

S. HRG. 112-439

# *Senate Hearings*

*Before the Committee on Appropriations*

---

## Commerce, Justice, Science, and Related Agencies Appropriations

*Fiscal Year* 2012

112<sup>th</sup> CONGRESS, FIRST SESSION

H.R. 2596/S. 1572

DEPARTMENT OF COMMERCE  
DEPARTMENT OF JUSTICE  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
NONDEPARTMENTAL WITNESSES

Commerce, Justice, Science, and Related Agencies, 2012 (H.R. 2596/S. 1572)

**COMMERCE, JUSTICE, SCIENCE, AND RELATED  
AGENCIES APPROPRIATIONS FOR FISCAL YEAR  
2012**

---

---

**HEARINGS**  
BEFORE A  
SUBCOMMITTEE OF THE  
COMMITTEE ON APPROPRIATIONS  
UNITED STATES SENATE  
ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

ON

**H.R. 2596/S. 1572**

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENTS OF COMMERCE AND JUSTICE, AND SCIENCE, AND RELATED AGENCIES FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2012, AND FOR OTHER PURPOSES

---

**Department of Commerce  
Department of Justice  
National Aeronautics and Space Administration  
Nondepartmental Witnesses**

---

Printed for the use of the Committee on Appropriations



Available via the World Wide Web: <http://www.gpo.gov/fdsys/browse/committee.action?chamber=senate&committee=appropriations>

---

U.S. GOVERNMENT PRINTING OFFICE

64-591 PDF

WASHINGTON : 2012

---

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800  
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

COMMITTEE ON APPROPRIATIONS

DANIEL K. INOUE, Hawaii, *Chairman*

PATRICK J. LEAHY, Vermont	THAD COCHRAN, Mississippi, <i>Ranking</i>
TOM HARKIN, Iowa	MITCH McCONNELL, Kentucky
BARBARA A. MIKULSKI, Maryland	RICHARD C. SHELBY, Alabama
HERB KOHL, Wisconsin	KAY BAILEY HUTCHISON, Texas
PATTY MURRAY, Washington	LAMAR ALEXANDER, Tennessee
DIANNE FEINSTEIN, California	SUSAN COLLINS, Maine
RICHARD J. DURBIN, Illinois	LISA MURKOWSKI, Alaska
TIM JOHNSON, South Dakota	LINDSEY GRAHAM, South Carolina
MARY L. LANDRIEU, Louisiana	MARK KIRK, Illinois
JACK REED, Rhode Island	DANIEL COATS, Indiana
FRANK R. LAUTENBERG, New Jersey	ROY BLUNT, Missouri
BEN NELSON, Nebraska	JERRY MORAN, Kansas
MARK PRYOR, Arkansas	JOHN HOEVEN, North Dakota
JON TESTER, Montana	RON JOHNSON, Wisconsin
SHERROD BROWN, Ohio	

CHARLES J. HOUY, *Staff Director*  
BRUCE EVANS, *Minority Staff Director*

---

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

BARBARA A. MIKULSKI, Maryland, *Chairman*

DANIEL K. INOUE, Hawaii	KAY BAILEY HUTCHISON, Texas
PATRICK J. LEAHY, Vermont	RICHARD C. SHELBY, Alabama
HERB KOHL, Wisconsin	MITCH McCONNELL, Kentucky
DIANNE FEINSTEIN, California	LAMAR ALEXANDER, Tennessee
JACK REED, Rhode Island	LISA MURKOWSKI, Alaska
FRANK R. LAUTENBERG, New Jersey	RON JOHNSON, Wisconsin
BEN NELSON, Nebraska	SUSAN COLLINS, Maine
MARK PRYOR, Arkansas	LINDSEY GRAHAM, South Carolina
SHERROD BROWN, Ohio	THAD COCHRAN, Mississippi ( <i>ex officio</i> )

*Professional Staff*

GABRIELLE BATKIN  
JESSICA M. BERRY  
JEREMY WEIRICH  
JEAN TOAL EISEN  
ART CAMERON (*Minority*)  
ALLEN CUTLER (*Minority*)  
GOODLOE SUTTON (*Minority*)

*Administrative Support*

MICHAEL BAIN  
KATIE BATTE (*Minority*)

# CONTENTS

THURSDAY, MARCH 10, 2011

	Page
Department of Justice: Attorney General .....	1
THURSDAY, APRIL 7, 2011	
Department of Justice: Federal Bureau of Investigation .....	75
MONDAY, APRIL 11, 2011	
National Aeronautics and Space Administration .....	131
THURSDAY, APRIL 14, 2011	
Department of Commerce: Secretary of Commerce .....	201
Material Submitted Subsequent to the Hearing .....	285
Nondepartmental Witnesses .....	287



**COMMERCE, JUSTICE, SCIENCE, AND RE-  
LATED AGENCIES APPROPRIATIONS FOR  
FISCAL YEAR 2012**

---

**THURSDAY, MARCH 10, 2011**

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

The subcommittee met at 11:04 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Lautenberg, Nelson, Pryor, Brown, Hutchison, and Murkowski.

DEPARTMENT OF JUSTICE

ATTORNEY GENERAL

**STATEMENT OF HON. ERIC H. HOLDER, JR., ATTORNEY GENERAL**

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Good morning, everybody. The Commerce, Justice, Science, and Related Agencies Subcommittee of the United States Senate Committee on Appropriations will come to order.

This is our first hearing on the fiscal year 2012 of the agencies within the portfolio of this subcommittee.

Today, we welcome the Attorney General of the United States. And Mr. Attorney General, we are just so glad to see you.

Before we turn to you, first of all, the subcommittee would like to note, because of our responsibility for the National Aeronautics and Space Administration (NASA), the joy that we feel on the safe return of the *Discovery*. It has been on its final journey, and sometimes I feel this appropriations subcommittee is there as well. But we were so glad that they returned safely, and we salute them.

On a more melancholy note, on behalf of this Committee, this subcommittee, and, I believe, the Senate, we would like to express our condolences to the United States Marshals Service (USMS) and to the families of those who—particularly of the deputy who was killed in a shootout with the fugitive. We also understand another marshal has been, indeed, gravely wounded. We express our condolences and our sympathies there.

We also want to note that this is the third Federal agent killed in the line of duty in recent weeks. And we want to acknowledge that our Federal law enforcement is in harm's way every single day protecting this Nation.

(1)

When we talk about numbers and statistics and cuts and shut-downs and showdowns, we need to know that there are consequences to this, and that there are people every single day out there, putting themselves in harm's way not only to protect us overseas—and we salute those troops there—but we have boots on the ground in the United States of America. And they are in our streets and our neighborhoods.

