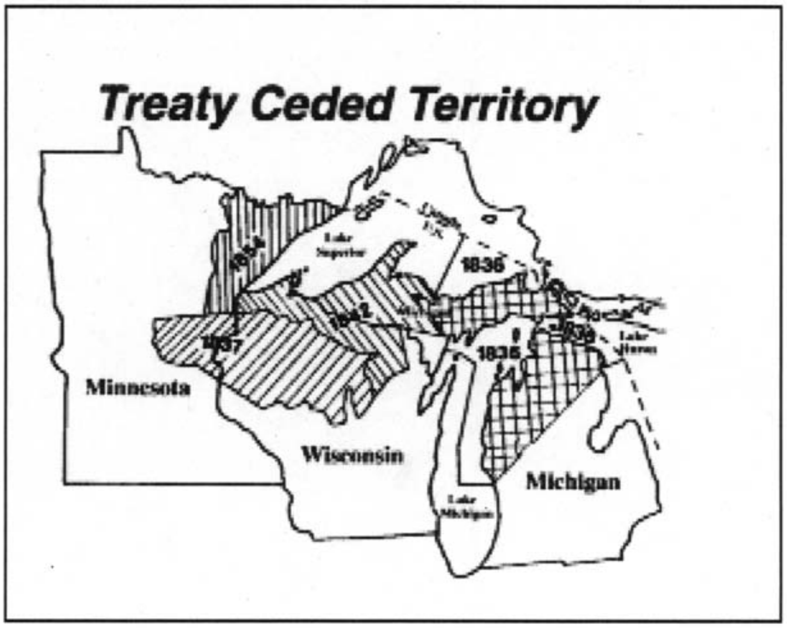
Program Involved: COPS Tribal Resources Grant Program (TRGP)

Summary of GLIFWC'S Fiscal Year 2009 Testimony

GLIFWC requests that Congress: (1) fund the TRGP at $31,065,000 in fiscal year 2009 (the same level as fiscal year 2007 enacted and $16,025,000 more than fiscal year 2008 enacted), (2) maintain the Tribal Resources Grant Program (TRGP) as a distinct program within the DOJ COPS Office of Justice Programs, and (3) ensure that special conservation agencies remain eligible, unlike in fiscal year 2006.

Ceded Territory Treaty Rights and GLIFWC's Role

GLIFWC was established in 1984 as a "tribal organization" within the meaning of the Indian Self-Determination Act (Public Law 93–638). It exercises authority delegated by its member tribes to implement federal court orders and various interjurisdictional agreements related to their treaty rights. GLIFWC assists its member tribes in: securing and implementing treaty guaranteed rights to hunt, fish, and gather in Chippewa treaty ceded territories; and cooperatively managing and protecting ceded territory natural resources and their habitats.



For the past 24 years, Congress and Administrations have funded GLIFWC through the BIA, Department of Justice and other agencies to meet specific federal obligations under: (a) a number of United States/Chippewa treaties; (b) the federal trust responsibility; (c) the Indian Self-Determination Act, the Clean Water Act, and other legislation; and (d) various court decisions, including a 1999 U.S. Supreme Court case, affirming the treaty rights of GLIFWC's member tribes. GLIFWC serves as a cost efficient agency to conserve natural resources, to effectively regulate harvests of natural resources shared among treaty signatory tribes, to develop cooperative partnerships with other government agencies, educational institutions, and non-governmental organizations, and to work with its member tribes to protect and conserve ceded territory natural resources.

Under the direction of its member tribes, GLIFWC operates a ceded territory hunting, fishing, and gathering rights protection/implementation program through its staff of biologists, scientists, technicians, conservation enforcement officers, and public information specialists.

Community-based Policing

GLIFWC's officers carry out their duties through a community-based policing program. The underlying premise is that effective detection and deterrence of illegal activities, as well as education of the regulated constituents, are best accomplished if the officers work within tribal communities that they primarily serve. The officers are based in reservation communities of the following member tribes: in Wisconsin—Bad River, Lac Courte Oreilles, Lac du Flambeau, Red Cliff, Sokaogon Chippewa (Mole Lake) and St. Croix; in Minnesota—Mille Lacs; and in Michigan—Bay Mills, Keweenaw Bay and Lac Vieux Desert.

Interaction With Law Enforcement Agencies

GLIFWC's officers are integral members of regional emergency services networks in Minnesota, Michigan and Wisconsin. They not only enforce the tribes' conservation codes, but are fully certified officers who work cooperatively with surrounding authorities when they detect violations of state or federal criminal and conservation laws. These partnerships evolved from the inter-governmental cooperation required to combat the violence experienced during the early implementation of treaty rights in Wisconsin. As time passed, GLIFWC's professional officers continued to provide a bridge between local law enforcement and many rural Indian communities.

GLIFWC remains at this forefront, using DOJ funding to develop inter-jurisdictional legal training attended by GLIFWC officers, tribal police and conservation officers, tribal judges, tribal and county prosecutors, and state and federal agency law enforcement staff. DOJ funding has also enabled GLIFWC to certify its officers as medical emergency first responders trained in the use of defibrillators, and to train them in search and rescue, particularly in cold water rescue techniques. When a crime is in progress or emergencies occur, local, state, and federal law enforcement agencies look to GLIFWC's officers as part of the mutual assistance networks of the ceded territories. In fact, the role of GLIFWC's officers in these networks was further legitimized in 2007 by the passage of Wisconsin Act 27. This law affords GLIFWC wardens the same statutory safeguards and protections that are afforded to their DNR counterparts. GLIFWC wardens will now have access to the criminal history database and other information to identify whom they are encountering in the field so that they can determine whether they are about to face a fugitive or some other dangerous individual.

GLIFWC Programs Funded by DOJ

GLIFWC recognizes that adequate communications, training, and equipment are essential both for the safety of its officers and for the role that GLIFWC's officers play in the proper functioning of interjurisdictional emergency mutual assistance networks in the ceded territories. GLIFWC's COPS grants have provided a critical foundation for achieving these goals. Significant accomplishments with Tribal Resources Grant Program funds include:

Increased Versatility and Homeland Security on Superior.—In 2007 GLIFWC used COPS funding to obtain a 22 foot boat to expand patrol capabilities and coverage on Lake Superior. This boat also provides greater versatility than GLIFWC's larger patrol boat to access bays and harbors in the Lake. The boat will be stationed in Marquette for use in both the 1836 and 1842 ceded territories in Lake Superior, as well as to provide increased emergency response, when needed.

Emergency Response Equipment and Training.—Each GLIFWC officer has completed and maintains certification as a First Responder and in the use of life saving portable defibrillators. Since 2003, GLIFWC officers have carried First Responder kits and portable defibrillators during their patrol of around 275,000 miles per year throughout the ceded territories. In remote, rural areas the ability of GLIFWC officers to respond to emergencies provides critical support of mutual aid agreements with federal, state, and local law enforcement agencies.

Ice Rescue Capabilities.—Each GLIFWC officer maintains certification in ice rescue techniques and was provided a Coast Guard approved ice rescue suit. In addition, each of the patrol areas was provided a snowmobile and an ice rescue sled to participate in interagency ice rescue operations with county sheriffs departments and local fire departments.

Wilderness Search and Rescue Capabilities.—Each GLIFWC officer completed Wilderness Search and Rescue training. The COPS Tribal Resources Grant Program also enabled GLIFWC to replace a number of vehicles that were purchased over a decade ago, including 10 ATV's and 16 patrol boats and the GPS navigation system on its 31 foot Lake Superior Patrol Boat. These vehicles are used for field patrol, cooperative law enforcement activities, and emergency response in the 1836, 1837 and 1842 ceded territories. GLIFWC officers also utilize these vehicles for boater, ATV, and snowmobile safety classes taught on reservations as part of the Commission's Community Policing Strategy, providing critical outreach to tribal youth.

Hire, Train and Equip Three Additional Officers.—Funding was contracted to provide three additional officers to ensure tribes are able to meet obligations to both enforce off-reservation conservation codes and effectively participate in the myriad of mutual assistance networks located throughout a vast region covering 60,000 square miles. As required by the program, GLIFWC has absorbed the salary costs related to sustaining those positions, however COPS funding is needed now more than ever to sustain the other components of program related to training and equipment.

Consistent with numerous other federal court rulings on the Chippewa treaties, the United States Supreme Court re-affirmed the existence of the Chippewa's treaty-guaranteed usufructuary rights in *Minnesota* v. *Mille Lacs Band*, 526 U.S. 172 (1999). As tribes have re-affirmed rights to harvest resources in the 1837 ceded territory of Minnesota, workloads have increased. In addition, a consent decree signed in 2007 will govern the exercise of treaty rights in inland portions of the 1836 ceded territory in Michigan, where one of GLIFWC's member tribes exercises treaty rights.

But for GLIFWC's COPS grants, this expanded workload, combined with staff shortages would have limited GLIFWC's effective participation in regional emergency services networks in Minnesota, Michigan and Wisconsin. The effectiveness of these mutual assistance networks is more critical than ever given: (1) national homeland security concerns, (2) state and local governmental fiscal shortfalls, (3) staffing shortages experienced by local police, fire, and ambulance departments due to the call up of National Guard and military reserve units, and (4) the need to cooperatively combat the spread of methamphetamine production in rural areas patrolled by GLIFWC conservation officers. Examples of the types of assistance provided by GLIFWC officers follow:

—As trained first responders, GLIFWC officers routinely respond to, and often are the first to arrive at, snowmobile accidents, heart attacks, hunting accidents, and automobile accidents (throughout the ceded territories) and provide sheriffs departments valuable assistance with natural disasters (e.g. floods in Ashland County and a tornado in Siren, Wisconsin).

—Search and rescue for lost hunters, fishermen, hikers, children, and the elderly (Sawyer, Ashland, Bayfield, Burnett, and Forest Counties in Wisconsin and Baraga, Chippewa, and Gogebic Counties in Michigan).

—Being among the first to arrive on the scene where officers from other agencies have been shot (Bayfield, Burnett, and Polk Counties in Wisconsin) and responding to weapons incidents (Ashland, Bayfield, Burnett, Sawyer, and Vilas Counties in Wisconsin).

—Use of a thermal imaging camera (purchased through the COPS program) to track an individual fleeing the scene of an accident (Sawyer County, Wisconsin).

—Assistance in evacuating residents after a chemical plant explosion (Burnett County, Wisconsin).

—Organizing and participating in search and rescues of ice fishermen on Lake Superior (Ashland and Bayfield Counties in Wisconsin), Lake Superior boats (Baraga County in Michigan and with the U.S. Coast Guard in other parts of western Lake Superior), and kayakers (Bayfield County in Wisconsin).

In 2008, GLIFWC proposes to utilize DOJ TRGP funding for training and equipment to: (1) recognize, secure and respond appropriately to homeland security threats, (2) improve response to incidents that trigger joint law enforcement activities such as "incident command center" protocols and training, and (3) improve community awareness through state certified safety classes (hunter safety, boater safety, ATV safety and snowmobile safety). Simply put, supporting GLIFWC's officers will not only assist GLIFWC in meeting its obligations to enforce tribal off-reservation codes, but it will enhance intergovernmental efforts to protect public safety and welfare throughout the region in the states of Wisconsin, Minnesota, and Michigan. The COPS Tribal Resources Grant Program provides essential funding for equipment and training to support GLIFWC's cooperative conservation, law enforcement, and emergency response activities. We ask Congress to support increased funding for this program.

Prepared Statement of Killdeer Mountain Manufacturing

On behalf of Killdeer Mountain Manufacturing, manufacturer of aerospace assemblies, located in Killdeer, Halliday, Hettinger, and Dickinson, North Dakota, I would like to thank the Committee for allowing our organization to submit this testimony for the record. I am writing to respectfully request that the Hollings Manufacturing Extension Partnership program be provided the authorized $122 million within the fiscal year 2009 Commerce, Justice, Science and Related Agencies Appropriations Bill. This requested level of funding for 2009 was provided for in the recently enacted America COMPETES Act. As you know, the Hollings Manufacturing Extension Partnership (MEP) is a program within the Department of Commerce, National Institute of Standards and Technology, a program authorized to improve competitiveness of America's manufacturing community.

The MEP is one of the most successful partnerships in the country. In addition to public support, a value proposition to improve manufacturer's global competitiveness is supported by those companies who receive benefit. In North Dakota, the Dakota MEP provides assistance to companies in continuous improvement, innovation, strategic growth, technology and workforce development—all major needs of our companies. Our company is currently working on a nationally recognized Lean Enterprise Certification Program with the assistance of Dakota MEP.

As a Dakota MEP Director, I would also like to report that the average company benefits and impacts realized in the Dakota MEP improvement work with manufacturers mirrors the national MEP average at $1.4 million per engagement. These benefits have been realized by manufacturers who've partnered with Dakota MEP over the past six years.

Manufacturing continues to diversify and grow the economies of the Dakotas. It currently is 10 percent of the gross state product in North Dakota and 11 percent in South Dakota. The industry has nearly 1,900 firms employing 69,000 in the Dakotas exporting over $2 billion. Manufacturing brings new wealth to our country, our states and communities which, in turn, generate other economic activity and opportunities.

Manufacturing must remain one of our country's economic strengths and the MEP is an invaluable program to help the industry better compete. Without unwavering strong federal support, the MEP will be unable to maintain its mission of serving America's small manufacturers' increasing needs. At a time when our economic strength and global competitiveness are national priorities, the MEP continues to be a wise investment. We respectfully request that you appropriate $122 million for the MEP in fiscal year 2009.

Prepared Statement of the National Association of Marine Laboratories

On behalf of the National Association of Marine Laboratories I am pleased to submit this statement for the official record in strong support of the research and education programs under the subcommittee's jurisdiction that play a vital role in the ocean, coastal, and Great Lakes research and education enterprise. I will focus my remarks on four key areas: federal support for extramural ocean, coastal and Great Lakes research; the next generation of ocean infrastructure; U.S. innovation and competitiveness through investment in the marine sciences; and ocean education, literacy, diversity and workforce development.

The National Association of Marine Laboratories (NAML) is a nonprofit organization of about 100 institutions employing more than 10,000 scientists, engineers, and professionals and representing ocean, coastal and Great Lakes laboratories stretching from Maine to the Gulf of Mexico, Guam to Bermuda, and from Alaska to Puerto Rico. NAML labs support the conduct of high quality ocean, coastal and Great Lakes research and education in the natural and social sciences and the effective use of that science for decision-making on the important issues that face our country.

FEDERAL SUPPORT FOR EXTRAMURAL OCEAN, COASTAL AND GREAT LAKES RESEARCH

NAML strongly urges the Subcommittee to maintain and strengthen its support for cutting-edge ocean, coastal, and Great Lakes research and education across the federal funding agencies within its jurisdiction.

The marine sciences are inherently interdisciplinary, push the envelope in terms of technology development, test the boundaries of our data collection and analysis systems, and offer an effective training ground for future scientists and engineers. NAML believes that competitive, merit-based research support by all relevant federal agencies is essential to the overall progress of coastal, ocean and Great Lakes science and education. Specifically, NAML calls on the Subcommittee in the fiscal year 2009 appropriations bill to support the research and education programs of the National Science Foundation, the National Oceanic and Atmospheric Administration, and the National Aeronautics and Space Administration one of its highest priorities.

National Science Foundation (NSF)

NSF provides vital support for basic research and education which enhances public understanding of the Nation's oceans, coastal areas, and the Great Lakes and strengthens the long-term economic competitiveness and national security of our country. NSF support for cutting edge research, cyberinfrastructure, as well as more traditional instrumentation and infrastructure is essential for the health of the Nation's research enterprise. NSF also plays a large role in supporting education and training for the next generation of scientists and engineers and enhancing diversity by attracting and retaining women and minorities. Marine labs contribute significantly to this objective through the research and education programming conducted with NSF support. NAML is supportive of proposals from the Administration ($6.9 billion request for fiscal year 2009) and the Congress (via the America COMPETES Act) to substantially increase NSF support for fiscal year 2009 and urges that in the provision of such resources, they be distributed in a balanced way to include all of the NSF directorates consistent with similar guidance provided in the fiscal year 2008 appropriations conference report.

National Oceanic and Atmospheric Administration (NOAA)

NOAA is a critical player in ocean, coastal and Great Lakes research and education and many NAML labs are co-located with, or linked to, NOAA laboratories. Through its partnerships with marine labs and universities, NOAA has access to world-class expertise and unique research facilities. In addition, by partnering with the external research and education community, NOAA can leverage funds and facilitate multi-institution cooperation, all for the purpose of promoting the very best science. NAML urges the Subcommittee to recognize the value of NOAA by funding the agency at a budget of $4.5 billion for fiscal year 2009, as supported by the Friends of NOAA Coalition. In addition, we call on the Subcommittee to emphasize NOAA's key extramural research and education programs which assist NOAA in addressing its mission. These programs include: the National Sea Grant College Program, the National Undersea Research Program, Ocean Exploration and Research, the National Estuarine Research Reserve System, the Competitive Research Program within NOAA's Climate Program Office, the Integrated Ocean Observing System, Oceans and Human Health, Coastal Zone Management, Office of Education and the various joint and cooperative institutes. In addition, NOAA supports important research in aquaculture and invasive species.

In 2007, NOAA released a comprehensive five year research plan [1] that highlights the linkage between NOAA research and the Nation's economic competitiveness. A healthy NOAA budget coupled with solid partnerships with the extramural research and education communities will only strengthen NOAA's research and education capabilities and ultimately make our nation safer.

National Aeronautics and Space Administration (NASA)

Budgets for NASA earth and space science have declined in recent years despite fervent calls from the community to protect science funding at the agency. The National Academy of Sciences released a report in 2007 [2] calling on NASA to "renew its investment in Earth observing systems and restore its leadership in Earth science and applications." NAML is not alone in its contention that this nation is in need of a balanced investment in NASA that will maintain a strong and vibrant earth and space science enterprise. NASA's support for earth observations and research is vital in helping us better understand our own planet. We are encouraged that the Administration has called for Earth and Space science increases in its fiscal year 2009 budget request. NAML urges the Subcommittee to renew its investment in the NASA Earth Science budget for fiscal year 2009.

NEXT GENERATION OF OCEAN INFRASTRUCTURE

In addition to program support for research at the various federal funding agencies, support for infrastructure and instrumentation—including long term planning for the next generation of infrastructure—is critical to the operation of marine labs. NSF in particular provides important support for basic laboratory facilities, instrumentation, support systems, computing and related cyberinfrastructure, and ship access through the important Major Research Instrumentation (MRI) and the Field Stations and Marine Laboratories (FSML) programs. The U.S. Commission on Ocean Policy's report [3] made several recommendations about the need for development and enhancement of ocean, coastal and Great Lakes research infrastructure. NAML recognizes the need for infrastructure investment at all scales, from traditional infrastructure—such as marine laboratories, ships, observation systems, satellites—to next generation infrastructure and technology like genomics, proteomics, robotics, nanotechnology, and other advanced computational approaches. As federal research budgets grow, so too must support for critical infrastructure required to effectively implement research and education. We are hindering our brightest scientific minds by denying them the proper infrastructure needed to support their research. NAML urges the Subcommittee to recognize the importance of sustained support for infrastructure across the federal research agencies and provide commensurate funding for fiscal year 2009.

FEDERAL SUPPORT FOR U.S. INNOVATION AND COMPETITIVENESS THROUGH INVESTMENT IN THE MARINE SCIENCES

NAML notes that the Federal government has targeted the "physical sciences" for funding increases in recent years, despite the outcome of the fiscal year 2008 appropriations process. The Congress, through enactment of the America COMPETES Act (Public Law 110–069), recognized that the physical sciences did not only refer to science coming out of the National Science Foundation, the Department of Energy's Office of Science, and the National Institute of Standards and Technology, as defined by the Administration. In addition to these agencies the COMPETES Act ac-

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[1] Research in NOAA: Toward Understanding and Predicting Earth's Environment, National Oceanic and Atmospheric Administration, June 2007.

[2] Earth Science and Applications from Space: National Imperatives for the Next Decade and Beyond, Committee on Earth Science and Applications from Space: A Community Assessment and Strategy for the Future, National Research Council, January 2007.

[3] An Ocean Blueprint for the 21st Century, U.S. Commission on Ocean Policy, April 20, 2004.

knowledged the role that many Federal agencies—such as NOAA and NASA—play in U.S. innovation and competitiveness. For fiscal year 2009, NAML urges the Subcommittee to fund all of the "physical science" agencies, including NSF, NOAA, and NASA, at levels that will help the nation keep pace on the global stage.

OCEAN EDUCATION, LITERACY, DIVERSITY AND WORKFORCE DEVELOPMENT

NAML believes that an informed, engaged and ocean literate populace is critical for the economic, environmental health of our planet and to the quality of life of all Americans. NAML encourages the federal government to strengthen its commitment to enhancing ocean, coastal and Great Lakes education, literacy, diversity and workforce development.

In early 2008 NAML developed a whitepaper [4] addressing the ocean education mission at NOAA and calling on NOAA to be a strong contributor to the implementation of the recommendations made within the 2006 Conference on Ocean Literacy (CoOL) report [5]. The Conference on Ocean Literacy was a watershed event that brought together for the first time all of the Federal entities overseeing ocean education and literacy. Its subsequent report issued key recommendations for fostering an ocean-literate society and increasing ocean workforce diversity. NAML looks forward to working with NOAA, as well as other federal agencies with ocean education missions, in implementing the report's recommendations.