This man died serving a warrant. We know that we ask people to serve warrants every single day under the Adam Walsh Act, going after the despicable, reprehensible sexual predators.

We also note that in local law enforcement—well, eight Federal law enforcement agents died last year in the line of duty—eight. Also we were told through the National Law Enforcement Officers Memorial Fund that 160 police officers died nationwide. That is a 40 percent jump in our thin blue line from what it was in other years. Forty percent more police officers have died.

We are a Nation at risk, and our law enforcement is at risk. Now, there will be appropriate memorial services, which we salute. But we have to protect those who protect us. And that means adequate pay—first of all, let us start with respect. Let us realize that there are many people who are called to defend and protect the United States, and many are in our Federal law enforcement.

So I am going to be asking you questions today about what is going to happen in terms of what you see in 2012 and the consequences to the continuing resolution.

I also want to note that my new ranking member, Senator Kay Bailey Hutchison, will be joining us shortly. She is at a Commerce Committee hearing for which she is the ranking member. She has significant responsibility. She will be joining us. She will have her own statement, and we will interrupt any proceedings so that she can move to the head of the line.

I want to thank you for all that you are doing. And I am mindful that we are in a tough spot. I am mindful that we haven't finished our appropriations on 2011.

You were here last year. You very clearly, specifically, and aptly and ably outlined the needs of the Department of Justice of the United States of America. We tried to give you the right stuff so that they could do the right job.

Now, we are facing a continuing resolution where I don't know where we stand. I don't know where we are going, and I don't know what to tell you, what we are going to do. But I sure would like to hear from you about where you are in terms of managing the Department of Justice.

I want you to know that I am absolutely on your side. In terms of community security, I want to make sure that our streets and neighborhoods and the people who live in them are safe.

I want to be clear that our national security is protected. And what the Department of Justice is doing there, not only through the able work of the Federal Bureau of Investigation (FBI), but what they do—I read the article about you being a nighthawk, staying up and getting those 3 a.m. calls, standing sentry over the predators that threaten the safety and well-being of the American people.



Well, if you stay up all night, I think we ought to stay up all night to make sure you get funded. And in terms of oversight and accountability, yes, there are some yellow flashing lights, and you and I are going to talk about it. But I believe we need to put our Federal checkbook where our values are. We are a Nation of a rule of law. Therefore, we need to support an independent judiciary. And we need to support a Department of Justice, both to enforce our laws and also to prosecute those who break our laws.

My priorities—and I know your highlights—will be in protecting our Southwest Border, which will have an additional \$2 billion; funding for State and local law enforcement, something all of us enthusiastically support, for \$3 billion; fighting mortgage fraud and white-collar crime, close to \$1 billion; tackling civil rights and discrimination; and also strengthening our national security and counterterrorism efforts for \$5.4 billion.

I am very concerned that for those that want to cut law enforcement, it will have a draconian effect. This subcommittee and the current Justice Department have locked arms and committed to re-investing resources for the State and local areas. We want to make sure violent crime rates drop.

This is the time that we know we must be frugal, but we think we also need to make these public investments that keep our Nation straight. You can't have a strong economy if you are worried about break-ins, whether it is through cyber crime or people on the street.

The Justice Department requests \$3 billion for State and local tribal partners supporting grant programs. But we will also—I understand you are going to consolidate 35 programs.

We know that you have got your hands full tackling fraud cases, and that you are teaming up with the FBI agents, U.S. Attorneys, and legal divisions to really go after the Ponzi schemes, mortgage and healthcare fraud. We wonder why more of those who broke the law aren't in orange jumpsuits and either paying restitution or paying with time in jail. We know that you have requested close to—through the President—\$978 million to go after financial fraud.

We hear from families everywhere that they want their children to be protected. This is why we so strongly support the Adam Walsh Act. We are concerned that it received no additional funding in 2011, but yet the list of sexual predators grows. And we ask that our marshals enforce them. We want to be sure that this year, we invest \$370 million in going after the sexual predators.

I know that Senator Hutchison will talk about our Southwest Border effort. She and I have had extensive conversations about it. She and I will be joined together in our effort to protect our Southwest Border. Because if our Southwest Border is at risk, the entire United States of America is at risk.

And the Southwest Border should not be a gateway for drug cartels, illegal guns, and a variety of other despicable activity. So we want to be able to support the \$2 billion request to target and dismantle drug cartels. I know Senator Hutchison will speak more to that, but I want you to know I regard this as a bipartisan effort to protect our borders.

Something that is very specific in my interest is in the area of cybersecurity. I believe, Mr. Attorney General, we have four wars.

We have Iraq. We have Afghanistan. We have the war at our very own border, the Southwest Border war. And I believe we have an enduring war in cybersecurity.

As we speak, the United States of America is under attack. Today, at the end of the day, there will be 2,000 attacks on the Pentagon from sovereign states and organized crime.

Also, we now know that even something as important to our economy as NASDAQ had a cybersecurity intrusion. Thanks to the collaborative work of our own Government and the outstanding work of the FBI, we thwarted the bring-down of NASDAQ. Well, it could happen again, and you need a very sophisticated workforce to deal with this.

We are going to discuss a variety of issues with you, but I am going to turn to Senator Hutchison. Senator, we welcome you, and then hear from you. But we need to know, how is the Department of Justice protecting the Nation, what does fiscal year 2012 mean, and how do you see the consequences of this really foggy “never-neverland” of the continuing resolution affecting your ability to protect the Nation?

Senator Hutchison, I am going to turn to you for your opening statement. And I would like to say, I really, with warmth and enthusiasm, welcome you as my ranking member.

We have worked together on so many issues, from the space program to women’s health, and now we look forward to working with you here. And again, a very cordial and collegial welcome, and with that, we turn to you for such remarks that you choose to make.

STATEMENT OF SENATOR KAY BAILEY HUTCHISON

Senator HUTCHISON. Well, thank you, Madam Chairman.

And let me say that I can’t think of anyone with whom I would rather work on a bipartisan basis than you, because we have worked together on so many issues of mutual concern, and I know that you are a straight shooter. And I know that you want to do the things that are right for our country, and I look forward to us pursuing those things together. And we do have a lot of mutual interests, in space, as well as certainly in the Justice Department.

I do want to welcome you, Mr. Attorney General. You have a very tough job, and I understand that. And I have looked at the beginnings of the budget request that you have made.

I will just make a few points. And I will say I am late because I am the ranking member on the Commerce Committee, and we had nomination hearings this morning at 10 a.m., and it ran over. So I do apologize.

Let me just make some of the points, because Senator Mikulski was talking as I came in about the war on our border, and it is true. It is there. Just yesterday, I was meeting with the people from Laredo—actually, the day before yesterday. The police chief was here, the mayor, the council. And when I go to El Paso or Laredo or Brownsville or many of our border cities, I see what they are dealing with at a local level.

And I will tell you what every one of them says to me, and that is the most valuable thing that they have is the interagency information cooperation. And they believe that is working pretty well, and that is very important to them because their local police on the

streets need to know if we have drug cartel information or drug gang information. And there is no question in my mind that we have got to have a firm stand on the border to completely stop the corruption from coming across.

And there is drug activity connected with the Mexican cartels in our major cities and in our border communities. And there are efforts to recruit 12-year-olds and 13-year-olds by the cartels. They are poor kids. They have never had money, and they are offered enormous sums of money to do terrible things. So we have a problem and we must use the resources that we have.

Your budget does have support for State and local law enforcement. One of the things that I am very concerned that you have cut is the State Criminal Alien Assistance Program (SCAAP) funding. That is the funding for the local people to house illegal alien criminals. People who have committed crimes, they have to go to a jail, and the jails are overrun. These are county jails and city jails, and they are overrun.

SCAAP funding helps offset the expenses of housing criminals who are also illegal aliens, and your budget cuts that by \$194 million. And I am very concerned about that, I will tell you, because we need to support those local law enforcement officials throughout the Arizona and California borders as well. Senator Feinstein, Senator Kyl, and I have worked on this, and I hope that we can use that priority.

I think that the Community Oriented Policing Services (COPS) hiring funding, in my opinion—and according to The Washington Post, your Department didn't put that forward as a request in your budget, but OMB did. And so, it is in your request. I don't—I think that it is important to have police on the streets everywhere. But is it the priority use of your funding? I don't think so.

And I think perhaps you didn't think so since you didn't ask for it. But that is an area where, if I were going to do it at all, it would be on the border to help local law enforcement officers deal with issues that are beyond just their purview, but are because of people coming across the border and these terrible drug fights.

Number two, Mr. Attorney General, Guantánamo—I know we are in disagreement about Guantánamo. I welcomed the President, even though he was critical of the Congress, in his statement that we would not be able to pursue trials of these terrorists on American soil. He was not happy about it, but I am glad that we are not going to be bringing those people from Guantánamo, where there has yet to be an escape, into our 49—well, 48 States anyway, certainly. And I don't want it to be in Hawaii or Alaska either. But I don't think it is in the security interests of U.S. citizens to have these people on our soil where there could be attacks to try to free them or other issues.

So I think that many in the Congress hope that you will not be pursuing that further. But I think there will be efforts to keep there from being money in your budget to pursue trying these people on American soil with all the rights of American citizens in our court system.

I have been to Guantánamo Bay, and I think that it is the right place for these people to be held. And I think that I will just quote one of our intelligence community followers to just give some statis-

tics that assess how many of the people who have actually been released from Guantánamo have been confirmed or suspected of re-engaging in terrorist or insurgent activities after their transfer out. Thirteen percent are confirmed and 69 percent—or 13 percent are confirmed and 11 percent more are suspected of re-engaging where they are now in terrorist and insurgent activities. In addition to that, 13 are dead, 54 are in custody again, and 18 remain—83 remain at large.

So we have got information that says that there is a high recidivism rate for people who have been in Guantánamo and released. So I just hope that we will be a little more protective of our American soil than to talk about bringing them home.

The Immigration and Customs Enforcement (ICE) agent shooting in Mexico—there are disturbing reports. First of all, let me say, I appreciate that you have established an investigation that encompasses the organizations that could contribute to this. I give you the credit for doing that.

I want to add to your area of investigation that there are disturbing reports that the weapons that have been used in the killing of a Border Patrol agent in Arizona and the ICE agent from Texas in Mexico City, that the guns used were smuggled in from America. And the reports are that perhaps Bureau of Alcohol, Tobacco, and Firearms and Explosives (ATF) agents knew of that smuggling.

I would like to ask you—and I will, in my question period—if you will add that to your area of investigation.

So I will stop there. I will just say one last thing, and that is, the Southwest Border efforts that you are making and are in your budget I do appreciate. I think the increase in the Drug Enforcement Administration (DEA) intelligence center in El Paso is very important. And I think that Project Gunrunner is something that I support, but I do want to make sure that the ATF agents are also supporting that. And so, we can talk more about that.

But thank you, Madam Chairman, for having this hearing and giving us this opportunity to talk to the Attorney General, and I thank you for giving us the time.

Senator MIKULSKI. Thank you, Senator Hutchison.

Colleagues, I want to note that we started our hearing at an unusual time to accommodate Senator Hutchison, which we were delighted to do. But the Attorney General has to leave at 12:30 p.m.

So instead of asking for your opening statements, why don't we get right into the testimony? If any of you have to leave, if you could tell me, because I want to protect your rights as well.

Mr. Attorney General, why don't you go right ahead with your testimony, and let us get into it.

#### SUMMARY STATEMENT OF ERIC H. HOLDER, JR.

Attorney General HOLDER. Thank you.

Well, good morning, Chairwoman Mikulski, Ranking Member Hutchison, and other distinguished members of the subcommittee.

I want to thank you for this opportunity to discuss the President's fiscal year 2012 budget for the Department of Justice.

And on behalf of my colleagues, the more than 117,000 dedicated men and women who serve our Nation's Justice Department in po-

sitions and in offices all around the world, I want to thank you for your support of the Department's critical work.

Now, as I have said often, no aspect of our work is more important or more urgent than protecting the safety of the American people and strengthening our national security. As Attorney General, this is my paramount obligation. And at every level of the Justice Department, this is our primary focus.

In recent years, we have confronted some of the most significant terrorist threats to the homeland since the September 11 attacks, and the Justice Department has played a vital role in combating these threats.

Just yesterday, outside of Spokane, Washington, we arrested a United States citizen on charges of attempted use of a weapon of mass destruction. We allege that in January, this individual placed a bomb along the route of a Martin Luther King Jr. Day unity march.

Now, had it been successful, this alleged bomb plot could have been extremely deadly. But thanks to the help of alert citizens and the outstanding work of FBI agents and their Federal, State, and local law enforcement partners, it was foiled. And this morning, that individual is in custody.

On Tuesday of this week, United States citizen Jamie Paulin-Ramirez pleaded guilty in Federal court in Philadelphia to conspiracy to provide material support to terrorists and admitted to traveling overseas with the intention of participating in violent jihad.

And 2 weeks ago, Zachary Chesser, a resident of northern Virginia and, again, a United States citizen, was sentenced to 25 years in prison for attempting to provide material support to the terrorist organization Al-Shabaab, communicating threats against Americans and encouraging violent jihadists to impede and to obstruct law enforcement activities.