A strong national ocean policy can only be sustained with the most up to date and reliable scientific information. To ensure that the Nation will continue to generate the very best knowledge investment is needed today in coastal, ocean, and Great Lakes education programs that support learning at all age levels, by all disciplines, and for all Americans. NAML labs work closely with many programs throughout the Federal government to produce a more ocean-literate populace. These include the Centers for Ocean Science Education Excellence program (COSEE) and the Louis Stokes Alliance for Minority Participation program at NSF, and the Office of Education and National Sea Grant College Program within NOAA. Not only do marine labs serve as excellent training grounds for experiential ocean education, they are also committed to enhancing diversity within the field of ocean, coastal and Great Lakes research and education by fostering relationships with community colleges and minority-serving institutions (MSIs) to provide distinctive learning opportunities for underrepresented groups. At marine laboratories, students achieve a greater understanding of the oceans and coastal ecosystems and take with them a sense of stewardship for these important environments. Given the interdisciplinary nature of the ocean sciences, a continued interagency approach will be needed by the Federal government to foster a truly ocean-literate populace. NAML urges the Subcommittee to provide priority funding for the science education programs noted above for fiscal year 2009.

Thank you for the opportunity to express these views on behalf of the National Association of Marine Laboratories. We hope the Subcommittee will take these points into consideration as you move forward in the fiscal year 2009 appropriations process.

PREPARED STATEMENT OF THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY (FASEB)

Mission

Our nation's ability to remain competitive in the global economy depends on its capacity to develop new knowledge, train scientists, and provide resources that fuel discovery and innovation. Funding for the National Science Foundation's (NSF) scientific research and education programs is essential to the fulfillment of these goals.

NSF's mission is "to promote the progress of science; to advance the national health, prosperity, and welfare; [and] to secure the national defense." [1] Although NSF receives less than 5 percent of the federal research and development (R&D) budget, it has a leading role in advancing U.S. science, technology, engineering and mathematics (STEM). In addition to providing necessary support for large scale research facilities, NSF funds approximately 20 percent of all federally-sponsored

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[4] Ocean Literate America: A Whitepaper in Support of the National Oceanic and Atmospheric Administration's Ocean Education Plan, National Association of Marine Laboratories, February 2008.

[5] Conference on Ocean Literacy Report, Washington, D.C., June 7–8, 2006.

[1] National Science Foundation. http://www.nsf.gov/about/. Accessed September 17, 2007.

basic research [2] and at least two-thirds of all federally-sponsored non-medical basic research at America's colleges and universities.[3] Each year, this funding results in grants to more than 200,000 scientists, teachers and student researchers for cutting-edge projects at thousands of institutions across the country. NSF is also a major force in science education and training. The agency supports education research and funds initiatives to prepare teachers, develop curricula, and engage students in scientific activities that are critical for strengthening our scientific workforce. NSF's support of science and education and its emphasis on integrating research and education make it unique among federal research sponsors; its broad approach stimulates the flow of ideas across scientific boundaries and brings new insight to bear on perplexing research questions. NSF's pioneering research investments have advanced the frontier of science and have led to the development of marketable technologies, processes and methods.

A recent National Academies report warns that as other countries make R&D spending a top priority, the scientific and technological building blocks that are critical to U.S. economic leadership are eroding.[4] Expressing a similar sentiment, the U.S. Office of Science and Technology Policy stated that "keeping our competitive edge in the world economy requires policies that lay the ground work for continued leadership in innovation, exploration, and ingenuity." [5] Although Congress recognized NSF's contribution to the science and technology enterprise when it authorized a doubling of the agency's budget by 2007, NSF's budget remains far below the amount the NSF Authorization Act of 2002 specified.[6]

Enactment of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Science, and Education (COMPETES) Act [7] in 2007 renews U.S. commitment to science and technology and puts NSF on a path to double its budget by 2015, permitting the agency to expand its support for scientific research and education and training programs. These critical investments in NSF will ensure that the United States remains at the forefront of scientific discovery and technological innovation.

Select Accomplishments in Research and Education

Research that NSF funds traverses the sciences, captures the imagination, and improves our quality of life. A few highlights of innovative research and education projects NSF supports follow.

Nanotechnology

Nanotechnology is a multidisciplinary field in which scientists design and build objects and even machines with the dimensions of individual atoms and molecules. This new research area is revolutionizing everything from computers to health care, and NSF is leading the charge.

—*Developing Medical Nanosensors*.—Scientists have developed nanosize chemical sensors that can detect glucose in human tissue. This research is paving the way for the development of a class of biosensors that could improve the way diabetics monitor blood sugar and facilitate tracking a variety of other molecules, such as hormones, cholesterol and drugs.

—*Disrupting Cancer Development*.—Scientists have found they can use antisense DNA to disrupt cells' production of cancer-causing proteins; attaching gold nanoparticles to antisense strands enhances their ability to disrupt the production of these proteins.

High-End Computing and Advanced Networking

Computational research that NSF funds is driving discovery in critical scientific fields. High-end computing and advanced networking is enabling scientists to better understand biological systems and apply new knowledge to pressing health, environmental and social concerns.

—*Developing HIV Drugs*.—Scientists are harnessing the power of super-computers to model molecular structure and movement. Structural models of enzymes that

[2] Ibid.

[3] AAAS Report XXXII: Research and Development Fiscal Year 2008. (2007) American Association for the Advancement of Science. Washington, DC.

[4] National Academies of Science. (2007) *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Future*. Washington, DC.

[5] Domestic Policy Council. (2006) *American Competitiveness Initiative: Leading the World in Innovation*. Office of Science and Technology Policy. Washington, DC.

[6] Public Law 107–368. (December 2002) National Science Foundation Authorization Act of 2002.

[7] H.R. 2272. (August 2007) America Creating Opportunities to Meaningfully Promote Excellence in Technology, Science, and Education (COMPETES).

permit HIV to survive and proliferate have guided the development of new drugs to target these essential proteins.

—*Networking Biodiversity Data*.—The Global Biodiversity Information Facility has created a worldwide network of biodiversity data, including genetic and ecological data, on the earth's myriad species. This information is useful in predicting the spread of disease, identifying the sources of disease-resistant crop genes, and tracking the spread of invasive species.

Materials Science and Engineering

Nature produces an array of materials with structural properties that the materials scientists create in labs cannot rival. Basic research on the structures of these materials is helping engineers develop new products with medical and industrial applications.

—*Developing Artificial Joints and Limbs*.—Basic research on the biology of the unique cartilaginous skeletons of sharks may help researchers design biological materials that are suitable for the development of artificial joints and limbs.

—*Medical Uses of Collagen*.—Researchers have discovered ways to modify collagens that may help block the formation of scar tissue, control the growth of blood vessels in tissues for implantation, and develop better infection-fighting bandages.

Basic Physiological Processes

Though it may not be evident at first glance, humans have a fair amount in common with species as diverse as fungi, frogs and bears. Due to similarities at the genetic, cellular and physiological levels, studying these and other organisms yields insight into human health and disease. NSF support for this basic scientific research paves the way for human medical advances.

—*Advancing Organ Transplant Technology*.—Researchers discovered that certain frogs produce an "antifreeze" that prevents cell damage in frigid temperatures. As a result, these frogs can survive for months in freezing weather even though their major organs have come to a practical halt. Research in this area may lead to technologies that permit longer preservation of human organs and, therefore, improve transplantation success rates.

—*Using Baker's Yeast to Study HIV*.—Yeast cells are structurally similar to human cells and contain harmless retrovirus-like elements that scientists use to model HIV. A mechanism scientists discovered in these retrovirus-like elements may be the missing link to retrovirus replication and may provide a new target for the development of HIV drugs.

Science Education and Training

The National Science Foundation supports the nation's STEM infrastructure by contributing to science education. NSF programs are cultivating the next generation of scientists and engineers by developing research curricula, engaging K–12 and undergraduate students in science, providing support for graduate and postdoctoral researchers, and improving teacher training.

—*Math and Science Partnership (MSP) Program*.—This program supports educational partnerships between universities, local school systems, businesses, and informal science organizations. Early analyses of this initiative demonstrate that participating students show improvements in math and science proficiency.

—*Science, Technology, Engineering, and Mathematics Talent Expansion (STEP) Program*.—The STEP program aims to increase the number of students who obtain undergraduate degrees in STEM disciplines through grant support to academic institutions. With STEP funding, colleges and universities have developed programs to engage women and minorities in science, provide students with research opportunities, and introduce them to scientific careers.

—*Integrated Graduate Education Research and Training (IGERT) Program*.—This initiative supports 125 doctoral degree programs that foster interdisciplinary training in emerging scientific domains. IGERT trainees have produced important scientific and technological breakthroughs, which include a handheld imaging device that can detect breast tumors and "bio-transformable" materials doctors can implant in the body to deliver drugs or open blood vessels.

Investing in the Future

NSF's strategic plan for the future[8] outlines the agency's approach to building our nation's research capacity. By combining support for basic research, education, and training with investments in emerging areas of scientific interest and need, NSF will ensure that the United States has the infrastructure and talent to maintain its role as a leader in science and technology.

Fundamental and Transformational Research

NSF will continue to support both transformational R&D and the basic science on which it depends. The agency is emphasizing interdisciplinary investigation in areas such as the neural bases of behavior, energy and climate research, and nanomaterial safety. Through investments in computer science and mathematics, NSF will advance research in all STEM disciplines and enhance our ability to make future discoveries.

Systems Biology

Support for NSF is critical to advancing new areas of biological discovery such as systems biology. NSF has led this emerging field, which unites biologists, chemists, engineers, mathematicians and physicists. Systems biologists are developing a better understanding of living systems and their interactions with the non-living world, which is essential to understanding the global impact of phenomena such as climate change.

Education and Training

By funding initiatives such as MSP, STEP and IGERT, NSF will continue to foster innovative approaches to science education. NSF's focus on integrating research and education; bridging gaps between K–12, undergraduate science and technical education; and expanding partnerships between academia and industry will broaden interest and participation in science careers.

Recommendation

If we are to continue to lead the world in innovation and prepare for future prosperity, funding for NSF is essential. As NSF Director Arden Bement, Jr. has said, "America's sustained economic prosperity is based on technological innovation made possible, in large part, by fundamental science and engineering research. Innovation and technology are the engines of the American economy, and advances in science and engineering provide the fuel."[9] Without a greater commitment to NSF, our country faces the grave possibility of losing its global dominance in science and technology.

In keeping with the America COMPETES Act of 2007, FASEB recommends an appropriation of $7.33 billion for the National Science Foundation in fiscal year 2009.

Prepared Statement of the National Congress of American Indians

On behalf of the tribal nations of the National Congress of American Indians (NCAI), the Nation's oldest and largest organization of tribal governments, we are pleased to present our recommendations on the Administration's fiscal year 2009 budget for Indian programs.

Recommendations

Priority 1.—Reject consolidation of DOJ programs and restore funding to fiscal year 2002 levels. Top three priorities at DOJ: COPS $35 million, Tribal Courts $15 million, Tribal Prison Construction $35 million.

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[8] National Science Foundation (2006). *Investing in America's Future: FY 2006–2011*. http://www.nsf.gov/pubs/2006/nsf0648/NSF-06-48.pdf. Accessed October 31, 2007.

[9] Dr. Arden L. Bement, Jr., Director National Science Foundation. (March 29, 2006) Testimony before the Senate Commerce, Science, and Transportation Subcommittee on Technology, Innovation, and Competitiveness. http://commerce.senate.gov/pdf/bement-032906.pdf. Accessed on September 17, 2007.

DEPARTMENT OF JUSTICE

[In thousands of dollars]

	Fiscal year—			
	2006 enacted	2007 enacted	2008 Omnibus	2009 (Restored to fiscal year 2002 Levels)
Indian Assistance:				
Tribal Prison Construction	9,000	9,000	8,630	35,000
Indian Tribal Courts Program	8,000	8,000	8,630	15,000
Alcohol and Substance Abuse	5,000	5,000	5,180	5,000
Community Oriented Policing Services: Tribal Law Enforcement	14,808	15,000	15,040	35,000
Title V—Incentive Grants: Tribal Youth	10,000	10,000	14,100	14,100

Priority 2.—Fully fund Violence Against Women Act programs; Research on violence against Native women; and the National Tribal Sex Offender and Order of Protection Registry.

VAWA

[In thousands of dollars]

	Fiscal year—			
	2006 enacted	2007 enacted	2008 Omnibus	2009 (Restored to fiscal year 2002 Levels)
Research on violence against Native women	....	....	940	1,000
National Tribal Registry	....	....	940	1,000

Priority 3.—Department of Commerce, Office of Native American Business Development, $3 million.

Background

The administration of justice in Indian Country is clearly in crisis.[1] Because of the unique legal and political status of Indian tribes within the United States, the federal government has a responsibility to assist tribes in safeguarding Native people from crime. Despite this responsibility, law enforcement and criminal justice services in Indian Country are chronically underfunded. In October 1997, the Executive Committee for Indian Country Law Enforcement Improvements issued its final report to the Attorney General and the Secretary of the Interior. The report concluded that "there is a public safety crisis in Indian Country," and "the single most glaring problem is a lack of adequate resources in Indian Country."[2] In the wake of this report, funding for tribal justice systems was increased for several years. Ten years later, however, funding levels have been cut and law enforcement and justice systems in Indian Country are once again operating without the resources they need. As a result, tribal communities continue to suffer crisis levels of crime.

The Bureau of Justice Statistics estimates that Native Americans "experience an estimated 1 violent crime for every 10 residents age 12 or older."[3] Native Americans are the victims of violent crime twice as often as African Americans, two and half times as often as whites, and four and a half times as often as Asian Americans.[4] Two specific areas of crime in Indian Country deserve particular mention: domestic violence and drug-related crime.

Violence against Women.—Nearly every study on the rate of sexual assault in the last ten years that has included race or ethnicity as a factor has concluded that American Native American women suffer a rate of sexual violence at least 2 to 3

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[1] Michael Riley, Lawless Lands, Denver Post (Nov. 11–14, 2007).

[2] Report of the Executive Committee for Indian Country Law Enforcement Improvements (1997), available at http://www.usdoj.gov/otj/icredact.htm.

[3] Steven W. Perry, Bureau of Justice Statistics, U.S. Dep't of Justice, "American Indians and Crime: A BJS Statistical Profile," 1992–2002, at iv (2004) [hereinafter American Indians and Crime 1992–2002], available at http://www.ojp.usdoj.gov/bjs/pub/pdf/aic02.pdf.

[4] Id. at 5.

times higher than any other group of women in the United States.[5] In 2000, the National Violence Against Women Survey concluded that more than 1 in 3 Native women will be raped in their lifetime.[6] These statistics demonstrate that violence against Indian women has reached crisis proportions. Full funding for the programs authorized by the Violence Against Women Act will bring much needed resources to tribal governments.

Methamphetamines.—Nationally Native Americans have the highest rates of methamphetamine abuse.[7] On some reservations the reported rate of meth abuse has been as high as 30 percent.[8] The Bureau of Indian Affairs Office of Law Enforcement Services surveyed tribes with whom they work closely on law enforcement, 74 percent of tribes indicated that meth is the drug that poses the greatest threat to their community.[9] Meth causes dramatic increases in violent crime, suicide, and child neglect. An informal survey of the seven FBI offices located primarily in Indian country estimated that approximately 40 percent to 50 percent of violent crime cases investigated in Indian country involve meth.[10] In addition, the National Indian Child Welfare Association estimates that 80–85 percent of the Indian families in child welfare systems have drug or alcohol abuse issues.[11]

In order to address the profound needs in many tribal communities, additional law enforcement and criminal justice resources are badly needed. The most telling indicators of the under-resourcing of public safety services in Indian Country are the chronic law enforcement staffing deficit, the over-burdened tribal courts, and the deplorable conditions of tribal detention facilities.

Law Enforcement Staffing.—More than 200 tribal police departments, ranging from small departments with only two officers to those with more than 200 officers, help to maintain public safety in Indian Country. Current funding for tribal law enforcement and first responders lags well behind that for non-tribal law enforcement. The Bureau of Indian Affairs conducted an analysis of law enforcement staffing in Indian Country in 2006, and found that Indian Country has 2,555 law enforcement officers, yet needs a total of 4,409, resulting in a gap of 1,854 officers, or a 42 percent unmet staffing need. According to the Bureau of Justice Statistics, cities like Baltimore, Detroit, and Washington have police-to-citizen ratios of 3.9 to 6.6 officers per 1,000 residents. On the other hand, virtually no tribal police department has more than 2 officers per 1,000 residents. Increased funding for tribes under the COPS program will help to close this gap.

Tribal Courts.—Tribal judicial systems, the primary and most appropriate institutions for maintaining order in tribal communities, frequently are overburdened due to lack of federal funding. Tribal courts are overwhelmed with hundreds of serious cases declined by U.S. attorneys as well as increasing meth and drug crimes. Tribal courts have been level funded for at least the last five years. Increased funding for tribal courts will ensure that tribal justice systems are equipped to handle their increasing case load.

Detention Facilities.—Well functioning detention centers for tribal members both accused and convicted of crimes are of great importance to criminal justice in Indian Country. Detention centers in Indian Country often do not meet minimum acceptable standards for prisons: frequently basic maintenance does not occur, major sani-

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[5] Amnesty International, Maze of Injustice: The Failure to Protect Indigenous Women From Sexual Violence in the United States (2007); Lawrence A. Greenfeld & and Steven K. Smith, Bureau of Justice Statistics, U.S. Dep't of Justice, "American Indians and Crime," p. 3, table 3 (Feb. 1999), available at http://www.ojp.usdoj.gov/bjs/abstract/aic.htm.

[6] Patricia Tjaden & Nancy Thoennes, National Inst. of Justice, U.S. Dep't of Justice, "Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women," p. 23 (2000), available at http://www.ncjrs.gov/pdffiles1/nij/183781.pdf.

[7] Office of Applied Studies, Substance Abuse and Mental Health Services Administration, "Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004. The National Survey on Drug Use and Health Report," (Sept. 16, 2005).

[8] Donna Vigil, Director, Division of Health Programs, White Mountain Apache Tribe, Oral testimony offered to the U.S. Senate Committee on Indian Affairs Hearing on Indian Youth Suicide (May 17, 2006).

[9] The New Mexico Investigative Support Center, "Bureau of Indian Affairs Office of Law Enforcement Services, National Methamphetamine Initiative Survey," p. 4 (2006) [hereinafter National Methamphetamine Initiative Survey], available at http://www.ncai.org/ncai/Meth/BIA_MethSurvey.pdf.

[10] FBI Indian Country Unit Presentation, The Federal/Tribal Meth Summit sponsored by the Department of Justice, Attorney General's Advisory Committee, Native American Issues Subcommittee of United States Attorneys (Oct. 13, 2005).

[11] Connie Bear King, Testimony of the National Indian Child Welfare Association before the Senate Finance Committee regarding Keeping America's Promise: Health Care And Child Welfare For Native Americans (March 22, 2007), available at http://www.senate.gov/~finance/hearings/testimony/2007test/032207testcbk.pdf.

tation concerns exist, safety and security are inadequate, resources for juveniles do not exist, funding for rehabilitation and re-entry programs is almost non-existent, health care services for inmates are lacking, and there is very little accountability for fixing the problems that plague tribal detention centers.[12] As such, the safety of tribal members who are incarcerated is often jeopardized and the safety of tribal members in the community is put at risk because prisoners are offered few basic services and quickly released due to over-crowding. Increased funding for the construction of tribal detention facilities is imperative.

Juvenile Justice.—A critical piece of law enforcement is juvenile detention facilities and juvenile rehabilitation and treatment programs. Many tribes have no place to house juvenile offenders and are required to shoulder the cost of transportation and bed rental in order to send their youth to another jurisdiction—often far from their communities. In addition, tribes have no ongoing source of funds for non-detention programs for youth. Research on juvenile justice has shown that detention is the most expensive and often the least effective way to deal with young offenders; it should be the last resort. However, without the resources to support alternatives to detention, tribes have few options for addressing juvenile crime. Increased funding for the Tribal Youth Program will allow tribes to begin to address this need.

PREPARED STATEMENT OF THE MARINE CONSERVATION BIOLOGY INSTITUTE

On behalf of Marine Conservation Biology Institute (MCBI), I wish to thank the members of the Commerce, Justice, Science, and Related Agencies Appropriations Subcommittee for the opportunity to submit written testimony on fiscal year 2009 National Oceanic and Atmospheric Administration (NOAA) appropriations. MCBI supports funding increases to the President's fiscal year 2009 budget for several significant NOAA conservation programs and activities as follows: $2 million for Hawaiian monk seal recovery; $5.5 million for the Deep Sea Coral Research and Technology Program; $30 million for the National Marine Sanctuaries Program; and $2.9 million for the Marine Protected Areas Program.