Now despite the many forms of national security threats that we have faced, I am proud to report that over the last 2 years, the Justice Department has charged more defendants in Federal court with the most serious terror-related offenses than at any other time since 9/11.

Now beyond our essential national security work, the Department has made extraordinary progress in fulfilling the pledge that I made before this subcommittee nearly 2 years ago: that under my leadership, every decision made and every policy implemented would be based on the facts, the law, and the best interests of the American people, regardless of political pressures or consequences.

Now I am proud of the work that has been done to honor this promise and to advance the Department's other critical priorities. In the last 2 years, we have taken meaningful steps to safeguard civil rights and to utilize the new tools and authorities that the Congress provided to combat hate crimes.

We have worked to protect our environment and to respond to the largest oil spill in United States history by seeking justice for victims and working to make certain that American taxpayers don't foot the bill for restoring the gulf coast region.

We have launched historic efforts to expand access to legal services, to strengthen our corrections system, and to combat child ex-

ploitation, human trafficking, prescription drug abuse, and gun, gang, and drug-fueled violence.

The Department has collaborated with governments worldwide not only to combat international crime networks, but also to identify and to disrupt drug cartel operations, intellectual property thefts, and a broad range of cyber crimes.

We have strengthened relationships with colleagues across Federal, State, local, and tribal governments as well. And we have focused in particular on finding innovative, effective ways to protect the safety of our law enforcement partners.

From our bulletproof vest initiative to cutting-edge training programs and information-sharing platforms, we will continue to do everything we can to ensure officer safety and to reduce the rising tide of gun violence against law enforcement that has devastated too many families and communities in recent months.

I also want to note that we have brought our Nation's fight against financial and healthcare fraud to a new level. In fact, in the last year, the Department has announced the largest financial and healthcare fraud takedowns on record. And in fiscal year 2010, the Department's Civil Division secured the highest level of healthcare fraud recoveries in history, \$2.5 billion, as well as the second-largest annual recovery of civil fraud claims.

Our Criminal Division has seen similar success in fiscal year 2010. The Criminal Division participated in efforts, including joint enforcement actions with our U.S. Attorneys' offices throughout the country, that secured more than \$3 billion in judgments and in settlements.

Now, in addition to our work to secure these recoveries, we have made strategic investments and taken unprecedented actions to serve as sound stewards of precious taxpayer dollars.

The President's fiscal year 2012 budget for the Department of Justice reflects our ongoing commitment to identifying savings and efficiencies. It also reflects a willingness to make difficult, but necessary choices, such as program reductions, in order to focus resources on our highest-priority programs and to respond to current fiscal realities.

Although the current cost of operations and staffing is considerably higher than it was last year, the fiscal year 2012 budget request represents an increase of less than 2 percent more than the fiscal year 2011 continuing resolution. Without question, the continuing resolution has presented significant budget challenges for the Department and resulted in financial restrictions, including a temporary hiring freeze and the curtailing of nonessential spending.

I have had to make some tough choices, and I have asked my colleagues to do more with less. They have risen to the occasion, and they are working harder and more collaboratively than ever before.

#### PREPARED STATEMENT

It is on their behalf and on behalf of the American people that we are privileged to serve that I submit to you the Department's fiscal year 2012 budget request.

Thank you.

[The statement follows:]

## PREPARED STATEMENT OF ERIC H. HOLDER, JR.

Good morning Chairwoman Mikulski, Ranking Member Hutchison, and members of the subcommittee. Thank you for this opportunity to meet with you today to discuss the President's fiscal year 2012 budget request for the Department of Justice (DOJ) and to provide an update on the Department's progress, key priorities, and future plans. I appreciate your recognition of the Department's critical mission, and I thank you, in particular, for your support of the fiscal year 2010 Supplemental Emergency Border Security Act and the fiscal year 2010 Supplemental Disaster Relief and Summer Jobs Act. These measures provided essential resources for our law enforcement and litigation operations. I look forward to your continued partnership and support.

When I appeared before this subcommittee last May, I testified that the Department had made historic progress in meeting its strategic goals under this administration:

- to protect our national security;
- to reinvigorate the Department's traditional missions and to restore integrity; and
- have transparency at every level of the Department's work.

I also pledged that, under my leadership, all decisions and policies would be based on the facts, the law and the best interests of the American people, regardless of political pressures or political consequences.

Almost 1 year later, I am pleased to report that—even at a time of financial challenge—we continue to make progress in meeting these ambitious goals. We remain dedicated to protecting the American people through the use of every lawful instrument to ensure that terrorists are brought to justice, held accountable for their actions, and can no longer threaten American lives. Over the past year, we also continued to defend the safety and best interests of both consumers and the United States. We sought to ensure the strength and integrity of our most essential healthcare programs through enforcement actions that helped control healthcare costs and reduce fraud. We worked to safeguard the public against threats foreign and domestic. We collaborated with local law enforcement to investigate January's tragic shootings in Tucson, Arizona, and we continue to utilize every resource necessary to deliver justice for those killed and injured. We also led Federal efforts to prevent and control crime by taking aggressive steps to combat the serious proliferation of violence along the Southwest Border and to combat the nationwide epidemics of gang- and drug-fueled violence, human trafficking, hate crimes, and child exploitation.

Today, I affirm these commitments—and pledge also to act as a sound steward of taxpayer funds. The Department will continue to explore ways to assess the effectiveness of our investigations and prosecutions; to reduce duplication of efforts and realign investigative resources; and to promote effective, fiscally sound alternatives to incarceration consistent with public safety. I will continue to make targeted investments that render communities safer for all Americans and to work with our many partners to strengthen critical State, local- and, tribal-assistance initiatives.

As you are aware, the fiscal year 2011 continuing resolution presents significant budget challenges for the Department, as the current cost of operations and staffing is considerably higher than it was last year. Given the size of our Department—and the scope of its many responsibilities—I have announced financial restrictions that are difficult but, under these circumstances, necessary. One of the measures that I recently announced was a temporary freeze on hiring. I have also directed components to immediately curtail nonpersonnel spending unless it is necessary for essential operations. These actions—and others—are designed to increase overall efficiency and to keep the Department solvent and operating effectively. We take these steps now in order to avoid more severe measures in the future, such as staff furloughs.

But even with these directives in place, it is critical to our national security—and to our law enforcement work—that the Department obtains adequate funding in fiscal year 2011 and that this subcommittee, and the 112th Congress, approves the President's fiscal year 2012 budget request.