MCBI is a national, nonprofit environmental organization whose mission is to advance the science of marine conservation biology and secure protection for ocean ecosystems. Our headquarters are in Bellevue, Washington; we also have offices in Hawaii, California and Washington, DC. MCBI is a member of the Friends of NOAA Coalition and supports the Coalition's recommendation for funding NOAA at $4.5 billion in fiscal year 2009. Our justifications of increases for critical conservation programs and activities are as follows:

The Hawaiian monk seal is one of the most critically endangered marine mammals in the world, and is the only U.S. marine mammal species whose entire range lies within U.S. jurisdiction. Most Hawaiian monk seals reside in the Papahānaumokuākea Marine National Monument, but there is a small important sub-population in the Main Hawaiian Islands. Over the last 20 years, the Hawaiian monk seal population has declined to approximately 1,200 individuals.

The Hawaiian monk seal is headed toward extinction unless the National Marine Fisheries Service (NMFS) and its partner agencies aggressively budget for, and implement the recommendations of the 2007 recovery plan, which strives to protect and enhance the overall number of breeding female seals. This is not an unattainable goal, but it will require a variety of concurrent actions and interventions at a projected annual cost of approximately $7 million annually over the next 5 years. Although this cost may seem high, in comparison, the Steller seal lion whose current Western population is approximately 45,000 has received $55 million in conservation support since 1998, while the more critically endangered Hawaiian monk seal has received approximately $21 million over the same time period.

For fiscal year 2009, the President's budget includes an $855,000 request from NOAA in the monk seal line item. Additionally, discretionary funding usually is allocated from other Protected Resources line items for seal management. In fiscal year 2008, for example, total funding for the seal base program is approximately $2.1 million. Even at this funding level, research and protection interventions in the Northwestern Hawaiian Islands have been cut back by two-thirds for the summer field season. Furthermore, there are no funds requested in fiscal year 2009 for managing seals in the Main Hawaiian Islands where human interactions are a significant threat to recovery.

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[12] U.S. Department of the Interior, Office of the Inspector General, "Neither Safe Nor Secure: An Assessment of Indian country Detention Facilities," P. 1–6 (2004), available at http://www.doioig.gov/upload/IndianCountryDetentionFinal%20Report.pdf.

To recover the monk seal, the recovery team is unanimous that the recovery plan must be implemented aggressively on a sustained basis. I urge the subcommittee to increase seal funding as follows:

—For fiscal year 2009, MCBI recommends an additional $2 million above the President's budget request be added to the monk seal line item specifically for recovery plan implementation. $1 million of this amount is needed for the Pacific Island Fisheries Science Center's ongoing field efforts to enhance pup and juvenile survival principally in Papahānaumokuākea.

—Another $1 million is needed for coordinating the seal recovery program and crisis intervention actions in the Main Hawaiian Islands. Of this $1 million, MCBI recommends $150,000 for a Regional Office Coordinator, and $600,000 for six field response team leaders who handle day to day interventions to protect the 100 or so seals scattered around the Main Islands. The remaining $250,000 would go for programs to educate the public on appropriate behavior toward seals, prevent seal disease, and capture and rehabilitate entangled, abandoned, sick or wounded seals for eventual release back into the ocean.

The Deep Sea Coral Research and Technology Program is an exciting addition to the budget this year. With the recent discovery of extensive deep sea coral ecosystems within U.S. waters—ecosystems every bit as diverse as many tropical coral reef systems—scientists are now challenged to understand these ecosystems to the fullest. Unfortunately, many deep sea coral areas are highly susceptible to destructive fishing practices, particularly bottom trawling. Under the newly reauthorized Magnuson-Stevens Conservation and Management Act of 2006, NOAA was directed to create a new Deep Sea Coral Research and Technology Program under the direction of the National Marine Fisheries Service.

MCBI is pleased to see start-up funding of $1.5 million for the program in the fiscal year 2009 NOAA request. However, we would like to mention that due to the expensive technology and research vessel time required to study and map deep sea corals, an additional $5.5 million could be used to fund known research needs:

—An area of the southeastern U.S. shelf edge and slope spanning approximately 23,000 square miles is of top priority for mapping and scientific studies for the conservation of deep sea corals. With adequate funding, extensive mapping of this southeastern shelf can be accomplished with three 30-day scientific cruises at approximately $2 million per cruise.

—In addition, another priority for the Deep Sea Coral Research and Technology Program is the development of observer by-catch workshops. These workshops will train fisheries observers to identify corals brought up by commercial fishers and assess the continued impacts that fishing is having on seafloor corals. $1 million would fund at least three workshops in the regions where they are most needed.

The National Marine Sanctuaries Act authorizes the Secretary of Commerce to designate and manage areas of the marine environment for resource protection and multiple use. Currently, the National Marine Sanctuary Office is responsible for managing the nation's 13 marine sanctuaries and the Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands. Collectively, these units cover more area than the entire National Park System.

The President has requested $49.8 million in fiscal year 2009 for the Sanctuary Program base. This includes $44.4 million for Operations, Research and Facilities (ORF) and $5.4 million for Procurement, Acquisition, and Construction. This is a decrease of $6.5 million from the $56.3 million enacted in fiscal year 2008.

Given the pressing needs to better protect sanctuary resources, MCBI recommends a considerable increase in funding of $23 million in fiscal year 2009, to bring the overall program budget to $80 million. This would include $60 million for the ORF base and $20 million for acquisition and construction. With the proper funding, the Office of National Marine Sanctuaries can better execute its responsibilities as a leader in ocean management and conservation. Funding will support monitoring and enforcement of sanctuaries, ensure public access through visitor facilities and programs, and promote scientific research.

The Marine Protected Areas Program is responsible for the implementation of Executive Order 13158, "Marine Protected Areas" (MPAs). MPAs are defined as discrete areas of the ocean that have some degree of formal protection under federal, state, tribal and local laws. MPAs are essential to maintain biological diversity, protect ocean habitats, and effectively manage fish populations. NOAA is tasked with undertaking a gap analysis to identify which additional types of marine areas should be protected.

Given the ongoing degradation of our ocean resources, research to implement the executive order has moved excessively slowly, in part due to insufficient funding. After receiving a start-up budget of $3 million in fiscal year 2001, the MPA Program budget reached almost $5 million in fiscal year 2004, and then dropped rather abruptly to $1.5 million in fiscal year 2007 and 2008. During this period of decline, the center lost 70 percent of its staff (i.e., a loss of 18 full and part-time employees).

MCBI recommends $2.9 million be added to the fiscal year 2009 budget for the MPA Science Center in fiscal year 2009. Without adequate funding, the MPA Center cannot properly carry out the goals of creating and expanding a national system of MPAs, rendering technical assistance to state-level MPA programs, and maintaining its MPA inventory.

In conclusion, MCBI respectfully requests that the subcommittee augment funding for the marine ecosystem and species protection programs mentioned above. Thank you for the opportunity to share our views.

PREPARED STATEMENT OF THE NATIONAL CORN GROWERS ASSOCIATION

The National Corn Growers Association (NCGA) appreciates the opportunity to share with the subcommittee our appropriations priorities for fiscal year 2009, and we respectfully request this statement be made part of the official hearing record.

The National Corn Growers Association (NCGA) is a national organization founded in 1957 and represents more than 32,000 members in 48 states, 47 affiliated state organizations and more than 300,000 corn farmers who contribute to state check-off programs for the purpose of creating new opportunities and markets for corn growers.

NCGA's top priority in the fiscal year 2009 Science, State, Justice and Commerce appropriations bill is maintaining funding and focus of the $101.22 million for the National Science Foundation (NSF) Plant Genome Research Initiative (initiative). The initiative is supported by the Interagency Working Group on Plant Genomes under the auspices of the National Science and Technology Council within the Office of Science and Technology Policy. In 1997, NCGA spearheaded the effort on legislation that authorized major plant genome research, which resulted in the Plant Genome Research Initiative. Obtaining genome sequence information frequently leads to breakthroughs in the study of a particular organism. The goal of the initiative is to understand the structure and function of plant genes at all levels in species of economic importance and indeed, the initiative has led to an unprecedented increase in our understanding of the genomics and genetics of plants. The initiative also changed the way research is conducted in plant biology and helped to attract a new generation of scientists to the plant sciences field at U.S. colleges and universities.

Bringing agriculturally important plant species into the genomic age is an important goal. Initial major accomplishments included the completion of the model laboratory plant Arabidopsis and rice genome sequences. Completion on those genomes demonstrated that genomic sequence was the most comprehensive way toward gene discovery—a first step toward identifying the role of each gene. Building upon lessons learned sequencing smaller plant genomes, sequencing the corn genome became feasible. Arabidopsis, a member of the brassicaceae, or mustard, family, has a genome of 125 million base pairs. Rice's genome has 430 million base pairs. Sequencing the corn genome had been considered difficult because of its large size and complex genetic arrangement. The genome has 50,000 genes scattered among the haploid genome size of 2.3 billion nucleotides—molecules that form DNA—that make up its 10 chromosomes.

In 2004, valuable corn research was made available through NCGA to research scientists working to understand the maize genome through the availability of sequencing data from Ceres, DuPont and Monsanto. This information, combined with the corn sequence data already in the public domain, significantly accelerated the identification of genes within the entire corn genome and was a precursor to the effect that the full corn sequence will have on the research community.

In 2005, NSF, the United States Department of Agriculture (USDA) and the Department of Energy (DOE) awarded $29.5 million to sequence the corn genome. NSF selected a consortium of four research institutions to sequence the maize genome: The University of Arizona, Washington University in St. Louis, Iowa State University in Ames and Cold Spring Harbor Laboratory in Cold Spring Harbor, New York. The goal of the Maize Genome Sequencing Project is to unravel the DNA sequence of the maize plant and to identify the genes and begin to determine their position on the chromosomes—the tiny bundles of DNA that form the storage units of genetic information. The sequencing of corn pushed the state of the art of genetic research to new levels as its genome has complexities beyond any plant sequenced to date. The highly repetitive regions of DNA, formerly considered "junk" DNA, are extremely prevalent in corn, and have been shown to have a significant impact on how the genetic engine of life truly works. These issues have posed significant challenges to researchers interested in crop improvement, plant molecular biology, or genome evolution. Using a physical map that covers about 95 percent of the maize genome map, scientists generate a draft sequence to reveal the locations of regulatory elements within stretches of so-called non-coding "junk" DNA. Focus of the project does center on gene-containing regions and are sequenced in detail. This sequencing strategy enables the consortium to sequence the corn genome at a fraction of the cost that was necessary to decipher the human genome, which is only slightly larger than the corn genome.

Today, genomic research technology and techniques are ready to complete a high quality corn genome sequence. The result will be the complete sequence and structural understanding of the entire corn genome, annotated functional sequences, and their locations on corn's genetic and physical map. This genome will be the most complex eukaryotic genome to be sequenced to date, including the human genome. The corn genome sequence will, in turn, help in the eventual completion of other major crop genome sequences, as itself benefited from knowledge gained through the prior completion of other genome sequences. Corn will also serve as a model system to aid in elucidating clues to improve the growth and development of other related grass crops, such as wheat, sorghum, millet and barley. Importantly, access to all of this information is shared through GenBank, Gramine, MazeGDB and other public repositories for genome-sequence data.

With focused funding, we will be much closer to achieving the goal of this initiative—understanding the structure and function of all economically significant plant genes. The corn industry, including the academic research community, grain handlers, growers, and seed companies, supported the corn genome sequencing project and will continue to support a program that maintains its focus on discovering the functionality of genes in economically important plant species. A complete corn genome sequence and the application of its information will provide a wide range of benefits. Both the public and private sectors will be able to expedite their breeding programs and increase their knowledge of corn's important agronomic traits. Corn growers will be able to plant varieties of corn that are better suited to market and environmental needs, such as pest resistant traits, lower nitrogen needs, and higher yields—all increasing sustainability. Quality researchers will continue to be attracted to the field of plant genomics and genetics.

Consumers will also benefit from more abundant and sustainable food, feed and fuel supplies. Corn is not only grown for food and feed, it is converted to a myriad of processed food products—literally thousands of products in the typical supermarket contain corn. Improvements aim at increasing yield and nutritional value and optimizing the properties crucial for grain products such as flour and pasta. The production of corn-based products with enhanced nutritional value that are safer and less allergenic will directly benefit consumers.

Corn is also an important material for many industrial purposes and products including rubber, plastics, fuel and clothing. Corn is a model system for studying complex genomic structure, organization and function and its high quality genetic map will serve as the foundation for studies that may lead to improved biomass and bioenergy resources from corn and related plant species.

The request for the Directorate for Biological Sciences (BIO) is $675.06 million, and increase of $63.04 million, or 10 percent, over the fiscal year 2008 request of $612.02 million. The Directorate for Biological Sciences supports research, infrastructure, and education in the biological sciences at U.S. colleges, universities, nonprofit research institutions, and other research and education organizations.

BIO includes a sub-activity request for Plant Genome Research (PGR) of $101.22 million, an amount that does not contemplate an increase from the fiscal year 2008 request. PGR sub-activity was initiated in fiscal year 1998 as a stand alone budget managed by Biological Infrastructure (DBI). In general, 36 percent of the PGR portfolio is available for new research grants. The remaining 64 percent is used primarily to fund continuing grants made in previous years. PGR supports research in agronomic significant species. However, the fiscal year 2009 budget proposes to roll PGR into the Integrated Organismal Systems (IOS) sub-activity, potentially causing the program to lose focus. Rolling the PGR budget into IOS will result in a significant reduction in funds available for new genetic projects in economically important species as the needs of non-agricultural plants would be served from the same budget. The fiscal year 2009 budget also proposes to roll Arabidopsis 2010 into the IOS sub-activity. It is important to note that model systems research such as this project, has been traditionally supported through NSF's core budget and not PGR or IOS. This change may result in a reduction of resources available for economically significant plants, such as continued work on new projects involving the rice genome and future new project stemming from corn genome work, during flat budget cycles. The Arabidopsis 2010 project and the NSF's independent Plant Genome Research Program (PGRP) complement each other and provide a broad base of support for the plant biology research community. Arabidopsis 2010 has traditionally received up to $25 million per year. It is critical that both activities remain separate and receive enough support to achieve their goals.

Maintaining and improving upon the resources available for crop systems is now more important than ever, as agriculture tries to meet the demands of consumers worldwide by providing a safe and secure supply of resources for human and animal nutrition, fiber, bioenergy, and industrial feeds. Continued strong governmental support of basic agricultural research is essential to ensure that the innovation pipeline remains robust. NCGA requests that this subcommittee include in the fiscal year 2009 Science, State, Justice and Commerce appropriations bill language that secures the $101.22 million PGR budget to be applied exclusively to species of economic importance, keeping in line with the original intent of the program.

Thank you for the support and assistance you have provided to corn growers over the years. Please feel free to contact Jon Doggett at 202–628–7001 if you need any additional information.

PREPARED STATEMENT OF THE NATIONAL FISH AND WILDLIFE FOUNDATION

Madam Chairman and Members of the Subcommittee: Thank you for the opportunity to submit testimony regarding fiscal year 2009 funding for the National Fish and Wildlife Foundation (Foundation). We appreciate the Subcommittee's past support and respectfully request your approval of $4 million through the National Oceanic and Atmospheric Administration's (NOAA) fiscal year 2009 appropriation.

This funding request is well within the authorized levels and would allow the Foundation to uphold our mission and expand our successful partnership with NOAA. Madam Chairman, I want to make one very important point: we are asking for your support of well-established conservation programs with national significance. The Foundation is an honest broker for the federal agencies and we have a remarkable track record of bringing private partners together to leverage federal funds and maximize conservation impacts.

In 1999, Congress expanded the Foundation's mandate to specifically include NOAA's mission to restore and protect marine and coastal resources. During fiscal year 2001–2006, the Foundation received an average appropriation of $2 million annually to further the mission of NOAA's National Marine Fisheries Service and National Ocean Service through cooperative agreements and leveraging of private sector funds. In fiscal year 2007, the Foundation sustained cooperative agreements with NOAA to continue our partnership programs. We respectfully request that the Subcommittee restore NOAA appropriations for the Foundation in fiscal year 2009 to accelerate our work with NOAA to protect coastal habitats and marine species.

This fiscal year 2009 request would allow the Foundation to expand key partnerships and highly successful grant programs in the areas of marine debris removal, coral reef conservation, marine species protection and coastal ecosystems such as Delaware Bay, Long Island Sound, Tampa Bay, San Francisco Bay, Puget Sound and Chesapeake Bay. The Foundation continues to excel in grant-making while providing thought leadership, accountability and sustainable conservation outcomes. Our unique ability to organize federal agencies and private partners to work together to achieve mutual conservation goals through on-the-ground and in-the-water grant programs is notable and there is significant potential to advance these efforts in fiscal year 2009 and beyond.

In addition to NOAA, the Foundation works closely with the U.S. Fish and Wildlife Service (FWS) and other Department of the Interior agencies, the Environmental Protection Agency (EPA), and USDA's Natural Resources Conservation Service (NRCS), among others. On average, every federal dollar is leveraged with three or more matching dollars from the non-federal sector. Therefore, a NOAA appropriation of $4 million in fiscal year 2009 would turn into a minimum of $8 million, according to the Foundation's Congressional Charter which requires a minimum of a 1:1 match, and have the potential to turn into $16 million or more for on-the-ground conservation. Funds appropriated by this Subcommittee are fully dedicated to project grants and do not cover any overhead expenses of the Foundation.

This Subcommittee's funding will also attract additional funding for conservation through corporate sponsorship, legal settlements, and direct gifts. Through our targeted grants, the Foundation strategically invests federal funds entrusted to us to achieve measurable success in "moving the needle" on collaborative conservation objectives over the next five to ten-year period. To date, the Foundation has leveraged more than $53 million in NOAA funds to invest more than $157 million for on-the-ground and in-the-water conservation. Over 1,200 project grants have been awarded, focusing on the conservation needs of at-risk species, habitat enhancement, coastal restoration, marine debris clean-up, environmental education, and community-based stewardship.

Conserving Fish, Wildlife, Plants and Habitats

fiscal year 2009 appropriations through NOAA will be focused on mutually agreed upon projects according to our Keystone Initiatives and the objectives of the Foundation's Special Grant Programs, which are specific to a geographic area, group of species, or conservation concern. The Keystone Initiatives represent the new core portfolio of the Foundation's grant making with clearly defined long-term goals, well-articulated strategies, and defined budgets to reach desired outcomes. In 2007 the Foundation continued implementing a new strategic plan and developing targeted Keystone Initiatives, with the goal of achieving sustainable and measurable conservation impacts.

Four Keystone Initiatives were launched by the Foundation in 2007: (1) Birds, (2) Wildlife and Habitats, (3) Fish, and (4) Marine and Coastal Conservation. Each grant approved under a Keystone Initiative will be designed to provide a measurable outcome that brings us one step closer to the final long-term conservation goal of the Initiative. Achieving success through our Keystone Initiatives will also help to fulfill the objectives of the National Fish Habitat Action Plan and the National Oceanographic Partnership Program, among others.

With increased support through NOAA appropriations, the Foundation can accelerate our collaborative efforts to achieve long-term conservation impacts for fish and wildlife through our Keystone Initiatives. Increased funding in fiscal year 2009 will also help to strengthen the Foundation's Special Grant Programs, a few of which are highlighted below:

—The Coral Reef Conservation Fund was initiated in 2000 with NOAA to build public-private partnerships and leverage resources for effective stewardship of marine and coastal resources, and the communities that depend on them. FWS and NRCS have contributed to the Fund which supports grants to reduce and prevent degradation of coral reefs and associated habitats. Recently, the Harold K.L. Castle Foundation provided additional support for our efforts in Hawai'i and Tesoro Corporation is providing additional support in 2008 for an education and outreach campaign. The Foundation has provided funding for nearly 200 projects with $7.3 million in federal and non-federal funds, leveraged with $11.6 million in non-federal matching funds, for a total of $18.9 million for coral reef conservation in 38 countries, including 4 U.S. states and 8 U.S. territories.

—The International Sea Turtle Conservation Fund supports projects for the six species of sea turtles found in the Western Hemisphere, all of which are considered endangered or threatened. Since 1998, grants have been awarded for more than 100 projects in over 25 countries, representing a total of $6.2 million in funding from both federal and non-federal sources. Projects focus on key nesting and foraging areas for species survival as well as local capacity-building and outreach with fisherman to increase awareness and minimize damage caused by certain fishing techniques to marine turtle populations. This collaborative effort with NOAA and FWS is the leading source of funding for sea turtles in the Western Hemisphere.

—The Marine Debris Prevention and Removal Program was established in 2006 through a partnership with NOAA's Marine Debris Program. The program focuses on improving best management practices of ports and marinas, reducing derelict fishing gear, and research to better understand the impacts of marine debris on marine mammals, sensitive habitats, and tourist and fishing industries. Since 2006, the Foundation has supported 28 projects with over $1.2 million in federal funds, leveraged with over $1.5 million in non-federal matching funds for projects in 13 States and 4 U.S. Territories. In 2007, the Foundation formed partnerships with industry to prevent debris introduction to the marine environment, including the new Reel in and Recycle Program in partnership with Pure Fishing and Berkeley Recycling, and the Nets to Energy in partnership with Covanta, aimed at recycling retiring or derelict fishing gear and convert it into energy.

—The Pinellas County Environmental Fund (PCEF) is a unique partnership formed in 2000 between the Pinellas County Board of County Commissioners, NOAA, and the Foundation to actively pursue the protection, restoration, and enhancement of fish and wildlife habitat around Tampa Bay. PCEF helps to implement the on-the-ground habitat and species conservation recommendations developed through the Tampa Bay Estuary Program and incorporated into the Tampa Bay Comprehensive Conservation and Management Plan. Since inception, the PCEF has leveraged $9.6 million with an additional $14.3 million in matching funds to support 123 projects for a total conservation investment of nearly $24 million in the Tampa Bay area.

Other Special Grant Programs supported by NOAA, including the Delaware Estuary Watershed Grants Program, Long Island Sound Futures Fund and Chesapeake Bay Stewardship Fund, continued positive results in 2007 with grantee requests far exceeding available funds. As mentioned, the Foundation is successfully building bridges between the government and private sector to benefit NOAA's mission. Fiscal year 2009 appropriations through NOAA allow the Foundation to continue our investment in common-sense, innovative, cooperative approaches that directly benefit coral reefs and other marine habitats as well as targeted species, such as Loggerhead turtles, Hawskbill turtles, and Pacific coho salmon.

A Tradition of Successful and Accountable Performance

Since 1984, the Foundation has awarded nearly 9,500 grants to over 3,000 organizations in the United States and abroad and leveraged—with our partners—more than $400 million in federal funds into over $1.3 billion for conservation. NFWF is recognized by Charity Navigator with a 4-star rating for efficiency and effectiveness. The Foundation has taken important strides to improve our grant review and contracting process to ensure we maximize efficiency while maintaining strict financial and evaluation-based requirements. Interactive tools through our website have improved communication with our stakeholders and helped to streamline our grant-making process. We expect that as of spring 2008, the Foundation will be operating under a paperless application system.

Grant-making through our Keystone Initiatives and Special Grant Programs involves a thorough internal and external review process. Peer reviews involve federal and state agencies, affected industry, non-profit organizations, and academics. Grants are also reviewed by the Foundation's Keystone Initiative staff, as well as evaluation staff, before being recommended to the Board of Directors for approval. In addition, according to our Congressional Charter, the Foundation provides a 30-day notification to the Members of Congress for the congressional district and state in which a grant will be funded, prior to making a funding decision.

Once again, Madam Chairman, we greatly appreciate your continued support and hope the Subcommittee will approve funding for the Foundation in fiscal year 2009.

Prepared Statement of the Optoelectronics Industry Development Association

On behalf of the 75 member organizations of the Optoelectronics Industry Development Association (OIDA) and our approximately 200 affiliates, I urge you to fund the National Institute of Standards and Technology (NIST) in fiscal year 2009 at the levels authorized in the America COMPETES Act signed into law in 2007: $541.9 million for Scientific and Technical Research and Services, $86.4 million for Construction of Research Facilities, $131.5 million for the new Technology Innovation Program, and $122 million for the Manufacturing Extension Partnerships, or a total of $881.8 million.

The high technology community depends on sound metrology to support its products. The NIST Optoelectronics Division helped develop the metrology standards that enabled American companies to establish a very strong market share in optical fiber, which provides the backbone of the Internet. But the need for metrology assistance continues and our members therefore strongly support NIST's proposed fiscal year 2009 initiative called "Going at Light Speed: Optical Communications and Computing." In a different area, the NIST Optical Technology Division provides the standards for the emerging solid state lighting industry, in which our members are developing new technology that will save energy, help our environment, and enable new lighting functions. These are just a few examples from our industry.

We strongly object to the absence of an Administration request for funding for the new NIST Technology Innovation Program (TIP). Like its predecessor, the Advanced Technology Program (ATP), TIP will help our members, many of which are small and medium-sized companies, advance their technologies through the most difficult and risky stages of development. We believe that the legislation creating TIP has resolved all significant concerns with ATP, and TIP will prove to be an extraordinarily successful program.

We appreciate your consideration of the needs of our industry. The Optoelectronics Industry Development Association is a Washington, DC-based organization that is the focal point for vision, transformation, and growth of the optoelectronics industry. OIDA advances the competitiveness of its members by focusing on the business of technology, not just technology itself.

PREPARED STATEMENT OF THE INTERNATIONAL FUND FOR ANIMAL WELFARE

The International Fund for Animal Welfare and our more than 2 million members worldwide appreciate this opportunity to submit testimony in support of recovery efforts for the endangered North Atlantic right whale. On behalf of the many scientists, academics, aquariums, and conservationists who are deeply worried about the plight of the North Atlantic right whale, we are writing to request the Subcommittee's support for restoring funding for North Atlantic right whale conservation and research programs administered by the National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS). Adequate funding is essential to ensure that this endangered marine mammal is not lost forever. Specifically, we ask Congress to restore funding in NOAA's fiscal year 2009 budget to the fiscal year 2005 level of $12.5 million. This funding is vital for the long-term recovery of this species. At least half of the requested amount should be directed to funding disentanglement efforts and a competitive grants program that focuses on (1) innovative entanglement mitigation and monitoring, (2) reproduction and health research (health assessment, reproduction studies and monitoring, and non-invasive medical assessments), and (3) monitoring of anthropogenic impacts (necropsy, carcass recovery, field monitoring, scar analysis).

The North Atlantic right whale is one of the worlds' most endangered marine mammals, with only about 300–400 whales remaining today. While the North Atlantic right whale is protected under both the Endangered Species Act and the Marine Mammal Protection Act, a lack of adequate resources over the years has severely hampered NMFS' ability to effectively protect and recover this endangered species.

The survival of each individual is vitally important to ensure the survival of this species. Since 1986, the majority of confirmed North Atlantic right whale deaths, have resulted from human-induced causes including ship strikes and entanglements in fishing gear. Since January 2004, twenty right whale deaths have been confirmed. These data are a minimum estimate of the actual number of deaths as they do not account for animals that may have died at sea and gone undetected. At least nine of these mortalities were linked to ship strikes. Seven of them were reproductively mature females and three were pregnant with near-term fetuses at the time of death, suggesting that females are particularly vulnerable to ship strikes. These data alone represent a loss of more than five percent of the total breeding population adding yet more pressure to the successful recovery of this species.

Little is known about the year-round distribution of right whales. Existing federally-funded surveys operate seasonally, and only in specific areas where human impacts are thought to be greatest. This results in many areas with little or no survey effort, which has led to a lack of understanding of other areas that may be important to right whale survival, which puts them at an avoidable and unnecessary risk.

Restoring funding to the fiscal year 2005 level of $12.5 million would provide much-needed funding for: surveys (both visual and acoustic); mandatory ship reporting systems; ship strike strategy implementation (including enforcement of speed restrictions and routing measures); mortality investigations; disentanglement efforts; gear research; state and federal cooperative research grants; health assessments; population monitoring; implementation and refinement of take reduction plans; and other high-priority projects identified in the recovery plan. This will allow NMFS to improve protections for right whales by reducing the threat of entanglements in fishing gear and preventing fatal ship strikes.

The urgency of this situation is highlighted by the announcement in December, 2006, of the extinction of the Yangtze, or baiji, river dolphin in China. In the 1980's, scientists estimated there were 400 baiji alive, only a remnant of the estimated 5,000 that once existed, but a number sufficient to allow recovery for the species, if adequately protected. Sadly, over-fishing, vessel traffic, noise pollution, habitat degradation and marine debris continued to exert ever-increasing pressure on the remaining population. The result? In less than 30 years, they are now officially extinct and join the growing list of species that humans have helped drive to extinction.

The similarities between the history and fate of the baiji and the North Atlantic right whale are alarming. Human generated threats such as vessel strikes, entanglements in fishing gear, pollution, and habitat degradation have replaced whaling as a threat. We are seeing the increasing industrialization of our oceans, and whales will be the first to pay the price of our neglect.

North Atlantic right whales remain at risk of extinction from human-induced vessel strikes and entanglements in fishing gear, and from low reproductive rates. NMFS has made laudable efforts to reduce mortalities from shipping and fishing, but these efforts have been hamstrung by inadequate funding and information. We remain hopeful that the Administration will soon issue long-overdue protections from ship strikes and provide the funding needed for implementation and monitoring to ensure full compliance with these protective measures.

In collaboration with scientists, academics, aquariums, conservationists, and as identified in NMFS' own recovery plan, we have identified the following funding priorities for fiscal year 2009 to further recovery efforts of North Atlantic right whales. The requested funding will ensure the survival of right whales by providing better information to managers, developing solutions for conflicts with industry, supporting management measures that integrate industry and right whale needs, and monitoring progress toward these goals.

Innovative entanglement mitigation and monitoring

Gear research is urgently needed to develop fishing methods and gear types that will not harm right whales while also allowing fishermen to make a living. A new rule mandating sinking groundline will be in effect in October 2008 and is likely to reduce right whale entanglements. No clear options or agreement on vertical lines exist, and work on this problem is urgently needed. Vertical lines may account for up to 70 percent of entanglements.

Reproduction and health research (health assessment, reproduction studies and monitoring, and non-invasive medical assessments)

Right whale reproduction is still suffering from unknown effects. The potential causes of impaired reproduction include habitat problems (including noise and pollution), incidental effects of entanglements (over 70 percent of right whales have been entangled), disease (possible human sources), and red tides. Identifying those causes could lead to prevention or solutions that would enhance population recovery. Health assessments are a critical tool for evaluating the aftermath of ship strikes and entanglements, and allow predictions of survival. In addition, health assessments are essential for evaluating trends in the population related to reproduction and survival.

Monitoring of anthropogenic impacts (necropsy, carcass recovery, field monitoring, scar analysis)

Support for necropsy work on stranded right whales is needed to determine the cause of death. This is a fundamental tool for evaluating whether management actions have been effective. Monitoring of anthropogenic impacts on right whales through photo-documentation and scarring analysis is critical to understanding whether management actions regarding fishing and shipping have been effective. Appropriate photographic data collection, scarring analysis, and entanglement documentation are all required to understand the status of the right whale population.

Surveys (both visual and acoustic, habitat studies)

Effective management of human activities to reduce impacts to right whales requires a detailed understanding of migratory paths and behavioral patterns. Shipboard and aerial surveys are the single most important source of information to determine seasonal distribution of right whales. Shipboard surveys also collect vital population data, including biopsy samples for genetic studies and fecal samples for reproduction and health research. Passive acoustic surveys provide a simple tool for evaluating the presence of whales when poor weather or nighttime conditions prevent visual surveys. These combined datasets are essential for managers attempting to manage anthropogenic risk to right whales.

While surveys directly address our need to understand right whale distribution, habitat studies address questions of why right whales visit particular habitats. Right whales may experience different risks depending upon the habitat use of an area (i.e., surface feeding in the great South Channel puts whales at risk from ships, and bottom feeding may put whales at risk from certain fishing gear). Short-term tagging studies, combined with prey and oceanographic sampling, can provide valuable information to managers, and long term non-invasive tagging techniques (under development), can do this across several habitats.

Disentanglement efforts

Until appropriate "whale-safe" gear and or methods have been developed and implemented, disentanglement efforts are our last line of defense against right whale deaths from fishing gear. Right whales are commonly hard and always dangerous to disentangle. Pharmacological restraint may enhance success, and these and other available tools should be deployed as appropriate.

Catalog and population monitoring, genetic studies

The foundation of all right whale research and conservation efforts is the individual identification of right whales, which allows tracking of births, deaths, movements, and anthropogenic effects by age, sex, and genetic characteristics. Catalog data identifies segments of the population that are at risk from human activities, and is the only way to monitor recovery.

The catalog is critical for tracking population size and trends, developing population models for management, and targeting particular management actions. Genetic analyses provide information that cannot be obtained by any other means including factors affecting the reproductive rate, and genetic identification of live and dead right whales.

Implementation, refinement, and enforcement of take reduction plans

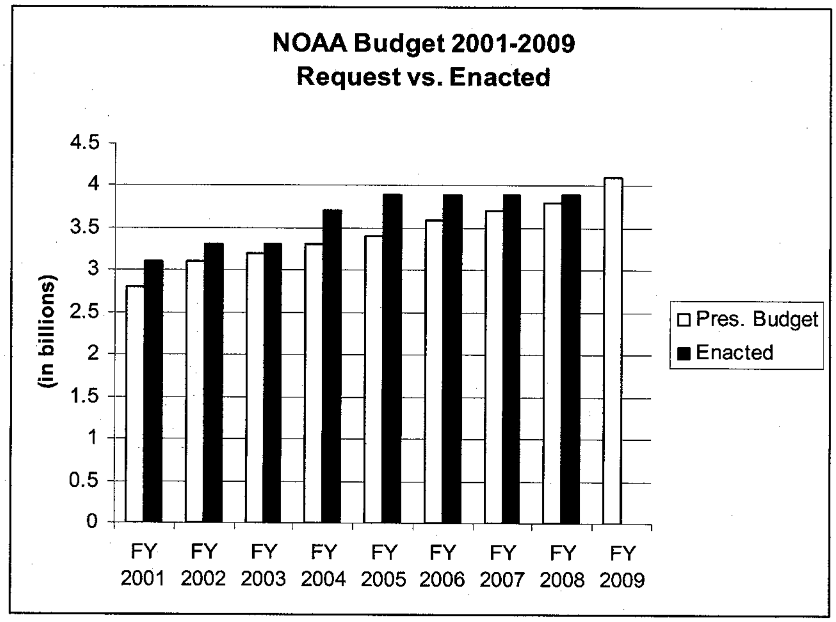
NMFS has the ultimate responsibility for reducing take of North Atlantic right whales, and needs adequate support and the best available data to ensure this process is effective and informed by good science.

In conclusion, we respectfully request that the Subcommittee on Commerce, Justice, Science, and Related Agencies appropriate no less than $12.5 million in the fiscal year 2009 for recovery of the endangered North Atlantic right whale. Funding of the previously mentioned programs is essential to not only protect the North Atlantic right whale from further decline, but to help recover their population to a level that will ensure these charismatic creatures, which play an integral role in the oceans' ecosystems, will survive for the benefit and enjoyment of future generations.

Prepared Statement of Oceana

On behalf of the more than 250,000 supporters of Oceana, an international, nonprofit conservation organization devoted to protecting ocean waters and wildlife, I submit the following testimony on the fiscal year 2009 budget for the National Oceanic and Atmospheric Administration (NOAA) within the Department of Commerce. I request that this testimony be submitted for the official record.

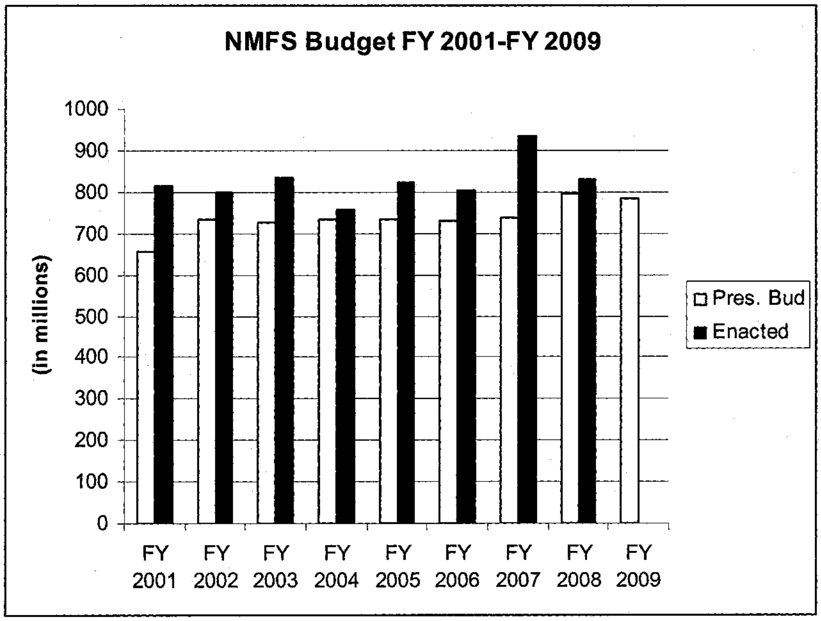
The National Oceanic and Atmospheric Administration's (NOAA) mission is "to understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs." More specifically, NOAA manages our fisheries, researches climate change, and predicts our weather, among other critical duties. Funding for this agency has been well below the needed level to fully address all of its responsibilities.



In the fiscal year 2009 budget, the Administration requests $4.11 billion for NOAA. Oceana is pleased that the Administration request is above the fiscal year 2008 enacted amount of $3.91 billion. The majority of the increase is directed to the Procurement, Acquisition and Construction (PAC) account for needed improvements to the NOAA satellite program. While this increase is necessary to keep our satellites operating, more resources must also flow into the Operations, Research and Facilities (ORF) account, which funds the programmatic work of the agency. The ORF account has remained stagnant since fiscal year 2005, which when taking inflation into account, has resulted in less money for ocean conservation and management.

Oceana urges the Subcommittee to provide $4.5 billion for NOAA in the fiscal year 2009 Commerce, Justice, Science appropriations bill. NOAA has a critical role in promoting sustainable coastal communities and a healthy economy. We recommend that any increase above the President's request be directed into the ORF account to provide resources for fishery management, coral reef protection, undersea research, ocean wildlife conservation, coastal management, and ocean education.

More specifically, we urge the subcommittee to fund the following critical ocean research and conservation programs at these recommended levels: $56 million for fishery observer programs; $40.5 million for stock assessments; $57.1 for enforcement activities; $15 million for deep water coral conservation; $26.4 million for sea turtle research and management; $82 for marine mammal research and management; and $10 million for ocean acidification research.



National Marine Fisheries Service (NMFS)

The Administration's fiscal year 2009 request for the National Marine Fisheries Service is less than the previous year's enacted level and is below the fiscal year 2008 Administration's request. This decrease is disappointing; especially considering the President's signing into law the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA) in January 2007. This comprehensive law includes critical changes to our fishery management system and requires additional funding to implement these changes. The Administration's request includes approximately $32 million for new programs to implement the requirements under the MSRA, but more money is needed to provide data for responsible fishery management. Stock assessments and fishery observers are just a few examples of such programs. In addition, sufficient enforcement of fishery management laws is needed.

Fishery Observer Programs—$56 million

Fishery observers are independent scientists who gather information about fishing practices by accompanying fisherman at sea. Observers collect data on the composition of what is caught and brought on board during fishing operations. This is in contrast to landings data which only records what is brought to port—failing to account for bycatch—often dead or injured fish, marine mammals, sea turtles, sea birds and other ocean wildlife that is discarded. According to the NMFS, observers are currently deployed in only 42 of the nation's 300 fisheries. Of the fisheries that have observers, coverage levels in many of these fisheries are well below the amount needed for precise and accurate estimates of bycatch and total catch of fish and other marine species.

Stock Assessments—$40.5 million

Oceana supports the President's request for $40.5 million for the fisheries stock assessment program. Almost two-thirds of the nation's fish populations lack basic information to determine whether or not those fish populations are depleted or "overfished." In fact, there are 65 "major" stocks or stock complexes classified as "unknown" with respect to their population status. The Magnuson-Stevens Fishery Conservation and Management Act requires that the fisheries of the United States end overfishing, therefore accurate data is needed to provide regional fishery managers with the information needed to make management decisions.

Enforcement—$57.1 million

Successful fishery management relies upon fair enforcement of laws, regulations, and other requirements of fishery management plans. Without resources for enforcement personnel at sea and at ports, compliance with fisheries laws will be inconsistent. The enforcement program also provides resources for cooperative agreements with state enforcement authorities.

Deep Sea Coral Conservation—$15 million

The Magnuson-Stevens Fishery Conservation and Management Act provides the regional Fishery Management Councils with the authority to protect deep sea coral habitat. These long-lived, slow growing corals can be destroyed in a matter of minutes by certain types of destructive fishing gear. These coral areas often serve as nurseries for commercially important species. Recognizing the importance of corals, the President's budget includes $1.5 million for a deep sea coral research program to identify and map sensitive habitat areas. Oceana supports this recommended increase for research and also would like additional resources be used for additional fishery observers, enforcement of protected areas, and the minimization of gear impacts on deep sea coral habitat.

Sea Turtle Research and Conservation—$26.4 million

Oceana requests that the Subcommittee reject the Administration's funding cut to the marine turtle program and instead expand upon existing funding. For over 25 years, all sea turtles that swim in U.S. waters are listed as endangered or threatened under the Endangered Species Act, yet populations of sea turtles continue to decline. Commercial fisheries alone are authorized to kill 10,000 and injure an additional 334,000 turtles each year. Beyond commercial fishing, the federal government has not analyzed the cumulative impact of all permitted activities on sea turtle populations. There is not enough research on the health of sea turtle populations to ensure that these authorized takes are not jeopardizing the existence of the species. Additional funding will enhance research, recovery and conservation activities for imperiled sea turtles species.

Marine Mammal Research and Conservation—$82 million

Oceana requests that funding for the marine mammal program be restored to the fiscal year 2005 level of $82 million. These funds will help ensure that National Marine Fisheries Serve adopts measures to recover depleted and strategic marine mammal species, such as Northern right whales, bottlenose dolphins, and pilot whales. Activities that may be supported by these funds include marine mammal research, bycatch reduction strategies recovery plan implementation, and marine mammal mortality event response. The President's request of $41.23 million is only half of the enacted fiscal year 2005 level.