The President's fiscal year 2012 budget request for the DOJ totals \$28.2 billion, which represents a 1.7 percent increase in gross discretionary budget authority compared to the fiscal year 2011 continuing resolution level. This budget reflects our key priorities of strengthening national security, preserving the Department's traditional missions, maintaining safe prison and detention facilities, assisting our State, local and tribal law enforcement partners, and identifying savings and efficiencies that promote fiscal responsibility. In addition to addressing my key priorities, the budget enhances the Department's ability to focus on recovering assets obtained

through financial fraud, drug trafficking, and other criminal activity. In fiscal year 2010, the Department's Asset Forfeiture program obtained more than \$1.6 billion in forfeited assets and distributed more than \$674 million to victims of financial crimes and our State and local law enforcement partners. The Department also collected and disbursed more than \$4.7 billion related to civil debt collection in fiscal year 2010. Of this amount, \$3.7 billion was returned to Federal agencies; \$494.5 million was returned to the Treasury; \$391.2 million was paid to non-Federal recipients; and \$101.8 million was retained for debt collection efforts within the Department. This budget continues our emphasis on fiscal accountability and oversight.

#### STRENGTHEN NATIONAL SECURITY

Preventing, disrupting, and defeating terrorist acts before they occur remain the Department's highest priority. National security threats are constantly evolving, requiring additional resources to address new critical areas. The increase in global access to technological advancements has only compounded this problem, resulting in new vulnerabilities that must be addressed.

The President's budget request demonstrates this administration's steadfast dedication to protecting our national security and a commitment to using every instrument within our power to fight terrorism and keep America safe. The Department plays a critical role in the Government's national security and intelligence efforts, and it is essential that the Department's budget maintain the capabilities we have developed even in these difficult fiscal times. Moreover, the budget requests \$128.6 million in program increases and 170 additional positions to strengthen national security and counter the threat of terrorism. The requested increases would provide the essential technological and human capital to detect, disrupt, and deter threats to our national security.

More specifically, the administration supports critical national security programs within the Department, including \$122.5 million in program increases for the Federal Bureau of Investigation (FBI) and \$729,000 in program increases for the National Security Division. This figure includes resources that will enable the FBI to enhance national security related surveillance capabilities and enhance its Data Integration and Visualization System; expand the Operational Enablers program and Weapons of Mass Destruction/Render Safe capabilities to strengthen our ability to diffuse, disrupt, or destroy weapons of mass destruction; and expand the Computer Intrusion initiative to increase our capabilities to detect and counter cyber intrusions.

To address the growing technological gap between law enforcement's electronic surveillance and the number and variety of communications devices available to the public, the request also includes \$17 million in program increases to improve the Department's lawful Electronic Surveillance Capabilities for the FBI, Drug Enforcement Administration, Bureau of Alcohol, Tobacco, Firearms and Explosives, and the U.S. Marshals Service.

#### PRESERVE TRADITIONAL MISSIONS

At the Department, we continue America's greatest tradition of protecting the promise of justice and helping bring justice to those in need. Enforcing the law and ensuring the fair and impartial administration of justice for all requires resources to both investigate and litigate on behalf of the American people. The request provides \$57.4 million in program increases to expand the Department's enforcement litigation capacity and its ability to protect vulnerable populations.

These resources will enable the Department to continue to fulfill its historic role in fighting crime, protecting civil rights, preserving the environment, and ensuring fairness in the marketplace, while responding to new and unprecedented challenges such as the Deepwater Horizon oil spill. And they will support continued robust efforts to crack down on financial fraud, which have already resulted in charges for fraud schemes that have cost victims more than \$8 billion in estimated losses nationwide. The budget also includes funding to continue the implementation of the Hate Crimes Prevention Act of 2009, which helps communities prevent and respond to violent hate crimes committed on the basis of gender, gender identity, sexual orientation, religion, and disability in addition to race, color, and national origin.

To respond to mounting demands, we have also requested \$15 million for the Executive Office of Immigration Review, including funds for 21 new immigration judge teams, additional attorneys for the Board of Immigration Appeals and funds to expand our Legal Orientation program.



## MAINTAIN SAFE PRISON AND DETENTION FACILITIES

It is important for the Department to maintain the appropriate balance of resources within core Departmental functions. Successful investigations lead to arrests, prosecutions, and convictions. They also lead to a greater need for prison and detention capacity. More than 5,000 new Federal inmates and 6,000 detainees are projected to be in custody in 2012, which means adequate funding for prison and detention operations is critical. The budget requests a total of \$8.4 billion to maintain basic prison and detention operations.

The budget request includes \$224 million in prison and detention resources to maintain secure, controlled detention facilities and \$461.4 million for program increases to ensure the growing numbers of offenders are confined in secure facilities. The Department is committed to strengthening current efforts to improve inmate re-entry and recidivism rates, and the proposed budget includes \$22 million for second chance initiatives that would allow for enhanced inmate re-entry programs, specifically vocational training, education, and drug treatment programs.

In addition, the budget addresses the Federal prison population through sentencing reform. Such reform is anticipated to help stabilize the growth of the prison population and ensure fundamental fairness in our sentencing laws, policy, and practice. One outcome of these changes would be to address associated long-term costs.

We are also continuing our efforts to combat sexual abuse in correctional settings. Simply put, sexual abuse is a crime, not a punishment for a crime. Last month, we published a proposed rule pursuant to the Prison Rape Elimination Act (PREA) that contains national standards aimed at combating sexual abuse in adult prisons and jails, juvenile facilities, lockups, and community confinement facilities. In addition to preparing the rule, the Department has been working to ensure that, once promulgated, the national standards are successful. The Department is uniquely positioned to serve as a force multiplier, enabling best practices to gain recognition and enabling correctional systems to benefit from the PREA efforts of other jurisdictions. The Bureau of Justice Assistance has entered into a 3-year cooperative agreement for the development and operation of a Resource Center for the Elimination of Prison Rape. The Resource Center, which was established with fiscal year 2010 funding, will provide additional training and technical assistance to States and localities to assist in the identification and promulgation of best practices and promising practices. The Department's request will supplement our efforts by enabling the Bureau of Justice Statistics to continue its work conducting surveys examining the incidence and consequences of sexual abuse in confinement settings.

## ASSIST STATE, LOCAL, AND TRIBAL LAW ENFORCEMENT PARTNERS

The President's budget also requests a total of \$3 billion for State, local, and tribal law enforcement assistance. These funds will allow the Department to continue support to State, local, and tribal law enforcement agencies that fight violent crime, combat violence against women, and support victim programs.

The Department recognizes that many tribal law enforcement agencies face unique obstacles to effectively promote and sustain community policing. Unlike municipal police agencies, many tribes still lack basic technology to modernize their departments, such as laptops installed in police vehicles. The budget requests \$424.4 million in total resources for public safety initiatives in Indian country.

In addition, the Department continues to build and maintain key partnerships with State, local, and tribal law enforcement officials as well as community members. These partnerships include Community Oriented Policing Services hiring program, which enables State, local, and tribal police agencies to increase the number of officers available for targeted patrol and other proven strategies designed to prevent and reduce crime. In addition, the Office on Violence Against Women (OVW) supports numerous grant initiatives that provide communities with resources to combat sexual assault and other forms of violence against women. These include the Legal Assistance for Victims program, Sexual Assault Services program, and the new OVW Consolidated Youth Oriented Grants program.

The budget request includes resources for new programs for the Office of Justice programs, including the Race-to-the-Top style Juvenile Justice System Incentive Grant program and the Byrne Criminal Justice Innovation program. And it includes funding to continue implementation of the Adam Walsh Act of 2006 to protect children from exploitation; assist children exposed to violence; and implement a smart policing initiative. These programs—and our relationships with State, local, and tribal law enforcement agencies—will maximize the Federal Government's ability to fight crime and to promote justice throughout the United States.

In that spirit, although violent crime has decreased nationwide, the Department remains committed to tackling a disturbing countertrend: the number of law enforcement officers killed in the line of duty has surged. Last year, 162 law enforcement officers were lost—61 of them were killed by gun-violence—an increase of nearly 40 percent from the previous year, and the highest level of gun-related officer deaths in nearly two decades. So far in 2011, the number of officers killed by gunfire is 60 percent higher than last year's level at this time.

To combat this unacceptable trend, the Department hopes to be able to continue our critical investments to expand our bulletproof vest initiative and our cutting-edge officer safety training programs and information-sharing platforms. This much we owe to those who put themselves in harm's way, day after day, to protect their fellow citizens.

#### SAVINGS AND EFFICIENCIES

The President's fiscal year 2012 budget request represents a fiscally responsible approach to funding the Department's critical missions. The budget proposal also places a premium on achieving savings and efficiencies. It includes broad savings to be gained from improved IT project management, smarter travel policies, better space utilization, and other cost-saving measures. We have also made hard choices in program reductions in order to focus our resources on our highest-priority programs. These are just a few of numerous proposed efforts to respond to the fiscal realities that we face today—and to act as sound stewards of taxpayer dollars.

As we move forward with the tough choices necessary to reduce our national deficit and put the country on a sustainable fiscal path, we must never compromise our core mission—to protect the American people—and to ensure justice for all.

#### CONCLUSION

Chairwoman Mikulski, Ranking Member Hutchison, and members of the subcommittee, thank you again for this opportunity to discuss the Department's priorities and detail new investments sought for fiscal year 2012.

Today, I have highlighted critical areas that require attention and resources so that the Department can continue to enforce the Nation's laws and protect our national security. I hope that you will support the Department in the execution of these worthy efforts. In this age of limited budgets and growing demands, the Department's leadership has already made many tough choices in preparing this budget, significantly reducing funds requested in certain areas in order to focus our resources on national security and core law enforcement and litigation responsibilities. I urge you to support these priorities.

In this time of unprecedented challenges, new threats, and ongoing war, such support will remain critical in enabling the DOJ to meet its goals and obligations. As we move forward, I look forward to working with you and your colleagues.

I am now happy to answer any questions you may have.  
Thank you.

Senator MIKULSKI. Thank you very much, Mr. Attorney General.

We are going to follow pretty closely the 5-minute rule and go in the order of arrival.

I am going to use my first 5 minutes and then, if you are still able to stay, focus also on 2012. But I am very deeply concerned about the consequences of the continuing resolution on the safety and functioning of the United States of America.

We know that Homeland Security and the Department of Defense are off the table. But I would like to know, what are the consequences of the continuing resolution to you—not to you, but to the Department of Justice?

We have already cut—or at least the Senate was willing—many in the Senate were willing to cut up to \$50 billion. Now we are going to be asked to cut another—go another 2 weeks and cut another \$4 billion, and then maybe another 2 weeks and another \$4 billion while we keep doing this.

As the CEO of DOJ, what could you tell us about the consequences on the functionality of DOJ? And also, I know that you are going to pay the FBI and make sure they are on the job. But

I would presume you have to recycle, reprogram, and move money around.

Could you tell us what this means in terms of the safety and security of the people who work for us, and then also the consequence to local communities? And what does this also mean to morale? I am not hearing good things in Maryland about morale and this continuing resolution.

EFFECTS OF FISCAL YEAR 2011 CONTINUING RESOLUTION—MORALE

Attorney General HOLDER. Yes. I will go in reverse order. But I would start with morale, and that is not an insignificant concern. And I think you are right, that the uncertainty that this process has entailed has had a negative impact on morale throughout the Department.

As I have visited, up to now, about 38 U.S. Attorneys' offices, as I talk to the people who are in the components here in Washington, DC, the lack of certainty with regard to the amounts of money that we are going to have, the ability to do the programs that we want to do, the question of whether or not they are going to continue to have their jobs, be furloughed, pay cuts, all of these things have had a negative impact on morale.

People are fighting through those morale concerns and still doing a good job. But it is, nevertheless, a concern that I have.

If we look at the funding levels under the current continuing resolution, I know that certain accounts, such as prisons, detention, some of our legal divisions, will ultimately be deficient without further funding. And I am greatly concerned about that. This has a negative impact on our ability to do the job that the American people expect from the Department of Justice.

If you look at the possibilities that exist here, I am very concerned that, too often, our funding is considered discretionary. Well, there is nothing discretionary about protecting the national security, protecting the lives of the American people, making sure that we adhere to the rule of law.

EFFECTS OF FISCAL YEAR 2011 CONTINUING RESOLUTION—FURLOUGHES

Senator MIKULSKI. Would you anticipate furloughs?

Attorney General HOLDER. I don't think so. I think that with the hiring freeze that we have in place, we are going to be okay. But I have to say that if we continue with these 2-week cycles or 3-, 4-week cycles, we are ultimately going to reach a position where we are going to have to consider that.

That is not something that people in the Department of Justice are going to want to hear, and it is something that I would certainly like to avoid. But I am very concerned that unless we have additional funding, that might be something that we will have to consider.

EFFECTS OF FISCAL YEAR 2011 CONTINUING RESOLUTION—PRISON FUNDING

Senator MIKULSKI. And these cuts, is it possible that you will run out of money in certain key areas at certain times in the year?

Attorney General HOLDER. Yes. If you look at the level of funding that we are getting with regard to the prisons, we are taking in prisoners all the time. We have about 200,000 now. We expect to take in about another 11,000 this year.

We need additional funds beyond that which we have in order to do the work of keeping prisoners and keeping them off the streets. We will potentially run out of money in that regard.