Ocean Acidification—$10 million

In addition to climate change, humanity's emissions of carbon dioxide are altering the acidity of the world's oceans. As emissions increase, more carbon dioxide is absorbed by the oceans, thus altering the water chemistry. Researchers agree that ocean acidification will pose a significant threat to marine ecosystems over the next century, with significant potential impacts to fisheries and coral reefs. More research is needed to better understand the ecological implications of these predicted impacts to the entire marine ecosystem and the degree to which marine organisms and ecosystems will be able to adapt to increased acidity. Oceana recommends $10 million for an ocean acidification research program.

Climate Change

NOAA's role in climate change includes monitoring, researching, and predicting the impacts of climate change on humans and the environment. In the oceans alone, ocean acidification, sea level rise, and increased intensity of storms are just a few of the areas under NOAA's purview, not to mention, coastal infrastructure impacts, changes to inland weather patterns, and increased satellite needs to monitor global fluctuations. NOAA's research capabilities are becoming increasingly important in our changing world. New money is needed now to address climate change. This increased research should not come out of the existing NOAA budget and at the cost of current programs.

Overall, substantial increases are needed for the National Oceanic and Atmospheric Administration. Increases to the PAC account cannot come at a cost to the ORF funding. Both accounts need substantial increases in the fiscal year 2009 budget and in years to come if NOAA intends to manage our fisheries, conserve endangered species, protect ocean and coastal habitat, monitor global warming and its impacts, predict our weather, and perform other critical services to our nation.

Thank you for your consideration of these recommendations.

Oceana received no funding from a federal grant (or subgrant thereof) or contract (or subcontract thereof) in the current fiscal year or either of the two previous fiscal years.

PREPARED STATEMENT OF THE AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

The American Institute of Biological Sciences (AIBS) encourages the Committee to provide the National Science Foundation (NSF) with $7.326 billion for fiscal year 2009, the funding level authorized by the America COMPETES Act.

AIBS is a nonprofit scientific association dedicated to advancing biological research and education for the welfare of society. Founded in 1947 as a part of the National Academy of Sciences, AIBS became an independent, member-governed organization in the 1950s. AIBS is sustained by a robust membership of some 5,000 biologists and nearly 200 professional societies and scientific organizations; the combined individual membership of the latter exceeds 250,000. AIBS advances its mission through participating in coalition activities in research, education, and public policy; publishing the peer-reviewed journal BioScience and the education Web site ActionBioscience.org; providing scientific peer review and advisory services to government agencies and other clients; convening meetings; and managing scientific programs.

The fiscal year 2008 omnibus appropriations provided only a 2.5 percent increase over fiscal year 2007 funding for the NSF. This appropriation disappointed many in the science community who had hoped for the 10 or 11 percent increase pledged by Congress through House and Senate Appropriations Committee marks, respectively.

Although the President's fiscal year 2009 budget request recognizes the need to increase funding for the NSF, the request would only provide a modest two-year adjustment for NSF programs such as the Biological Sciences directorate (BIO). Thus, we encourage the Committee to work to provide NSF funding at the level authorized in the America COMPETES Act (Public Law 110–69), enabling a modest increase for BIO and the Social, Behavioral and Economics directorate (SBE).

Invigorating our innovation enterprise, improving science education, strengthening research infrastructure, and addressing energy, security, and environmental problems are bipartisan national priorities. NSF is the primary federal agency that funds fundamental research through competitively awarded, peer-reviewed, extramural grant programs. These research grants drive discovery and have enabled the United States to remain a global economic and scientific leader. Moreover, NSF-sponsored biological sciences research is transformative and leads to the development of sustainable and cost-effective solutions for society's greatest challenges, including energy independence, climate change, and security.

NSF's BIO directorate is vital to our nation's continued leadership in the biological sciences, the fields of science dedicated to understanding how organisms and ecological systems function. Research disciplines heavily dependent upon the directorate include botany, ecology, microbiology, zoology, basic molecular and cellular biology, and systematics and taxonomy. Equally important, NSF provides essential support for our nation's biological research infrastructure, such as field stations and natural science collections (e.g. university-based natural history museums), and education and training programs for undergraduate, graduate and post-doctoral students.

According to government data, BIO provides 67 percent of federal grant support for fundamental biological research conducted at our nation's universities and other nonprofit research centers. Transformative research in the biological sciences has advanced our understanding of complex living systems and is leading the way forward in addressing major challenges—protecting the environment, conserving biodiversity, and developing new bio-inspired technology. In fact, during a hearing before the House CJS Subcommittee on February 27, 2008, NSF Director Arden Bement referred to this century as "the bio century" and went on to explain that bioscience is "where the fundamental work is being done." Indeed, biological research from molecules and cells to ecosystems is the backbone supporting major cross-foundation initiatives, including Adaptive Systems Technology and Dynamics of Water Processes in the Environment (WATER). To continue to support activities across the Foundation, it is critical that BIO receives appropriate funding to advance its core research programs.

The President's fiscal year 2009 budget request would provide $5.594 billion to support disciplinary research programs within the Research and Related Activities (R&RA) account. This funding level would provide an average 16.0 percent increase over fiscal year 2008 estimated appropriations for the R&RA account; however, within R&RA, proposed budget increases are spread unevenly among the directorates. For example, the Mathematical and Physical Sciences directorate would increase $235.36 million (20.2 percent) and the Engineering directorate would increase $122.46 million (19.2 percent) over their respective fiscal year 2008 estimated appropriations while BIO is slated for just a $63.04 million increase (10.3 percent). This pattern would be understandable and acceptable if it were a one-year anomaly. However, this pattern of funding has become the norm—leaving some directorates, such as BIO, SBE and Geosciences behind.

In contrast, COMPETES authorizes $5.742 million for R&RA in fiscal year 2009, and would provide an average 19.1 percent increase over fiscal year 2008 appropriations. Moreover, COMPETES-authorized funding levels would provide NSF with the necessary funding to provide BIO with a 19 percent increase, placing it more on-par with the trajectory of other directorates.

Administration officials point to the importance of aligning the budget with priorities articulated in both the American Competitiveness Initiative and the America COMPETES Act. Yet, language in COMPETES (Public Law 110–69, Sec. 7018(b)) calls for parity in funding among scientific disciplines by specifying, "The Director shall give priority in the selection of awards and the allocation of Foundation resources to proposed research activities, and grants funded under the Foundation's Research and Related Activities Account, that can be expected to make contributions in physical or natural science, technology, engineering, social sciences, or mathematics, or that enhance competitiveness, innovation, or safety and security in the United States."

Indeed, research in the biological sciences has directly contributed to the development of new technologies and has advanced our understanding of life in critical areas, including genomics, emerging diseases, ecosystem services, global change, nanotechnology, and complex systems. Such research has led to important discoveries with implications for American competitiveness and public health and safety. For example, scientists at Arizona State University funded through BIO used a special laser to analyze the split-second process within photosynthesis where plants harness light energy; their research may have important implications for the development of solar energy technologies. It is imperative that we understand how biological systems—whether a microbe or an ecosystem—function so that we can address current issues like global change and can innovate solutions to additional challenges that will likely emerge in the future.

Members of the biological sciences community are concerned that inadequate funding is being provided to fundamental biological and environmental sciences. For twelve years, the research grant funding rate for BIO has been consistently lower than the NSF-wide funding rate. In 2008, the research grant funding rate was only 15 percent compared with an agency-wide rate of 21 percent. Unfortunately, this trend occurs at a time when BIO is contributing the largest percentage of federal dollars to basic biological sciences research and the number and scope of problems requiring biological information continues to increase.

Key Areas

Increased funding for NSF at the level authorized by the America COMPETES Act would enable more robust investment in the five core programs supported by BIO: Molecular and Cellular Biosciences; Integrative Organismal Systems; Environmental Biology; Biological Infrastructure; and Emerging Frontiers.

The fiscal year 2009 budget request includes important funding for the National Ecological Observatory Network (NEON), the first national ecological measurement and observation system designed to answer regional- to continental-scale scientific questions. NEON is an innovative facility that is designed to transform the way science and education are conducted by enabling integration of data from natural- to human-dominated systems and from genomes to the biosphere. A total of $26 million has been requested for NEON in the fiscal year 2009 BIO budget. Roughly $16 million would be funded from Emerging Frontiers and $10 million from Biological Infrastructure.

BIO provides essential support for the development and maintenance of other important research infrastructure (e.g., natural science collections and field stations) that is necessary to advance our understanding of biological systems.

Indeed, there is a growing national awareness of the need to reinvest in the physical and personnel resources associated with our nation's scientific collections. Evidence for this may be found in the annual Office of Science and Technology Policy (OSTP) and Office of Management and Budget (OMB) memorandum to federal agencies on research and development priorities, which has charged federal agencies to evaluate the needs of the collections they host or support. A federal interagency working group on scientific collections has also been established. As part of this effort, NSF is surveying non-federal research collections to gain a better understanding of the nature of our nation's holdings.

Unfortunately, the fiscal year 2009 budget request for the Division of Biological Infrastructure (DBI) is $86.99 million, only 0.1 percent more than DBI's fiscal year 2008 appropriation ($86.94 million). The biological sciences community is increasingly concerned that decreasing investment in the tools of science, namely the facilities, collections, and instruments that enable discovery, will have profound and negative impacts on the science.

Research support is only one of NSF's important missions. NSF is a vital component of our nation's formal and informal science education system. Whether through programs such as Research Experiences for Undergraduates, Integrated Graduate Education and Research Traineeships, or other fellowships for graduate and postdoctoral researchers, NSF provides the resources required to recruit, educate and train our next generation of scientists. We encourage Congress to continue to support these vital science education programs.

Thank you for your thoughtful consideration of this request and for your prior support of the National Science Foundation. If you have any questions or require additional information, please contact either of us at 202–628–1500.

Prepared Statement of Padgett Business Services

On behalf of Padgett Business Services, located in Fargo, North Dakota, I would like to thank the Committee for allowing our organization to submit this testimony for the record. I am writing to respectfully request that the Hollings Manufacturing Extension Partnership program be provided the authorized $122 million within the fiscal year 2009 Commerce, Justice, Science and Related Agencies Appropriations Bill. This requested level of funding for 2009 was provided for in the recently enacted America COMPETES Act. As you know, the Hollings Manufacturing Extension Partnership (MEP) is a program within the Department of Commerce, National Institute of Standards and Technology, a program authorized to improve competitiveness of America's manufacturing community.

The MEP is one of the most successful partnerships in the country. In addition to public support, a value proposition to improve manufacturer's global competitiveness is supported by those companies who receive benefit. In North Dakota, the Dakota MEP provides assistance to companies in continuous improvement, innovation, strategic growth, technology and workforce development—all major needs of our companies. In several companies, I have had the opportunity to partner with Dakota MEP to further develop our manufacturing capacity.

As a Dakota MEP Director, I would also like to report that the average company benefits and impacts realized in the Dakota MEP improvement work with manufacturers mirrors the national MEP average at $1.4 million per engagement. These benefits have been realized by manufacturers who've partnered with Dakota MEP over the past six years.

Manufacturing continues to diversify and grow the economies of the Dakotas. It currently is 10 percent of the gross state product in North Dakota and 11 percent in South Dakota. The industry has nearly 1,900 firms employing 69,000 in the Dakotas exporting over $2 billion. Manufacturing brings new wealth to our country, our states and communities which, in turn, generate other economic activity and opportunities.

Manufacturing must remain one of our country's economic strengths and the MEP is an invaluable program to help the industry better compete. Without unwavering strong federal support, the MEP will be unable to maintain its mission of serving America's small manufacturers' increasing needs. At a time when our economic strength and global competitiveness are national priorities, the MEP continues to be a wise investment. We respectfully request that you appropriate $122 million for the MEP in fiscal year 2009.

Prepared Statement of Phoenix International

On behalf of Phoenix International, a leader in the design and manufacture of custom, integrated electronic solutions, located in Fargo, North Dakota, I would like to thank the Committee for allowing our organization to submit this testimony for the record. I am writing to respectfully request that the Hollings Manufacturing Extension Partnership program be provided the authorized $122 million within the fiscal year 2009 Commerce, Justice, Science and Related Agencies Appropriations Bill. This requested level of funding for 2009 was provided for in the recently enacted

America COMPETES Act. As you know, the Hollings Manufacturing Extension Partnership (MEP) is a program within the Department of Commerce, National Institute of Standards and Technology, a program authorized to improve competitiveness of America's manufacturing community.

The MEP is one of the most successful partnerships in the country. In addition to public support, a value proposition to improve manufacturer's global competitiveness is supported by those companies who receive benefit. In North Dakota, the Dakota MEP provides assistance to companies in continuous improvement, innovation, strategic growth, technology and workforce development—all major needs of our companies. With the assistance of Dakota MEP, our company has worked on a number of improvement projects to improve productivity.

As a Dakota MEP Director, I would also like to report that the average company benefits and impacts realized in the Dakota MEP improvement work with manufacturers mirrors the national MEP average at $1.4 million per engagement. These benefits have been realized by manufacturers who've partnered with Dakota MEP over the past six years.

Manufacturing continues to diversify and grow the economies of the Dakotas. It currently is 10 percent of the gross state product in North Dakota and 11 percent in South Dakota. The industry has nearly 1,900 firms employing 69,000 in the Dakotas exporting over $2 billion. Manufacturing brings new wealth to our country, our states and communities which, in turn, generate other economic activity and opportunities.

Manufacturing must remain one of our country's economic strengths and the MEP is an invaluable program to help the industry better compete. Without unwavering strong federal support, the MEP will be unable to maintain its mission of serving America's small manufacturers' increasing needs. At a time when our economic strength and global competitiveness are national priorities, the MEP continues to be a wise investment. We respectfully request that you appropriate $122 million for the MEP in fiscal year 2009.

Prepared Statement of the Red Cliff Band of Lake Superior Chippewas

The following is a brief, qualitative analysis of the local impact of the Presidents fiscal year 2009 budget proposal as we understand it from data available in the Department of the Interior Indian Affairs Budget Justifications Fiscal Year 2009 and related budget documents. A more detailed, large-scale analysis of the appropriation is available from the National Congress of American Indians (www.ncai.org), but here we focus on concerns and priorities of the Red Cliff Band, a small, federally-recognized Indian Tribe in far northern Wisconsin.

Key information about the Red Cliff community is available in the attached Red Cliff "Community Snapshot" http://www.redcliff-nsn.gov/planning/08snapshot-2.pdf

Natural Resources Management

The President's fiscal year 2009 budget continues to stifle the Tribe's effort to maintain an active role in the management and stewardship of the Lake Superior fishery resource, which has tangible recreational and economic benefits for the region and which was severely impacted by heavy cuts to the Tribal Management Development Program (TMDP) in the mid 80's and 90's. Funding since that time has stagnated such that, in 2009, TMDP funding will still have not recovered to levels of over twenty years prior, yet cost for such things as utilities, staff benefits, and supplies have significantly increased over that time, and this has prevented the Tribe from adequately addressing its aging hatchery facilities and water systems.

Lake Superior has the only fully-restored, self-sustaining trout populations in Lake Superior, due in substantial part to Red Cliff's efforts. Now the fisheries management department of the Tribe, which co-manages an area of almost 2.8 million hectares, is further threatened by a dramatic increase in disease-management costs associated with the deadly fish disease VHS.

Without offsets to these cumulative cost increases, the viability of Red Cliff's fisheries programs is severely threatened.

More details about the accomplishments and challenges of the Red Cliff Natural Resources program are attached (Attachment 2).

Request: At minimum, restore Red Cliff's TMDP funding to mid-80's funding levels of $300,000 (up from $222,000 proposed for fiscal year 2009) and reject Bush's 30 percent cut to the BIA's Fish Hatchery Maintenance program.

Public Safety and Justice

Tribally-designated COPs grants have served as the Tribe's only reliable source of law enforcement vehicles and field equipment in the past decade. Red Cliff responds to emergencies not only on reservation lands but, at times, on the beautiful but dangerous shores of Lake Superior and the adjacent National Park lands, and Red Cliff likewise responds to the mutual aid requests of the City of Bayfield and Bayfield County. President Bush's budget will eliminate Tribal COPs set-asides, reducing the likelihood of our responders' availability and preparedness, thereby threatening the safety and well-being of residents and tourists.

Likewise, set-asides are proposed to be eliminated for Tribal Courts, for which Red Cliff's base funding is also being reduced by 4.2 percent in the President's budget. Red Cliff Tribal Court has no alternative funding and has already curtailed expenditures on judges and otherwise limited its services in the enforcement of vital local laws. With further erosion of funds, Red Cliff will continue to struggle to bring justice to the victims of child abuse, protect its treaty rights, or generally enforce the Red Cliff Code on which it depends for its sovereignty and civil order.

Finally, the fiscal year 2009 budget Justification shows that nearly $15,000 for Red Cliff community fire protection has been eliminated. Red Cliff's local Fire Department which, again, serves Red Cliff and adjacent communities, is very much dependent on CFP dollars for equipment purchases, the most recent being wildland fire fighting vehicle attachments.

Request: Reject the President's proposal to consolidate DOJ programs and eliminate Tribal set-asides. Maintain previous years' average funding levels of +/− $15,000 for Community Fire Protection.

Education and Job Training

With combined elimination of the Johnson O'Malley (JOM) and Job Placement and Training programs from the BIA's Consolidated Tribal Government budget, Red Cliff stands to lose over $73,500 in much-needed assistance to already-disadvantaged local people.

The Red Cliff Tribe does not feel JOM's GPRA/PART ratings reflect the strong value that our community places on the JOM program, which serves as an important way to promote educational parity for children whose families experience unemployment and poverty rates several times that of surrounding Bayfield County. JOM provides such things as sports gear, instrument rentals, and other important academic supports which can make the difference between attainment and alienation. While JOM cannot solve all of the challenges of the Bayfield School district with its large proportion of native students, the tutors paid for by Red Cliff's JOM program have helped many young learners build the academic confidence to resist otherwise high truancy rates of the District.

Job training and placement for Tribal members is especially important in light of Red Cliff's geographic isolation and distance to the service industries in which local jobs are relatively scarce. In light of great commitment to their ancestral lands and culture and their obligations to local extended families, Tribal members seeking jobs rely on placement and training assistance to increase their likelihood of local employment.

Request: Reject the Presidents proposed elimination of the Johnson O'Malley program and Job Placement and Training programs.

Housing and Community Facilities

The President's fiscal year 2009 budget proposes elimination of the Department of the Interior's Housing Improvement Program (HIP). While the program is competitive and does not result in a large number of projects in a community as small as Red Cliff, the Tribal members it does assist are among our most needy: the elderly and disabled. With housing having been in extremely short supply on the Red Cliff Reservation, deterioration of an elder's home often guarantees stressful relocation. HIP is often the only option for remodeling or replacement of existing homes where the elder cannot afford or qualify for other housing programs.

A $4.6 million reduction has also been proposed for the Indian Community Development Block Grant program in fiscal year 2009. In Red Cliff, ICDBGs have been an absolutely essential solution to the abovementioned housing shortage. With ICDBGs and DOD Sec. 154 funds, the Tribe has been able to make the most significant housing infrastructure improvements in a generation—making over 175 sewered home sites available in the coming years. Likewise, ICDBGs offer the Tribe one of its primary options to address aging and inadequate public facility space.

Every dollar eliminated from ICDBGs translates to homes not served with essential utilities or to community services that cannot be sited in Red Cliff.

Request: Restore $13.6 million eliminated from the DOI's Housing Improvement Program and $4.6 million from HUD's Indian Community Development Block Grant. programs in fiscal year 2009.

Health

The President's fiscal year 2009 budget does not slash budgets for the Indian Health Service, yet neither does it address the disturbing health trends in the community that are likely to pose a massive burden to the health care budgets of the Red Cliff Health Center, the City of Ashland's health service providers, Bayfield County, and the State of Wisconsin.

We are referring in part to the fact that local data shows 74 percent of native patients at the Red Cliff Health Center—including many children—are obese or at risk of obesity, and the resulting incidence of Type 2 diabetes and related complications are projected to triple disease-related health care expenditures for those afflicted, an increase that is above and beyond the double-digit medical services inflation that has been disproportionately impacting our impoverished community.

The ten-year old Red Cliff Health Center is one of the Tribes greatest social and economic successes and has already met or exceeded some patient service levels that were not projected to be realized until 2015. The Red Cliff Health Center's ability to address the vital health needs of the Red Cliff community—ranging from prenatal care to mental health treatment to dental services—are presently most limited by space available.

To address the obesity challenge and other service demands mentioned above, the Health Center seeks a facility expansion of at least 5,000 to 8,000 square feet at a base cost of $1 million to $1.4 million which would be dedicated to preventative health and specialty health services. IHS and other federal funds for facility expansion are presently very limited.

The Red Cliff Health Center has earned a reputation for offering quality services to Tribal and non-Tribal members throughout the County. A special appropriation for Health Center expansion will help the Red Cliff Tribe to help avert the looming cost crisis and to offer marketable services and health industry jobs.

For additional details see Attachment 3.

Request: Special appropriation of up to $1.4 million for expansion of Red Cliff's Health Center for preventative health services.

Welfare

President Bush's fiscal year 2009 national budget proposes a $14 million reduction in welfare assistance, which includes BIA's General Assistance Program (GA). Estimates of Tribe-specific cuts are not clear, but the fiscal year 2009 BIA budget justification shows that, both with regard to clients served and welfare costs for GA, Red Cliff could expect a cut of as much as 40 percent from fiscal year 2007 levels of $82,000, which allows the Tribe to assist with over 300 cases per year.

Compared with adjacent Bayfield County, the rates of unemployment and children in poverty in Red Cliff are as much as three times and five times higher, respectively. Loss of 40 percent of Tribal GA funds could pose extreme hardships to a number of our residents who have few if any other income options.

Request: Reject Bush's proposed $14 million cut to BIA's welfare assistance programs.

Transportation

The President's proposal to cut in half the BIA road maintenance program comes at a time when costs for fuel, pavement, and other materials have substantially increased the per-mile cost of maintaining Red Cliff's 35 miles of reservation roads—costs which are already high due to severe winter conditions commonly experienced in our location at the northern tip of Wisconsin.

The road maintenance funding cuts will have significant impacts beyond Red Cliff. The Tribe realizes great operating efficiencies by using BIA road maintenance dollars to contract with the nearby Town of Russell, whose facilities, staff, and equipment are utilized for road grading, snow removal, vegetation clearing, and other services necessary to maintain safe roads for residents and visitors. In addition to Russell, other communities' roads that are not on the Reservation but are nevertheless used heavily by Tribal members are also eligible for Tribal assistance. Thus, reductions to BIA roads maintenance funds may pose hardships not just to Red Cliff but to adjacent governments.

Request: Reject Bush's proposed fiscal year 2009 50 percent reduction of BIA roads maintenance funding.

Land Consolidation

The Indian Land Consolidation Program (ILCP) was proposed for elimination in fiscal year 2009.

Red Cliff's Reservation is a mere 14,000 acres, only 8,000 of which are held in Trust for the Tribe. Land recovery is therefore a top priority, but the Tribe itself has no discretionary funds for acquisitions. Fractionation of ownership interests in land probated to heirs of Tribal land allotees poses major obstacles to land recovery, and it also places heavy probate administration costs on the BIA, which consequently diminishes other BIA and/or federal services available to the Tribe.

The President's claims of ILCP inefficacy are misleading. The program's efforts have been strategically targeted, and in those areas have been very effective. ILCP reports 68 percent of fractionated interests in Red Cliff have been acquired by ILCP, which translates to just over 1,000 acres—a very significant portion of our Reservation! Continued ILCP effort toward land consolidation is very important to Red Cliff and to other Tribes around the nation.

Request: Reject Bush's proposed fiscal year 2009 elimination of the ILCP.

General comments

Contrary to what is sometimes heard from Indian Nations, the Red Cliff Band of Lake Superior Chippewa strongly supports the mission and budget of the Bureau of Indian Affairs. That is not to say we are entirely satisfied with BIA's performance or decisions, yet we recognize that we as individual Tribes are also responsible to aid the agency in attaining GPRA and PART goals.

Of the Tribal casinos in the State of Wisconsin, the Red Cliff Tribe's Isle Vista Casino is distinguished as one of the lowest grossing, and thus it serves to offer only basic local employment and exceedingly little aid to local government. Stagnation in federal funding levels in the face of increasing costs of living therefore equates to lost programs, services, and organizational capacity. We ask you to protect and enhance Indian programs offered through BIA, IHS, HUD, USDA and others.

The Red Cliff Tribe's greatest strides in recent years have been in the areas of housing and related infrastructure, and we are grateful for your support. Health care, education, economic development, and environmental protection remain as urgent needs in our community, and we look forward to working with you and your staff to discuss issues and implement solutions. Thank you.

Prepared Statement of the Dakota Manufacturing Extension Partnership

On behalf the Board of Directors of Dakota Manufacturing Extension Partnership, I would like to thank the Committee for allowing our organization to submit this testimony for the record. I am writing to respectfully request that the Hollings Manufacturing Extension Partnership program be provided the authorized $122 million within the fiscal year 2009 Commerce, Justice, Science and Related Agencies Appropriations Bill. This requested level of funding for 2009 was provided for in the recently enacted America COMPETES Act. As you know, the Hollings Manufacturing Extension Partnership (MEP) is a program within the Department of Commerce, National Institute of Standards and Technology, a program authorized to improve competitiveness of America's manufacturing community.

The MEP is one of the most successful partnerships in the country. In addition to public support, a value proposition to improve manufacturer's global competitiveness is supported by those companies who receive benefit. In the Dakotas, the Dakota MEP provides assistance to companies in continuous improvement, innovation, strategic growth, technology and workforce development—all major needs of our companies. Several years ago our company, Turtle Mountain Corporation in Dunseith, North Dakota, was able to significantly improve its overall competitiveness as a supplier and its workforce with the assistance of Dakota MEP.

As a Dakota MEP Board Chairman, I would also like to report that the average company benefits and impacts realized in the Dakota MEP improvement work with manufacturers mirrors the national MEP average at $1.4 million per engagement. These benefits have been realized by manufacturers who've partnered with Dakota MEP over the past six years.

Manufacturing continues to diversify and grow the economies of the Dakotas. It currently is 10 percent of the gross state product in North Dakota and 11 percent in South Dakota. The industry has nearly 1,900 firms employing 69,000 in the Dakotas exporting over $2 billion. Manufacturing brings new wealth to our country, our states and communities which, in turn, generate other economic activity and opportunities.

Manufacturing must remain one of our country's economic strengths and the MEP is an invaluable program to help the industry compete with offshore companies. Without unwavering strong federal support, the MEP will be unable to maintain its mission of serving America's small manufacturers' increasing needs. At a time when our economic strength and global competitiveness are national priorities, the MEP continues to be a wise investment. We respectfully request that you appropriate $122 million for the MEP in fiscal year 2009.

PREPARED STATEMENT OF SEARCH, THE NATIONAL CONSORTIUM FOR JUSTICE INFORMATION AND STATISTICS

Introduction

Mr. Chairman and members of the subcommittee, I am Ron Hawley, Executive Director of SEARCH. Thank you, Mr. Chairman and members of the Subcommittee for your support. The efforts of your outstanding subcommittee staff are also greatly appreciated. SEARCH has requested a $2 million earmark from the Department of Justice, Byrne Discretionary Grant Program to be included in the Commerce, Justice, Science, and Related Agencies Appropriation bill. This amount of funding will ensure that the SEARCH National Technical Assistance and Training Program can reach local and state criminal justice agencies that are truly in need of SEARCH's services.

SEARCH is a state criminal justice support organization comprised of governors' appointees from each state. SEARCH's mission is to promote the effective use of information and identification technology by criminal justice agencies nationwide. For more than 20 years, the SEARCH National Technical Assistance and Training Program has been the only no-cost service for small- and medium-sized criminal justice agencies to assist them in: (1) enhancing and upgrading their information systems; (2) building integrated information systems that all criminal justice agencies need; (3) ensuring compatibility between local systems and state, regional and national systems; (4) developing and delivering high-tech crime training; and (5) providing computer forensic technical assistance support. SEARCH has provided training and technical assistance in every state. The criminal justice agencies that SEARCH has assisted have found our services invaluable.

Because the National Technical Assistance and Training Program is national in scope, SEARCH is able to replicate successful implementation strategies in one state or locality and disseminate and transfer those strategies to other states and localities. This unique program not only helps state and local agencies work more efficiently and effectively through the use of advanced information technologies, but it also creates a foundation for a national information infrastructure for interoperable justice systems.

SEARCH conducts research to examine emerging trends and issues that have the potential to impact the collection, maintenance and exchange of justice information, while advocating policies that ensure effective privacy protection for the subjects of those records. The technical assistance provided by SEARCH has always been sensitive to the privacy implications of the effective use of information systems.

In short, the automated sharing of information is a critical component of effective justice. Better information means better decisions, and better decisions mean improved public safety. Creating information sharing capabilities among state and local public safety agencies that consistently conform to national and international standards efforts and that provide tangible benefits and outcomes will strengthen the foundation for successful nationwide information sharing to help prevent major national incidents and terrorist attacks.

SEARCH's National Technical Assistance and Training Program has received rave reviews, not only from those local, regional and state law enforcement and criminal justice agencies that have received its services, but also from the Bureau of Justice Assistance (BJA), which administers the grants to SEARCH.

In the Department of Justice Reauthorization Act (Public Law 109–162), the Congress expressly and specifically authorized SEARCH's National Technical Assistance and Training Program. Chapter 5, Subsection C, 1184 of that provision reads:

(a) IN GENERAL.—Pursuant to subpart 1 of part E of title I of the Omnibus Crime Control and Safe Streets Act of 1968, the Attorney General may make grants to SEARCH, the National Consortium for Justice Information and Statistics, to carry out the operations of the National Technical Assistance and Training Program.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Attorney General to carry out this section $4,000,000 for each of fiscal years 2006 through 2009.

Byrne Competitive Grant Program

Before talking specifically about the SEARCH National Technical Assistance and Training Program, let me take a moment to ask for enhanced funding for the Byrne Competitive Grant Program. Through the Chairman's leadership, the fiscal year 2008 omnibus appropriations bill established the competitive grant process for programs of national significance to prevent crime, improve the administration of justice, and assist victims of crime. The process is administered by the Office of Justice Programs (OJP) to those national programs that previously have received earmark funding under the Byrne discretionary program. However, the total amount of grant funding provided to all of the competing national programs was set at only $16 million in fiscal year 2008. We believe that funding in the range of at least $65 million is the minimum necessary to permit a workable and effective competitive grant program.

SEARCH supports the laudable goal of distributing funds on a competitive basis to those national programs that can demonstrate the most compelling uses for those funds. However, the outstanding leadership of the Subcommittee in creating this program is undermined by the harsh reality that $16 million is a woefully inadequate amount to provide funding for national programs to assist criminal justice and law enforcement efforts across the country.

SEARCH's National Technical Assistance and Training, alone, received a $2 million grant from the Byrne Discretionary funds in 2006—this would comprise one-eighth of the funds now available under the Byrne competitive grants. Dividing $16 million among dozens of national programs will result in drastic reductions in the level of funding provided to these programs or no funding at all for many deserving organizations.

Indeed, for that reason we not only urge the Congress to fund the fiscal year 2009 competitive program at the $65 million level, but also to support emergency legislation that would increase the amount provided for the Byrne Competitive Grant program in fiscal year 2008 by approximately $50 million so that those national programs seeking to compete for these funds will have a chance at receiving a meaningful grant amount and, thereby, continuing to provide their vital criminal justice services. We have attached to our written testimony a letter from SEARCH and four other national programs supporting enhanced competitive grant funding.

Use of Past Funding

Returning now to SEARCH, in fiscal year 2007, SEARCH's National Technical Assistance and Training Program received a $2 million earmark out of the Byrne Discretionary Grant Program in the Office of Justice Programs. Through funding provided in fiscal year 2007, the SEARCH National Technical Assistance and Training Program reached out to nearly every state, as well as the District of Columbia.

SEARCH's on-site technical assistance customarily includes helping a state or local law enforcement agency establish an automated justice information system; evaluate and plan for integration of existing information systems; or enhance, expand or implement a computerized criminal justice record system. A typical technical assistance activity takes approximately six weeks and is staffed by two individuals with the required expertise making three site visits—one for an initial consultation and data gathering, one to provide recommendations, and one for follow-up. Each of these technical assistance activities cost approximately $50,000.

SEARCH has been recognized for its longstanding commitment to improving criminal history records at both the state and national levels. SEARCH software and related materials assist police and other law enforcement agencies in areas such as computer-aided dispatch, records management systems and mobile computers. In the post-9/11 world, information sharing and communications interoperability is more important than ever to protect our families and the first-responders responsible for their safety in an emergency.

For example, SEARCH is helping state policymakers and technical and operational stakeholders in numerous jurisdictions develop standards-based, high technology data sharing solutions so that critical law enforcement, court, corrections, prosecutor, and other justice agency information is rapidly shared to provide the foundation for accurate and appropriate decision-making. Simultaneously, SEARCH is actively focused on helping states develop privacy policies governing the collection of information in various state criminal justice systems to protect individual privacy and civil liberties in the growing information sharing environment.

Meanwhile, SEARCH provides direct operational support to law enforcement in its cybercrime investigation program. SEARCH, for example, was integral in helping law enforcement identify and stop a suspect who was planning a shooting rampage at a local high school. A State Patrol officer contact SEARCH for immediate help after receiving reports about an individual making statements via the Internet that a local high school was to be the target of a shooting rampage. The State Police did not have the local resources or expertise to properly conduct an Internet investigation to identify the user. Using its knowledge of Internet Service Provider protocols and social networking Web sites, SEARCH located the individual's online profile on a networking site that displayed photos and videos of firearms and automatic weapons. The State Patrol was then able to gather the leads necessary to further their investigation. SEARCH performed a forensic capture of the individual's profile and videos, which were offered to the State Patrol.

In other cybercrime assistance efforts, SEARCH has helped a number of police departments across the nation set up MySpace predator deterrent programs. The departments set up MySpace pages that encourage local youth to add the police department as a "number one friend" on the youths' MySpace Pages. This gives the police a prominent presence on the youth's page, and also enables the youth to quickly contact the police online if they receive inappropriate messages. This is just another example of how SEARCH helps law enforcement proactively work to protect their young citizens from Internet risks.

Through SEARCH cybercrime training classes and technical workshops, investigators are taught methods to prevent, detect and investigate the rising tide of cybercrime, such as fraud, email threats, online stalking and child exploitation. In one-on-one work with law enforcement investigators and prosecutors, SEARCH provides immediate operational assistance and critical operational guidance to practitioners on emerging technological issues in high-tech crime, such as assisting a local law enforcement agency obtain evidence from cell phones seized at the scene of a gang-related drive-by shooting.

Intended Use of Funding From Fiscal Year 2009

For fiscal year 2009, SEARCH is requesting $2 million for the National Technical Assistance and Training Program. If SEARCH is provided with the requested funding, SEARCH intends to utilize the funds to address goals in both the information sharing and high-tech crime investigation aspects of the program. In the information sharing space, SEARCH intends to: (1) support through training and technical assistance the adoption of national law enforcement and public safety information technology standards; (2) contribute to the development of new and emerging law enforcement and public safety standards; (3) develop specific information sharing requirements for the re-entry of prisoners into society following incarceration; and (4) improve agencies' ability to measure and manage their information sharing initiatives. SEARCH also intends to use the funds to train law enforcement investigators in high tech crime investigation, including training and education on cybercrime.

Conclusion

Congressional support for the SEARCH National Technical Assistance and Training Program is vital. The federal investment of $2 million can be leveraged many times over by contributing to the ability of state and local criminal justice agencies to provide timely, accurate and compatible information throughout the nation.

On behalf of SEARCH, its governors' appointees, and the thousands of criminal justice officials who participate in the SEARCH network and who benefit from SEARCH's efforts, I thank you for your time. It has been a pleasure appearing here today.

Prepared Statement of The Florida State University

Summary of Request: Florida State University is requesting $3,000,000 from the National Oceanic and Atmospheric Administration (NOAA) Air Research Laboratory (ARL) Account to fund the Center for Vapor Mercury in the Atmosphere.

Mr. Chairman, I would like to thank you and the Members of the Subcommittee for this opportunity to present testimony before this Committee. I would like to take a moment to briefly acquaint you with Florida State University.

Located in Tallahassee, Florida's capitol, FSU is a comprehensive Research I university with a rapidly growing research base. The University serves as a center for advanced graduate and professional studies, exemplary research, and top-quality undergraduate programs. Faculty members at FSU maintain a strong commitment to quality in teaching, to performance of research and creative activities, and have a strong commitment to public service. Among the current or former faculty are numerous recipients of national and international honors including Nobel laureates, Pulitzer Prize winners, and several members of the National Academy of Sciences. Our scientists and engineers do excellent research, have strong interdisciplinary interests, and often work closely with industrial partners in the commercialization of the results of their research. Florida State University had over $190 million this past year in research awards.

Florida State University attracts students from every state in the nation and more than 100 foreign countries. The University is committed to high admission standards that ensure quality in its student body, which currently includes National Merit and National Achievement Scholars, as well as students with superior creative talent. Since 2005, FSU students have won more than 30 nationally competitive scholarships and fellowships including 2 Rhodes Scholarships, 2 Truman Scholarships, Goldwater, Jack Kent Cooke and 18 Fulbright Fellowships.

At Florida State University, we are proud of our successes as well as our emerging reputation as one of the nation's top public research universities.

Mr. Chairman, let me summarize our primary interest today.

Mercury is one of two very toxic trace elements known to be best transported through the atmosphere. Local, regional, and global distributions of gaseous elemental mercury are unknown even though vapor mercury is the most important source of anthropogenic mercury to the atmosphere. Most U.S. mercury emissions occur in the northeast yet most mercury deposits fall on Florida and the southeastern coastal zone. Patterns of mercury in local rainfall can be interpreted as either "local source" or "long-distance source" and are thus non-diagnostic. These enormous gaps in scientific understanding undermine public policy initiatives to develop strategies to protect natural environments and human health and to find appropriate energy solutions to our national power and transportation needs.

To this end, FSU is prepared to lead a Southeastern Mercury Consortium to study the large-scale sources and fates of atmospheric mercury. This consortium will be a partnership between NOAA's Air Resources Lab (ARL), Florida State University (FSU) and Georgia Institute of Technology. ARL's mercury research group has pioneered ground and airborne measurements and models of atmospheric mercury. FSU's Oceanography Department and Isotope Geochemistry Programs in the National High Magnetic Field Lab excel in ultra-trace element chemistry and isotopes—including mercury—in global atmospheric and aquatic environments. Georgia Tech's Schools of Earth & Atmospheric Sciences and Civil & Environmental Engineering have extensive regional and global programs in urban photochemistry, "tailpipe" and "smoke stack" gases, and global atmospheric mapping of reactive trace gases and aerosols from research airplanes and satellites. We will concentrate on the two most critical pieces of the puzzle—gaseous elemental mercury and reactive gaseous mercury. This effort will fill the gap we now have in the understanding of mercury vapors, so that we can ensure safe power and transportation to our citizens.

Mr. Chairman, this project is extremely important and I appreciate your consideration.

Prepared Statement of the Educational Association of University Centers

Mr. Chairman, as President of the Educational Association of University Centers, which is the advocacy organization for universities in the EDA University Center Program, I am pleased to offer this testimony regarding fiscal year 2009 funding for this important program administered by the Economic Development Administration at the Department of Commerce. On behalf of our the network of universities across the United States that are participating in the program, our appropriation request for the EDA University Center Program for fiscal year 2009 is $12.5 million. The EDA Technical Assistance line item is currently funded at about $9 million annually for the national EDA University Center Program.

As you know, the EDA University Center Program is a network of centers located at universities and colleges in most states. The program has operated for over 30 years as the only federally funded program specifically designed to link the higher education system in the United States with local and regional economic development organizations, local units of government, private sector companies, non-profits and regional organizations. There are about 55 centers in the program currently.

Through this program, the resources, research, expertise, experience and capabilities of the higher education system are made accessible to help capitalize on opportunities, address problems and overcome economic challenges for areas suffering economic dislocation and distress. Each University Center reflects the character and capacities of the sponsoring institution and tailors its portfolio of programs, projects and services based on the individual institution and the needs of the service region that center serves.

Each EDA University Center currently receives approximately $100,000 to $150,000 per year. The program has been funded at the same level for over a decade. The additional funding that is requested would enable current University Centers to be funded at a level of $250,000 per year, which combined with the required local match of an amount equal to the federal share, would create program budgets of $500,000 per University Center. The nation's universities are a vital component of the economic development capacity of the United States and this increased funding will yield a strong return on the investment.

The University Center Program and the University Centers that form it operate in conformance with the EDA's investment principles. That means that programs and projects undertaken by the university centers include: being market-based and results-driven; having strong organizational leadership; advancing productivity, innovation and entrepreneurship; addressing medium to long-term needs; anticipating economic changes; fostering economic diversification; and including a high degree of local commitment. To those ends, the University Center program nationwide participates in economic development activities that help leverage hundreds of millions of dollars in private sector investment.

A fundamental objective of the University Center Program is to focus program activities on areas of economic distress and to conduct projects and programs that lead to the creation and retention of high-wage, high-skill, and high-demand jobs. The types of activities undertaken by university centers include direct technical assistance. That assistance can take the form of direct assistance to private sector companies. A typical example of a technical assistance project would be working with a manufacturer to develop a prototype of a new product, analyze the potential market for the product, and help commercialize and launch the new product. The end result will hopefully lead to increases in production capacity within the firm, resulting in new job creation.

University centers also often have the capacity and the mission to conduct applied research to inform economic development initiatives. Before a significant financial investment is made in an economic development project, due diligence must be performed to determine if there is a high probability for a significant return on investment in terms of jobs created and retained, as well as indirect jobs created and retained in the supply chain and in local and regional commercial and retail businesses. Typical projects that would require applied research to determine potential for success are industrial parks, technology parks, business incubators and accelerators, and public works projects to improve infrastructure, such as potable water treatment plants, wastewater treatment, access roads and other projects. Research such as market and feasibility analyses, business plans, operating plans and other types of analyses serves to strengthen projects and to help ensure that investments are directed toward projects with the highest potential to deliver in economic terms.