Senator MIKULSKI. What would that also mean in terms of your ability to—for example, in terms of the way we reimburse on detention? Does that mean we could no longer provide funds to State and local governments to hold prisoners that we have asked them to hold, and that would fall on local people?

Attorney General HOLDER. We have made tough decisions in the budget, cognizant of the fact that we are not going to have as much money as we would like, and we have had to cut the SCAAP program. As this budgetary process goes through and we look for cuts that we have to make, I think that is one of the things that would have to be on the table.

It is not something I would want to do, but as I am trying to restrict my focus on what I consider core functions of the Department of Justice, that is something that I think would potentially be at risk.

#### EFFECTS OF FISCAL YEAR 2011 CONTINUING RESOLUTION—FUNDING

Senator MIKULSKI. So this is pretty serious. And am I correct, from our conversation before the hearing, that a cut at this stage of the year has almost a—it has a different consequence than if you could spread it out over the year? How would you see that?

Because, first of all, know that I don't want to cut more. I believe in a more frugal Government. I believe we will have to look to other sources, like oil and gas subsidies, the \$30 billion farm subsidy, et cetera—that we can't do all this on discretionary spending.

I worry about if this subcommittee has to take more, we would have to go to the Justice Department, the space program, important economic development initiatives in the Department of Commerce. Can you take more?

Attorney General HOLDER. I don't think that we can. I think that we, in the very, very short term, can come up with creative ways in which we can deal with this. That is why I have instituted this hiring freeze, stopped all kinds of what we call "nonessential" spending, but we are pretty close to the bone. And—

Senator MIKULSKI. So you have already taken those steps at where we are now?

Attorney General HOLDER. Yes, those steps have been in place.

Senator MIKULSKI. I am going to stick to the 5-minute rule. I am going to stop and want to pursue 2012.

Senator HUTCHISON.

#### PROJECT GUNRUNNER

Senator HUTCHISON. Yes, thank you, Madam Chairman. I will try to—I will stick to the 5-minute rule.

Let me ask you about the ATF issue that I mentioned in my opening statement, that there are reports that there was actually knowledge by ATF of the sales that were going on of the arms out

of America, illegally out of America into Mexico, purportedly, I think, to be able to trace them, but after the shooting of the agent in Mexico, traced to those arms and also the shooting of the agent in Arizona.

What is your view now on that particular program? And I know that you have asked for an Inspector General study of it, but tell me if you think that program should be continued. Is it the correct use of the Project Gunrunner subprogram, I guess? Because, of course, it is a great concern.

Attorney General HOLDER. First, I would say that the mission of the ATF and the mission to which they are dedicated is to stop the flow of guns into Mexico and to people who shouldn't have guns here in the United States. And that is the focus of the ATF, that it is why the ATF agents serve bravely in Mexico and in this country, and, I think, do a great job.

It is true that there have been concerns expressed by ATF agents about the way in which this operation was conducted. And on that, I took those allegations, those concerns very seriously and asked the Inspector General to try to get to the bottom of it. An investigation—an inquiry is now underway.

I have also made clear to people in the Department that letting guns walk is not something that is acceptable. Guns are different than drug cases or cases where we are trying to follow where money goes.

We cannot have a situation where guns are allowed to walk, and I have made that clear to the United States Attorneys, as well as the agents in charge in the various ATF offices.

Senator HUTCHISON. Thank you.

#### GUANTÁNAMO BAY TRIALS

On Guantánamo Bay trials, in the President's budget, there is a \$72.8 million request for the Department's anticipated increases in security and prosecutorial costs associated with high-security trials. And it is a variety of things that you would need if you are going to bring known and reputed terrorists to trial in the United States.

Mr. Attorney General, do you think that is the right priority for the expenditure of your very scarce and important dollars for FBI, ATF, the many areas of law enforcement that you are responsible for? Do you really—I mean, I will say, is it still going to be the policy that you will continue to pursue having trials on American soil, even in spite of the protests that you have heard from Members of Congress?

Attorney General HOLDER. First, in this fight, we have to use all the tools that we have. The use of Article III courts and our Federal courts has proven to be extremely effective over the years. Hundreds of people have been convicted of terrorist offenses in these cases.

We have shown that the Bureau of Prisons is capable of handling them, holding onto them. There is not one report—one report—of anybody ever escaping from a maximum-level Federal penitentiary who has been convicted of a terrorist offense. I think we can handle these cases. We have done so in the past.

There is, with regard to the budget that we have submitted in 2012, no trial money with regard to these Guantánamo detainees.

I think that the restrictions that the Congress has placed on our use of funds in that regard, as I indicated in a letter that I sent to Majority Leader Reid, as well as to Speaker Boehner, are unwise.

The President indicated in his signing statement when he signed the Defense authorization bill that he thought this was not a wise thing to do as well. And we both indicated that we will try to unravel or unwork the restrictions that have been placed on us because I think it hampers us and our ability to handle the terrorism problem by taking a tool away from us that has proven to be very useful in the past.

Senator HUTCHISON. Well, my time is up, and I will adhere to the 5-minute rule.

Thank you, Madam Chairman.

Senator MIKULSKI. Senator Nelson.

Senator NELSON. Thank you, Madam Chairman.

Attorney General Holder, it is good to have you here. First of all, I want to thank you and all those who work within your agencies for the fine work on behalf of the security and justice for all Americans, and we appreciate those efforts so much.

#### FISCAL YEAR 2012 BUDGET CUTS

This is the time to have a candid conversation, of course, about budgets and the expenditure of taxpayers' dollars, and it is not something new for me. As Governor, I had to make the tough decisions about tough times when revenues didn't necessarily match the need for the outflow of expenditures to take care of the needs of the people.

So I am hoping that we can work cooperatively in this effort, and I know we can. Cuts are coming, and what I would like to know is as you look at your budget, it requests a 1.7 percent increase in new budget authority. And the increase in parts of your budget, outside of State and local grants, which, I think, have been reduced by 16 percent, the budget actually, outside of those cuts, goes up 4.4 percent.

I am hopeful that you will be able to take a look at that budget in light of where we are today, recognizing that we have to do more with less. And I know that is easy to say and hard to do, but it is essential that you could take a look to see where you could begin to trend down the expenditures in the 2012 budget.

I understand the challenge you have with the continuing resolution—continuing resolutions, I guess; we just keep doing it—for 2011. I understand that challenge. But in 2012, we are looking at a 12-month period, not cutting in the middle of programs, but at the beginning.

If you would, tell me where you could look to cut 1, 2, or 3 percent, or some area of reduction. We are expecting that from the Department of Defense. I am on the Armed Services Committee. And so, if you would, give me your thoughts.