University centers also conduct economic analyses to identify industry clusters that exist or that have the potential to be created. Industry clusters are private sector companies that exist in a defined geographic region and that have similar characteristics that can enable individual firms to create competitive advantages through relationships that often include pooled procurement activities or supply chain linkages, where firms provide raw materials, components or other products or services to companies that are using raw materials to produce value-added products or that create products by combining components to produce a finished item for delivery to customers. By conducting the research to identify companies with potential affinity and the potential for benefit from economies of scale, jobs may be created or retained and individual companies made more competitive and profitable. These efforts also can strengthen local and regional economies by developing a local supply chain and producing products that are exported from the region, thereby bringing revenue into the region from external sources.

An example of university center activity is the initiative has been undertaken by the University Center program at the University of Michigan, which I oversee, along with our partners at Cleveland State University, Ohio University and Purdue University. Our work addresses the adverse impacts on communities in Michigan, Ohio and Indiana that are experiencing major manufacturing plant closures. The university center programs at these universities are collaborating to deliver services to the impacted communities and to help the communities to access resources from a range of federal agencies, state agencies and non-profit organizations. The EDA University Centers in each institution are active collaborating to provide student, staff and faculty support for the affected communities in their respective states.

The tools that have been created to help these communities develop economic recovery plans include a resource guide to Federal, State and Non-profit agencies and organizations that can help communities in economic distress and experiencing sudden and severe economic dislocation. Communities also receive a Regional and Community Profile that contains critical information, such as key infrastructure, transportation corridor information, workforce characteristics, demographic information, and that helps identify core competencies and competitive advantages of communities and regions. A "Strategic Planning for Economic Recovery Workbook" helps to facilitate an accelerated strategic planning process that takes place over a period of 4–6 weeks and leads to a set of implementation projects to address economic, community and social needs in the communities and regions that are adversely impacted.

After the community stakeholders have become organized and identify critical needs, the program convenes a Community Stakeholder Workshop that brings Program Representatives from Federal and State agencies to present information about their programs for distressed communities and to meet one-on-one with stakeholders representing a wide range of economic and community development organizations, social service agencies, local elected officials and units of governments that are qualified to receive funding.

Another example of the wide range of University Center Program assistance activities is a project conducted by the University of Pennsylvania EDA University Center. The South Central Workforce Investment Area of Pennsylvania created a Department of Defense (DOD) Industry Partnership to strengthen the region's defense industry through targeted skills training. Penn State University's Pennsylvania Technical Assistance Program (PennTAP) managed the development of this Partnership. This Partnership grew out of a state-funded economic development initiative, Job Ready PA, which builds partnerships to more effectively respond to the workforce needs of targeted industries.

The Industry Partnership is comprised of representatives from regional DOD commands and activities, the private contractors supporting those activities, and regional education institutions and training providers. The Partnership acts as a workforce intermediary, connecting the workers and contractors with the educational infrastructure by creating industry-driven training programs in response to identified skill gaps targeting three categories of workers: DOD personnel; civilian contractors providing both infrastructure as well as technical and mission support services; and DOD systems manufacturers and parts and component suppliers.

Every University Center Program across the United States has many examples of terrific project and program activities that have greatly contributed to the health of regional and local economies and that have addressed economic distress.

The economic security, national security and global competitiveness of our nation are increasingly bound with the higher education system of colleges and universities in America. The economy of our nation is in a period of transformation from a primarily industrial-based economy to a post-industrial economy. This transformation is creating enormous challenges as jobs are lost in some sectors and regions, and jobs are created in other sectors and regions. It is essential that the higher education system play an engaged and proactive role in the nation's economy.

The EDA University Center Program is the primary federal program to ensure that that role is continual and successful. It is for that reason that the funding for this critical program be continued with the increase that is requested. Because it is a national program, no single state, region or economic sector gains at the expense of any other region or sector. I thank you for your attention to this issue and hope that this request will be approved.

Prepared Statement of the National Federation of Community Broadcasters

Thank you for the opportunity to submit testimony to this Subcommittee requesting a $30 million appropriation for the Commerce Department's Public Telecommunications Facilities Program (PTFP) in fiscal year 2008. As the President and CEO of the National Federation of Community Broadcasters, I speak on behalf of 250 community radio stations and related individuals and organizations across the country including many new Low Power FM stations. NFCB is the sole national organization representing this group of stations, which provide independent local service in the smallest communities and the largest metropolitan areas of this country. Nearly half of NFCB's members are rural stations, and half are controlled by people of color.

In summary, the points we wish to make to this Subcommittee are that NFCB:

—Supports funding for PTFP that will cover the ongoing needs of public radio and television stations.

—Supports funding for conversion of public radio and television to digital broadcasting.

—Supports funding to help public and community radio stations prepare to provide emergency information during natural or manmade disasters.

Community Radio supports $30 million in funding for the Public Telecommunications Facilities Program in fiscal year 2009. Federal funding distributed through the PTFP is essential to continuing and expanding the public broadcasting service throughout the United States. It is particularly critical for rural stations and those serving low income communities. PTFP funds new stations, expanding the reach of public broadcasting to rural areas and to audiences that are not served by existing stations. In addition, it replaces obsolete and worn out equipment so that existing public stations can continue to broadcast high quality programming. PTFP funding is critical to ensuring public radio's readiness to provide life-saving information to communities in the event of local disasters, as we have seen during weather emergencies in the past few years. Finally, with the advent of digital broadcasting, PTFP funding is helping with the conversion to this new technology.

We support $30 million in funding to ensure that both the ongoing program will be continued, and that there will be additional financial resources available to help cover the cost of improving the emergency infrastructure of public broadcasting stations. This additional funding is considered an urgent need if community stations are to withstand and continue broadcasting through extreme weather or other emergency situations. In addition, increased funding is necessary to assist the conversion of public radio and television to a digital format, which is particularly important when the FCC has endorsed a standard for digital radio broadcasting, the television conversion deadline is imminent, and commercial radio stations are converting to digital transmission, and public radio should not be left behind.

PTFP funding is unique. It is the only funding source available to help get new stations on the air and ensure that public broadcasting is available everywhere in the United States. At a time when local service is being abandoned by commercial radio, PTFP aids communities developing their own stations which provide local information and emergency notifications.

Funding from PTFP has been essential to keep public radio stations on the air by funding the replacement of equipment, often items that have been in use for 20 or more years. The program is administered carefully to be certain that stations are acquiring the most appropriate type of equipment. They also determine that equipment is being properly maintained and will not fund the replacement of equipment before an appropriate period of time in use. PTFP has also helped bring public radio service to rural areas where it is not otherwise available. Often they fund translators to expand the coverage of an existing station and they help with the planning and equipment needs of a new station. Recently, many of these new projects have been for Native American controlled stations on Indian Reservations or new Low Power FM installations that broadcast very locally.

Federal funding is particularly critical to stations broadcasting to rural and underserved audiences which have limited potential for fundraising due to sparse populations, limited number of local businesses, and low income levels. Even so, PTFP funding is a matching program, so federal money is leveraged with a local commitment of funds. This program is a strong motivating factor in raising the significant money necessary to replace, upgrade and purchase expensive broadcast equipment.

Community Radio stations must be prepared to provide continuing service during emergency situations. As we saw during the severe storms and devastating hurricanes of the last few years, radio is the most effective medium for informing a community of weather forecasts, traffic issues, services available, evacuations, etc. Since everyone has access to a radio and they are portable and battery operated, a radio is the first source for this critical information. Radio stations therefore must have emergency power at both their studios and their transmitter in order to provide this service.

The National Federation of Community Broadcasters supports funding for the conversion to digital broadcasting in public radio and television. While public television's digital conversion is mandated by the Federal Communications Commission, public radio is converting to digital to provide more public service and keep up with the market. The digital standard for radio has been approved and over 365 public radio transmitters have been converted. Most exciting to public radio is that stations can broadcast two or more high quality signals, even while they continue to provide the analog signal. Currently 117 stations are providing 153 streams of programming. The development of additional digital audio channels will potentially more than double the service that public radio can provide, particularly to unserved and underserved communities.

Thank you for your consideration of our testimony. If the Subcommittee has any questions or needs to follow up on any of the points expressed above, please contact the National Federation of Community Broadcasters at www.nfcb.org.

Prepared Statement of the American Astronomical Society

I appreciate the opportunity to comment on NASA's 2009 budget from my perspective as President of the American Astronomical Society (AAS).

The AAS believes that the President's fiscal year 2009 request of $17.6 billion is the bare minimum necessary to meet the agency's many challenges—from the reinvention of manned spaceflight, to the agency's many scientific missions in Earth Science, Heliophysics, Astrophysics, and Planetary science.

The AAS is the major organization of professional astronomers in the United States. The basic objective of the AAS is to promote the advancement of astronomy and closely related branches of science. The membership, numbering approximately 7,000, includes physicists, mathematicians, geologists, and engineers whose interests lie within the broad spectrum of modern astronomy. AAS members advise NASA on scientific priorities, participate in NASA missions, and use the data from NASA's outstanding scientific discoveries to build a coherent picture for the origin and evolution of the Earth, the solar system, our Galaxy, and the Universe as a whole.

In recent years, the astronomical community, working together with NASA, has produced a remarkable string of successes that have changed our basic picture of the Universe. Observations with the Hubble Space Telescope (HST) of exploding stars whose light has been traveling for half the age of the Universe, combined with the exquisite map of the glow from the Big Bang itself from the Wilkinson Microwave Anisotropy Probe and information from other observatories, shows that the Universe we live in is not the Universe we see. Mysterious Dark Matter makes the ordinary particles clump together to form stars and galaxies. Even more mysterious Dark Energy makes the expansion of the Universe speed up. Both of these concepts challenge our understanding of the nature of matter and energy in the Universe and open up broad new vistas for future work.

Similarly, exploration of the solar system has been a resounding success for NASA, with exciting missions to Mars and to Saturn revealing a beautiful and intricate history that is interwoven with the history of our planet Earth. A new mission is now on its way to Pluto. The discovery of planets around other stars has been a great triumph of the past decade, raising hopes for seeing planets like our own Earth, and placing our own solar system, and life itself, in a new context.

In addition to contributing greatly to our knowledge and understanding of the universe, NASA continues its long history of contributing to the country's high technology economy via spin-offs from it science programs. Hubble Space Telescope (HST) images form one of the key databases behind GoogleSky bringing state-of-the-art imagery of the Universe into a tool now available to anyone, anywhere in the world with a computer (http://www.google.com/educators/spacetools.html). NASA's leadership brings high visibility to U.S. science and technology achievements and attracts young people to these fields.

NASA's key role in these discoveries makes its science program of deep interest to AAS members. In the past, NASA has worked with the astronomical community to find the most promising paths forward. The James Webb Space Telescope (JWST) is a large program that was endorsed by the National Academy of Sciences (NAS) Decadal Survey in astronomy. When completed in the next decade, it will help expand the frontier of knowledge to the deepest reaches of space and time and into the hidden places where stars and planets are formed. The astronomical community also recommended, and NASA plans to execute, a wide range of other programs—some of moderate scope and others that nourish the infrastructure for a healthy and vibrant community. This balanced approach has proved best—with a range of opportunities carefully crafted to get the best science from NASA's Science budget.

While we enjoy a generous flow of data from past and current space telescopes, we are looking forward to new telescopes and new scientific challenges in the next decade. The astronomical community, under the leadership of the National Academy of Sciences (NAS), is preparing for the commencement of the Astronomy and Astrophysics Decadal Survey that is carried out once every ten years. This is an opportunity to look forward toward the future of space astrophysics in the context of a broad, national astronomy and astrophysics program. The next Decadal Survey will provide guidance for federal investment in the next generation of ground and space-based telescopes.

This priority-setting exercise has been the key ingredient in the success of U.S. astronomy and astrophysics for the past five decades. It is very important for the health of NASA's astrophysics program that we conduct an orderly evaluation of concepts across the full spectrum of astrophysics missions and wavelengths. To emphasize this point, the American Astronomical Society issued this statement in January 2008:

"The American Astronomical Society and each of its five divisions strongly endorse community-based priority setting as a fundamental component in the effective federal funding of research. Broad community input is required in making difficult decisions that will be respected by policy makers and stake-holders. The decadal surveys are the premier examples of how to set priorities with community input.

Other National Academy studies, standing advisory committees, senior reviews, and town hall meetings are important components. Mid-decade adjustments should also be open to appropriate community input. Pleadings outside this process for specific Congressional language to benefit projects or alter priorities are counterproductive and harm science as a whole. The American Astronomical Society opposes all attempts to circumvent the established and successful community-based priority-setting processes currently in place."

Recognizing the current challenging budget climate, in which federal non-security, discretionary spending is severely constrained, the current NASA budget for science is nonetheless cause for concern. Specifically, I am concerned about the overall drop in funding for Astrophysics from $1.363 billion in fiscal year 2008 to a proposed $1.162 billion in fiscal year 2009 (a decline of 14.7 percent). The budget is projected to remain flat thereafter.

Using NASA's new-start inflation index, this forecast is a reduction of $423 million (31 percent) for fiscal year 2013 in real buying power over that for fiscal year 2008. This decrease is proposed to occur during an era of significant new astrophysics discoveries with observatories such as the JWST and with the expected exciting recommendations from the Decadal Survey.

The fundamental issue is that NASA is under-funded for its overall mission and received no extra funds to help with the recovery of the *Columbia* disaster. This, in turn, creates budgetary stress for all of the Directorates including Science. In my view, this is the key problem that must be addressed by the Congress and the next Administration.

The AAS therefore recommends that Congress fund NASA Science by 2.9 percent over the fiscal year 2009 level. This modest increase over the President's fiscal year 2009 request will help maintain balance within the science portfolio, which is critical to our community. This increase is also the same increase as proposed for the top-line NASA budget. Small missions and research grants to individual investigators must also be supported. Otherwise, many exciting programs to explore the solar system, to detect planets around other stars, to measure gravitational waves from astronomical events, to explore black holes in all their manifestations, and to seek the nature of the dark energy may be threatened. The AAS also recommends a one-time supplement of $1 billion to help allay expenses associated with the *Columbia* disaster and the Shuttle return to flight.

Finally, the AAS strongly encourages the Administration and Congress to uphold the priorities of the NAS Decadal Survey in astronomy. We are pleased that the development of JWST and HST servicing mission are priorities in the new budget, but we stress that balance is critical in the Science portfolio.

NASA Science has been and continues to be a beacon of innovation and discovery by inspiring generations of young people, capturing the imagination of the public, developing new technologies, and discovering profound insights into the nature of our Universe.

The AAS and its members are prepared to work with Congress and with NASA to help find the best way forward. We will give you our best advice and we will work diligently to make the most of NASA's investment in science.

PREPARED STATEMENT OF THE NATURE CONSERVANCY

Thank you for the opportunity to offer the recommendations of The Nature Conservancy (Conservancy) on the fiscal year 2009 budget for the National Oceanic and Atmospheric Administration (NOAA). The Conservancy urges the Committee to provide appropriations for NOAA at or approaching $4.5 billion, as recommended by the Friends of NOAA Coalition. This funding level for NOAA would allow expanded ocean conservation, restoration, and management programs; increased research and education activities; and provide critical improvements in infrastructure (satellites, ships, high performance computers, facilities) and data management. More specifically, The Nature Conservancy supports the following funding levels for the following programs:

[In millions of dollars]

Line Office, Account, Program	Fiscal Year 2009 President's Budget	Fiscal Year 2009 TNC Recommendation
National Ocean Service:		
Operations, Research, and Facilities:		
Regional Collaboration	5	10

[In millions of dollars]

Line Office, Account, Program	Fiscal Year 2009 President's Budget	Fiscal Year 2009 TNC Recommendation
Coral Reef Program	25.9	30.5
Response and Restoration Base, Damage Assessment, Remediation, and Restoration Program (DARRP)	9.3	9.3
Estuary Restoration Program	1.2	4
Procurement, Acquisition, and Construction: Coastal and Estuarine Land Conservation Program	15	60
National Marine Fisheries Service:		
Operations, Research, and Facilities:		
Community-based Restoration Program	13	23
Open Rivers Initiative	7	12
Protected Species Research & Management, Cooperation with States	.990	5
National Environmental Satellite Data & Information Service: Operations, Research, and Facilities: Coral Reef Monitoring	.737	.737
Pacific Coastal Salmon Recovery Fund	35	90

The Conservancy works to identify priorities for coastal and marine conservation through ecoregional plans. We identify present and likely future threats to biological diversity and then identify appropriate strategies for conservation. At more than one hundred marine sites around the world, the Conservancy has used a variety of strategies for conservation including habitat restoration, removal of invasive species, coastal land acquisition, private conservation of submerged lands, establishment of protected areas, management of extractive marine resources activities, and reduction of nutrient and toxic inputs to coastal systems. No single strategy works everywhere; at every site multiple conservation approaches that take into account the biological, socioeconomic, and political circumstances are needed.

NOAA is an important partner to the Conservancy in many aspects of our conservation work:

—We work with NOAA's programs that support site-based conservation and restoration activities of coastal and marine systems. Programs such as Coastal and Estuarine Land Conservation, Community-based Restoration, Open Rivers Initiative, and the Pacific Coastal Salmon Recovery Fund are excellent examples of practical, community-oriented approaches to conservation of coastal and marine resources. These programs should be expanded.

—Our chapters routinely partner with NOAA programs that support management of marine and coastal ecosystems. The National Marine Sanctuary Program, the National Estuarine Research Reserve System, the Coastal Zone Management Program, the Coral Reef Program, the Marine Protected Areas Center, and fisheries and protected species management programs, are all valuable partners on Conservancy projects and should be funded robustly.

—We rely upon NOAA's data, research, and monitoring of coastal and marine systems, and have several shared priorities on which we collaborate. For example, NOAA's Coastal Services Center maintains a strong partnership-oriented approach to providing information and technical assistance to states, local governments, other federal agencies, and the private sector to inform decision-making.

—NOAA's contributions to state and local implementation and education programs help ensure that the human capacity exists to address environmental management issues at the necessary scale. The Committee should provide funding for staff capacity to provide technical assistance, efficiently manage grants and programs, and help to measure effectiveness.

The Conservancy highly values the contributions these NOAA programs make to sustaining healthy ocean and coastal ecosystems and we encourage the Committee provide significant funding for them. In particular, we would like to offer our recommendations regarding a specific set of programs that support conservation and restoration. NOAA has demonstrated significant capability to achieve results by advancing constructive, on-the-ground and in-the-water habitat conservation. Habitat losses have a substantial impact on the health and productivity of marine ecosystems, yet NOAA's ability to work closely with communities around the country to stem or reverse these losses is constrained by the relatively small amount of funding they receive. We would urge you to consider increasing funding for the following programs:

Habitat Restoration

Community-based Restoration Program ($23 million).—Currently this program, with its exceptional track record since 1996, is able to fund only about 15 percent of the proposals it receives. Additional funds would be well-spent.

Open Rivers Initiative ($12 million).—There are hundreds of thousands of small obsolete barriers on rivers and streams across the United States that block fish passage and restrict access to important habitat. This Initiative is part of a multi-agency commitment to address this problem.

Damage Assessment, Remediation, and Restoration Program (DARRP) ($9.3 million).—Thousands of oil spills and hazardous waste sites contaminate coastal and estuarine areas. DARRP uses a collaborative process to respond to pollution events, assess injuries, and work with responsible parties to restore natural trust resources. Through this program NOAA has secured nearly $450 million in settlements for restoration projects over the last 15 years. Additional funding is necessary for NOAA to continue to properly respond to spills, conduct initial environmental assessments, and work to resolve each settlement.

Estuary Restoration Program ($4 million).—The Estuary Restoration Act (ERA), as reauthorized by the Water Resources Development Act of 2007, sets a goal to restore one million acres of estuary habitat by 2010. The Act encourages coordination among all levels of government, and engages the unique strengths of the public, nonprofit, and private sectors. The ERA authorizes $4 million for NOAA, including $2.5 million for on-the-ground restoration projects and $1.5 million for maintenance of restoration project monitoring data.

Protected Species Conservation

Cooperation with the States ($5 million).—Through this program, authorized under Section 6 of the Endangered Species Act, NMFS provides grants to States to support conservation actions that contribute to recovery or benefit listed species, recently de-listed species, and candidate species that reside within that State. A comparable program in U.S. Fish and Wildlife Service (FWS) has been successful in funding activities that contribute to the recovery of listed species under FWS jurisdiction. With the exception of jointly managed species (e.g. Atlantic salmon), activities related to NMFS jurisdiction species are not eligible for funding under the FWS program. While substantial funding has been directed to Pacific salmon, there are few resources available to support proactive conservation efforts for the other 30 species for which NMFS has sole or joint management responsibility.

Pacific Coastal Salmon Recovery Fund ($90 million).—The Conservancy strongly supports $90 million for the Pacific Coast Salmon Recovery Fund (PCSRF). PCSRF has funded hundreds of successful on the ground salmon conservation efforts and is a critical state, tribal, and local complement to federal salmon recovery and management efforts. We are pleased that NOAA is moving towards a more merit-based allocation of funds focused on activities to recover and protect listed and at-risk salmon populations. However, we are greatly concerned about the dramatic decline in funding for the program, from $89 million in fiscal year 2004 and fiscal year 2005 to $35 million in the President's fiscal year 2009 request.

Coastal and Estuarine Land Conservation

Coastal and Estuarine Land Conservation Program (CELCP) ($60 million).—The Nature Conservancy supports funding CELCP at $60 million for fiscal year 2009. We recognize that this is a substantial increase of prior year funding levels, but feel that it is warranted given the extraordinary circumstances surrounding the fiscal year 2007 and fiscal year 2008 budgets and the pent-up demand left over from low funding levels in those years. We support a competitive process to award CELCP funding. However, for a competitive process to be successful, funding for the program needs to accommodate a greater percentage of the overall demand for coastal acquisition projects.

Coral Reef Conservation

Coral Reef Conservation Program ($30.5 million).—The Conservancy continues to work through a strong partnership with NOAA's Coral Reef program, and we are delighted with their enthusiastic desire to work together on improving resilience of coral reefs, developing approaches for sustainable financing for coral conservation activities at the local level, and other creative approaches to reducing threats to corals. The $30.5 million requested would include $1.5 million to support "Local Action Strategies," a unique partnership between NOAA and states and territories to address threats to coral reefs at the local level.

Coral Reef Monitoring ($737,000).—This line item is an important part of the Coral Reef Program, but is requested by the Administration through the National

Environmental Satellite Data and Information Service (NESDIS). The President's budget requests $737,000 for this modest but effective program known as "Coral Reef Watch." Whether funded in NESDIS or consolidated with the Coral Reef Program funding in NOS, we recommend that $737,000 be included in addition to the $30.5 million referenced above.

Regional Approaches to Ocean and Coastal Issues

Regional Collaboration ($10 million).—For the second year, the Administration's budget requests $5 million to help implement the Gulf of Mexico Governors' Action Plan. The Conservancy thanks the Committee for their support and appropriation of this funding in fiscal year 2008 and urges the Committee to provide an additional $5 million of funding in 2009 to support implementation of regional collaborations in the Northeast and the West Coast, as well as the Governor's Alliance in the Gulf of Mexico. As states come together to form these collaborations, funding should be made available to address issues at the regional scale. As such, we also recommend including this funding in the budget under the title or "Regional Collaborations" rather than "Gulf of Mexico Regional Collaboration."

Thank you for this opportunity to share with the Committee the Conservancy's priorities in NOAA's fiscal year 2009 budget. We would be pleased to provide the Committee with additional information on any of the Conservancy's activities described here or elsewhere. You may contact Emily Woglom at 703–841–5374 or via email at ewoglom@tnc.org, if you have questions on which we might be of assistance.

The Nature Conservancy is an international, nonprofit organization dedicated to the conservation of biological diversity. Our mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Our on-the-ground and in-the-water conservation work is carried out in all 50 states and in more than 30 countries and is supported by approximately one million individual members. We have helped conserve nearly 15 million acres of land in the United States and Canada and more than 102 million acres with local partner organizations globally.

The Conservancy owns and manages approximately 1,400 preserves throughout the United States—the largest private system of nature sanctuaries in the world. We recognize, however, that our mission cannot be achieved by core protected areas alone. Therefore, our projects increasingly seek to accommodate compatible human uses to address sustained human well-being.

PREPARED STATEMENT OF TRAIL KING INDUSTRIES

On behalf of Trail King Industries, major trailer manufacturer and employer of 900 people, with plants located in West Fargo, North Dakota, Mitchell, South Dakota and in Brookville, Pennsylvania, I would like to thank the Committee for allowing our organization to submit this testimony for the record. I am writing to respectfully request that the Hollings Manufacturing Extension Partnership program be provided the authorized $122 million within the fiscal year 2009 Commerce, Justice, Science and Related Agencies Appropriations Bill. This requested level of funding for 2009 was provided for in the recently enacted America COMPETES Act. As you know, the Hollings Manufacturing Extension Partnership (MEP) is a program within the Department of Commerce, National Institute of Standards and Technology, a program authorized to improve competitiveness of America's manufacturing community.

The MEP is one of the most successful partnerships in the country. In addition to public support, a value proposition to improve manufacturer's global competitiveness is supported by those companies who receive benefit. In South Dakota, the Dakota MEP provides assistance to companies in continuous improvement, innovation, strategic growth, technology and workforce development—all major needs of our companies. Last year, we were able to pilot a unique Manufacturing "Boot Camp" for unemployed, with the Dakota MEP.

As a Dakota MEP Director, I would also like to report that the average company benefits and impacts realized in the Dakota MEP improvement work with manufacturers mirrors the national MEP average at $1.4 million per engagement. These benefits have been realized by manufacturers who've partnered with Dakota MEP over the past six years.

Manufacturing continues to diversify and grow the economies of the Dakotas. It currently is 10 percent of the gross state product in North Dakota and 11 percent in South Dakota. The industry has nearly 1,900 firms employing 69,000 in the Dakotas exporting over $2 billion. Manufacturing brings new wealth to our country, our states and communities which, in turn, generate other economic activity and opportunities.

Manufacturing must remain one of our country's economic strengths and the MEP is an invaluable program to help the industry better compete. Without unwavering strong federal support, the MEP will be unable to maintain its mission of serving America's small manufacturers' increasing needs. At a time when our economic strength and global competitiveness are national priorities, the MEP continues to be a wise investment. We respectfully request that you appropriate $122 million for the MEP in fiscal year 2009.

PREPARED STATEMENT OF THE UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH

I submit this written testimony for the record of the U.S. Senate Committee on Appropriations, Subcommittee on Commerce, Justice, Science, and Related Agencies, on behalf of the University Corporation for Atmospheric Research (UCAR). UCAR is a 71-university member consortium that manages and operates the National Center for Atmospheric Research (NCAR) and additional programs that support and extend the country's scientific research and education capabilities.

We are reminded on almost a daily basis that the world faces significant and profound environmental challenges. Yet at a time when the need has never been greater, we are faced with decreasing investments in real terms for the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and the National Oceanic and Atmospheric Administration (NOAA). These are key agencies needed to provide the necessary observations, science, prediction models, and information that policy- and decision-makers need to respond effectively to short-term threats from weather hazards and to plan and prepare for the long-term future of the United States as we move into an uncharted climate. To meet both short- and long-term challenges the nation must support Earth sciences and applications in NSF, NASA and NOAA. I urge the Members to support the fiscal year 2009 request of $6.84 billion for NSF at a minimum, $4.583 billion for NASA's Science Mission Directorate, and $4.5 billion for NOAA overall.

The atmospheric and Earth sciences community appreciates the difficult choices Appropriators were forced to make in the fiscal year 2008 Consolidated Appropriations Act, but remains concerned about the negative consequences of not investing now in science. We appreciate Congress' support for the enactment last year of the America COMPETES Act and urge the Appropriations Committee to follow through with fiscal year 2009 funding for NSF, NASA, and NOAA that reflects the concern demonstrated in that legislation for the health of this country's scientific programs.

National Science Foundation (NSF)

While we lost a year with nearly flat NSF funding for fiscal year 2008, this critical science agency can get back on track to planned accelerated research levels by receiving appropriated funds at the level of the authorized amount of $7.32 billion in the America COMPETES ACT. This would provide a return on investment that would benefit citizens in additional research funded for the short and long term health of the country. I urge the Members to support the President's overall fiscal year 2009 request of at least $6.84 billion for the NSF, and within NSF, the request of $5.59 billion at least for Research and Related Activities (R&RA), the heart of NSF's scientific enterprise.

Geosciences Directorate (GEO).—In this most critical moment for the health of our planet and the future of life as we know it, the geosciences contribute knowledge that is absolutely necessary to understanding climate, weather, the dynamics of water resources, solar effects on Earth, space weather, the interactions of Earth's systems, energy resources, geologic hazards, and all aspects of the global oceans. The economic effects are substantial, with estimates of the component of the U.S. economy exposed to risks associated with weather and climate variability alone reaching $3 trillion annually. While we support the increase for NSF's GEO Directorate in the fiscal year 2009 budget request, we urge the Committee to once again reiterate, as it did last year, that all disciplines of science, including the geosciences, should be considered integral to the American Competitiveness Initiative and urge even stronger increases to include GEO on the "doubling track." I urge the Members to support the President's fiscal year 2009 request of $848.67 million, at a minimum, for the Geosciences Directorate, and within GEO, to provide the President's request of $240.8 million at least for the Atmospheric Sciences Division which provides resources for the atmospheric sciences community that are critical to the physical safety of our citizens, our economic health, and global issues of national security such as severe weather hazards, climate change, the security of our communications infrastructure, and the environmental health of the planet.

Office of Cyberinsfrastructure (OCI).—As stated in the fiscal year 2009 request, OCI "supports research, development, acquisition and operation of advanced shared and connecting infrastructure that enables otherwise unrealizable advances in 21st century science and engineering research and education." The modeling of the Earth's atmosphere is one of these "otherwise unrealizable advances." I urge the Members to support the fiscal year 2009 request of $220.08 million, an 18.8 percent increase over fiscal year 2008 that recognizes cyberinfrastructure's key role.

National Aeronautics and Space Administration (NASA)

NASA's Science Mission Directorate (SMD) has a central role in understanding our planet. Yet despite increasing policy-driven demand for information and analysis the funding in this area is not keeping up with needed support for observing systems and research. I appreciate the Administration's focus on the especially critical Earth Science account in the fiscal year 2009 request. But NASA's overall role in this country's scientific endeavor is so strategic and central to our well being that SMD should be one of this nation's highest priorities. I urge the Members to increase the Science Mission Directorate funding levels to at least $4.583 billion, $142 million above the fiscal year 2009 request and sufficient to keep pace with 3 percent inflation.

With accelerating climate change, there are few NASA responsibilities more important than monitoring the Earth's environment. Within NASA's SMD account, Earth Science does relatively well at $1.367 billion, a 6.8 percent increase, but much less well than in recommendations of the National Research Council's Earth and Science Applications From Space (Decadal Survey). Planned out-year funding absolutely falls short. It is encouraging to see the Decadal Survey being used as a benchmark for the order and timing of missions. However, falling behind schedule increases the risk of losing continuity in important observational data, which presents serious calibration issues. I urge the Members to plan for future investments of over $2 billion annually as called for by the Decadal Survey, whereas the fiscal year 2009 request includes out-year funding of approximately $1.3 billion annually.

NASA's SMD programs that are in progress and others that are yet to be implemented will enable us to mitigate some of the property damage and prevent some of the deaths caused by severe weather and help us to mitigate, understand, and cope with the inevitable effects of natural and human-induced climate change. SMD "space weather" programs, part of the Living with a Star Program, will also protect space vehicles, astronauts, and satellites from the devastating radiation of solar storms. These programs are critical to the health of our economy, to the health of the Earth, and to our national security. Once again, I urge the Members to protect the vibrant NASA science accounts and missions, current and planned, that make possible the study of our own planet and the environment that sustains life on Earth.

National Oceanic and Atmospheric Administration (NOAA)

As stated in the Friends of NOAA Coalition letter of March 12, 2008, "Assuming an annual inflationary rate of 3 percent, and using fiscal year 2005 as a baseline, the agency's budget would need to be $4.4 billion in fiscal year 2009 just to remain level in constant dollars." It is obviously impossible for NOAA to keep up with expanding responsibilities while its budget effectively shrinks. The atmospheric sciences community appreciates the Administration's request of $4.1 billion for fiscal year 2009, but this increase of 5.5 percent over fiscal year 2008 will primarily augment the satellite programs while others are diminished. The America COMPETES Act, signed into law last August, states that NOAA "shall be a full participant in any interagency effort to promote innovation and economic competitiveness through near-term and long-term basic scientific research and development and the promotion of science, technology, engineering, and mathematics education consistent with the agency mission, including authorized activities." NOAA has the potential to make much greater contributions, but the agency is struggling. There simply must be a better balance between NOAA's infrastructure, operations, and research funding, as well as effective management and organizational structure at all levels, for this agency to accomplish its mission.

I urge the Members to support an appropriation of at least $4.5 billion for NOAA in fiscal year 2009—a level recommended by the Senate for the past three fiscal years and endorsed by the multi-sector Friends of NOAA Coalition and Weather Coalition—and to do so while maintaining vital support for other portion's of the Subcommittee's research and development portfolio. While not sufficient to meet all of NOAA's current obligations, it would begin to alleviate pressures that have built up over many years and set a more realistic (although still inadequate) base for this agency to meet current and future obligations of national importance.

Office of Oceanic and Atmospheric Research (OAR).—Within OAR's Competitive Research Program request of $134.7 million, a small increase will support several climate and weather data related activities of great importance to the country and enable OAR to work more effectively with, and leverage from, the enormous base of expertise in the academic community. Within OAR Weather and Air Quality Research, the potentially substantial role of Unmanned Aircraft Systems in filling very serious observational gaps will be examined, and hurricane forecast improvement will be pursued. The fiscal year 2009 request moves the U.S. Weather Research Program from the National Weather Service back to OAR. This chronically underfunded program will fund THORpex, a multi-year international field experiment to improve two to ten-day forecasts, as well as experimental hurricane forecasting work. I urge the Members to support the fiscal year 2009 request of $372.2 million (Operations, Research and Facilities—ORF) for the Office of Oceanic and Atmospheric Research.

National Weather Service (NWS).—Within NWS, UCAR supports the fiscal year 2009 program changes including support for weather data buoys to enhance hurricane and severe storm observations, developing enhanced fire weather modeling capability, and additional water vapor sensors that contribute to improved weather aviation services within the Integrated Upper Air Observing System. I urge the Members to support the fiscal year 2009 request of $930.7 million for the NWS.

National Environmental Satellite, Data and Information Service (NESDIS).—NESDIS receives an absolutely necessary increase for the geostationary satellite series, GOES–R. Any further delay or decrease in funding will cause additional program costs as well as interruption to the overall continuity of GOES comprehensive data coverage including atmospheric, oceanic, climatic, and solar observations. This would cause severe problems for the nation's weather forecasts and warnings, climatologic analysis and prediction, ecosystems management, and safe and efficient public and private transportation. The fiscal year 2009 request cuts funding for the tri-agency National Polar-orbiting Operational Environmental Satellite (NPOESS) program, which we understand is a result of restructuring. We are extremely concerned about out-year funding for this critical program, but are pleased with the reinstatement of the development of two NPOESS climate sensors that were previously de-manifested, the Clouds and the Earth's Radiant Energy System (CERES) sensor and the Total Solar Irradiance Sensor (TSIS).

Of additional concern is the nearly flat funding for NESDIS Data Centers. If the country is truly committed to renewing and capitalizing on its investment in Earth-observing systems, it must also invest in accessing, archiving and assessing the data gathered from these systems. The weather and climate community is concerned also that the President's request fails to begin initial planning for the CLARREO and GPSRO missions, as recommended in the NRC Decadal Survey. CLARREO and GPSRO provide critical measurements of Earth's and the sun's radiation, which are critical for climate, and temperature, water vapor, and electron density profiles for weather, climate, and space weather.

I urge the Members to consider the NESDIS Procurement, Acquisition and Construction (PAC) account fiscal year 2009 request level of $1.24 billion to be the base level for this line office; to examine the erosion of funding for the NESDIS Data Centers and appropriate for them an inflationary increase; to press the agency to begin planning for the CLARREO and GPSRO missions; and to continue to pursue solutions to this nation's critical Earth observing program, the infrastructural satellite component of which is going to cause NOAA's core programs to be undercut severely if additional resources or restructuring are not provided.

National Ocean Service (NOS).—Ocean data are of great importance to the work of the atmospheric sciences community. Of particular interest are the efforts within NOS to manage hydrographic datasets more effectively and efficiently (Ping to Chart Infrastructure Streamlining), as well as the implementation as it was originally conceived, of the Integrated Ocean Observing System (IOOS). There is great concern that years of report recommendations have not been heeded and that the original concept of a "system of systems" providing information on the current and future state of the oceans, informed by competitive research grants to provide the technologies and understanding required to build and improve a scientifically sound system, has been abandoned. I urge the Members to support data gathering efforts within the National Ocean Service, but to ensure that a competitive grants program be fully funded for the Integrated Ocean Observing System so that this valuable program may be appropriately structured to meet its societal goals.

I sincerely thank the members of the Committee for your stewardship of the nation's scientific enterprise and your understanding that the future strength of the nation depends on the investments we make in science and technology today.

PREPARED STATEMENT OF MITCHELL V. VOYDAT

My name is Mitchell V. Voydat and I'm a private citizen highlighting the extreme urgency of appropriations that need to be earmarked for the continuation of two very successful, critical and important programs. The two programs are the Whale disentanglement program of the Provincetown Center for Coastal Studies (PCCS), located in Provincetown, Massachusetts for the highly endangered species, the North Atlantic Right Whale and the Dolphin SMART program, for the wild bottlenose dolphin located in the Florida Keys National Marine Sanctuary. The North Atlantic Right Whale is a highly endangered species listed under the Federal Endangered Species Act and both right whales and the bottlenose dolphin must be protected under the Marine Mammal Protection Act. The National Marine Fisheries Service (NMFS) under the National Oceanic and Atmospheric Administration (NOAA) is the responsible agency for the protection of the North Atlantic Right Whale and the bottlenose dolphin.

Let me explain the whale disentanglement program of PCCS.

The main responsibility of the whale disentanglement program is freeing Right Whales from life-threatening entanglements in fishing gear. Without the necessary appropriations, there is a very, very high and very, very real possibility of North Atlantic Right Whales becoming entangled in life-threatening fishing gear, serious injury or death caused by the entanglement and extinction of the highly endangered species, because there are only approximately 350 North Atlantic Right Whales living today.

The whale disentanglement program is world-renowned and the only one of its kind on the East Coast.

The whale disentanglement program of PCCS have freed 89 Right Wales and five of these rescues were right whales who went on to have calves.

Please help the PCCS secure the very necessary and urgent appropriations to continue its life savings services of freeing right whales from life-threatening entanglements in fishing gear.

Let me explain the Dolphin SMART Program.

A special area of the Florida Keys National Marine Sanctuary is home to a resident group of bottlenose dolphins. It is also where many businesses conduct dolphin tours in a small geographic area. This heightened amount of human activity in a small area may cause unnecessary stress to the local population by disrupting their natural behaviors. This prompted conservation agencies, including NOAA's National Marine Sanctuary Program and National Marine Fisheries Service, the Dolphin Ecology Project and the Whale and Dolphin Conservation Society, as well as local businesses and members of the public, to team up and develop a unique, multi-faceted program encouraging responsible viewing of wild dolphins and recognizing businesses that participated.

When we approach wild dolphins too closely, move too quickly, or make too much noise, we increase the risk of disturbing their natural behaviors, such as migration, breathing, nursing, breeding, feeding and sheltering.

The Dolphin SMART mission is to promote responsible stewardship of wild dolphins inhabiting the Florida Keys Nation Marine Sanctuary.

Program participation is for commercial businesses conducting and booking wild dolphin tours in the Florida Keys. The Dolphin SMART program offers participation incentives for businesses that follow the program criteria and educate their customers about the importance of minimizing wild dolphin harassment.

What does Dolphin SMART mean?

S—Stay at least 50 yards from dolphins.

M—Move away cautiously if dolphins show signs of disturbance.

A—Always put your engine in neutral when dolphins are near.

R—Refrain from swimming with, touching or feeding wild dolphins.

T—Teach others to be Dolphin SMART.

Purpose of the Dolphin SMART Program:

—Minimize the potential of wild dolphin harassment caused by commercial viewing vehicles.

—Reduce expectations of wanting to closely interact with wild dolphins in a manner that may cause harassment.

—Eliminate advertising that creates expectations of engaging in activities that may cause harassment.

—Promote stewardship of the Florida Keys National Marine Sanctuary.

Upon successful completion of the program criteria, the training and evaluation, Dolphin SMART businesses receive materials recognizing them as active Dolphin SMART participants. Participants must complete an annual refresher training and evaluation to ensure active participation. Dolphin SMART participants can easily be identified by a flag or decal displayed on their vessel featuring the Dolphin SMART logo and current calendar year.

Madam Chairman and Honorable U.S. Senators: As you can see, here are two very, very successful programs, but without earmarking the necessary funds to keep these programs running, without the Dolphin SMART program, human intervention will threaten, disrupt and destroy the natural behaviors of wild dolphins in the Florida Keys, and without the whale disentanglement program of PCCS, extinction of the North Atlantic Right Whale is very, very real and very certain.

I want to thank Madam Chairman, the Honorable U.S. Senator from Maryland, Senator Mikulski, and the ranking member, the Honorable U.S. Senator from Alabama, Senator Shelby and all the Honorable Committee Members on the U.S. Senate Subcommittee on Commerce, Justice, Science and related agencies for giving me the opportunity to submit my written testimony for these two very successful, critical and very important programs.

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DEPARTMENT OF JUSTICE

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NATIONAL SCIENCE FOUNDATION

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