Attorney General HOLDER. We are mindful of the financial situation that our Nation confronts, and we have submitted a budget for 2012 that I think walks that fine line between understanding the financial situation that we are in and making sure that we are still

capable of doing what the American people expect of the Department of Justice.

As I look at the places that we have made cuts—everything from dealing with ballistics tracing, radios, and technology—we have made very substantial cuts. We have looked at what we call DOJ-wide cross-cutting efficiencies and cut about \$57 million there.

We have looked at a whole variety of things that, frankly, have been really difficult to identify and difficult to implement. I have pushed people to make sure that we are not doing things for financial purposes that will have a negative impact on our ability to do our jobs, and we have come up, as I said, with a variety of things that are reflected in the budget that I think take into account those dual responsibilities: The financial situation and our obligation to keep the American people safe.

Senator NELSON. To distinguish myself from those who have been running around with percentages looking for plans for cuts, the reason that I am focused on this is Admiral Mullen, Chairman of the Joint Chiefs, when asked the question, “What is the biggest threat to America?” It wasn’t Iran. It wasn’t North Korea. It wasn’t even the border. Although those are important challenges that we face, it was the national debt.

So if that is the biggest threat to our country, then we must, in fact, find ways to trend down spending, increase prosperity to both cut and grow our way out of the situation we are in, and that means that everybody has to do more with less. We can’t do—we can’t ignore that reality. And so, that is why I hope we can work cooperatively to try to find a way to make those reductions.

It is a categorical imperative that we are facing right now, based on the threat that debt and the growing deficit is to our future. Not just our future, but to future generations as well.

Attorney General HOLDER. No, I agree with you, Senator. We have to find a way in which we deal with that debt problem that is, in fact, a threat to the welfare of our Nation, while at the same time coming up with ways in which we do the things that are expected of the Department.

You know, we are not the biggest agency. We have a proposed budget of about \$28 billion. But the responsibilities that we have are fairly enormous with regard to everything from protecting the American people from outside threats to dealing with the crime situation that we find within the United States.

And we have tried in this budget to allow us the ability, the tools so that we can make sure that we keep the American people safe, that we promote civil rights, that we protect the environment, all of the things that are our responsibility, while being mindful, as you correctly say, of the crisis that we face on the budget side.

Senator NELSON. Well, I appreciate it, and I know that we can work together. And I look forward to that as we move forward with this new budget. Obviously, the continuing resolution saga is going to plague us, but we are going to have to find ways to make that work as well and find some spirit of consensus to get it moving forward so we are not doing it every 2 weeks.

Thank you very much.

Thank you Madam Chairman.

Senator MIKULSKI. Thank you, Senator Nelson.

I am going to turn to Senator Murkowski and then Senator Pryor.

Before you go, I found what you said about Admiral Mullen very interesting. When did he say that?

Senator NELSON. Within the last 6 months.

I will get you the quote.

Senator MIKULSKI. Well, I would like to hear the quote because then if he feels that—did he also say that he was willing to give at the office and that Department of Defense should—

Senator NELSON. Oh, absolutely.

Senator MIKULSKI [continuing]. Now be on the table?  
[The information follows:]

Admiral MULLEN. "I think the biggest threat we have to our national security is our debt."

Senator NELSON. What I can say is that Secretary Gates has begun the process out there of trying to cut back and look for duplication and reduce the growth in their budget as well. So they are on board. They are on board.

Senator MIKULSKI. And that is why we need to go not for the 2 weeks, but we need to put all things on the table and come to a rational, orderly way to do this, because it is not good for anyone with boots on the ground.

Senator NELSON. Absolutely.

Senator MIKULSKI. Senator Murkowski.

Senator MURKOWSKI. Thank you, Madam Chairman.

And Attorney General Holder, welcome.

Attorney General HOLDER. Good morning.

Senator MURKOWSKI. Thank you for your leadership. Good morning.

#### BILL ALLEN ALASKA CASE

I am going to change the subject a little bit here. I would like to bring up with you the issue of Mr. Bill Allen, a name that I am sure you are familiar with from Alaska.

For the benefit of my colleagues, Mr. Allen pled guilty in 2007 to multiple Federal offenses, including bribery and extortion. He subsequently became a key witness for the Justice Department in the trials of the late Senator Ted Stevens and several Alaskan legislators. Mr. Allen is presently serving time at the Federal Corrections Institute in California.

Back in 2008, the Anchorage Police Department received information that Allen had paid a young Alaska Native woman for sex. She was 15 years old at the time. The young woman then later moved to Seattle, and he sought to continue that relationship. We learned—the law enforcement folks learned that Allen had transported this young woman between Seattle and Anchorage with the intent to engage in prostitution on multiple occasions.

The Anchorage Police Department brought in the FBI. The case was presented to the Child Exploitation and Obscenity section for prosecution. We understand that there were multiple trips with the trial attorney from Washington, DC, to Alaska to work with our law enforcement. We later learned that the trial attorney, as well as the section chief, had recommended that the case be presented



to the grand jury, and yet Mr. Allen has never been charged with these crimes.

It was reported that the charges were never presented to the grand jury, and it appears that the Justice Department simply declined prosecution.

I wrote you expressing my concerns back in August, and I received a reply from your Assistant Attorney General, Mr. Welch, back in October. I think you knew that I was not satisfied with Mr. Welch's response to my concern, and Alaskans were certainly not satisfied with the response.

I have indicated to Alaskans that I would follow up directly with you. So, at this time, I would ask you, Mr. Attorney General, if you can explain, as specifically as you can, why the Justice Department did not pursue an indictment against Mr. Allen on these charges. And if you could, specifically address the proposition that the Justice Department did not prosecute him on the sex abuse charge on account of his cooperation in other cases.

Attorney General HOLDER. With regard to the exploitation matter, I would say that the Department certainly has a very good record of vigorously investigating and trying these kinds of matters. I was just looking at the numbers here. We have about 4,000 of these offenders who, within the last 3 years, we have investigated.

Our caseload in that regard is up more than 1,000 percent since fiscal year 2001. So we are vigorous in our prosecution of those cases.

In making the determination as to what happens in any particular case, we are guided by the principles of Federal prosecution, and we take into consideration a number of factors, among them being the age of the case, the reliability of the witnesses, the ability to say that we have a better than 50 percent chance of winning a case.

Decisions to decline prosecutions or not go forward with cases are made strictly on that basis, not with regard to political persuasion or the role somebody has played. If a case could be made, a case would be brought. The basis for the declination would be rooted only in that which is governed or set out in the principles of Federal prosecution.

Senator MURKOWSKI. Given the circumstances of this particular matter and, again, this proposition that the failure to prosecute was based on cooperation, and that has been repeated and repeated, do you think I would be out of line if I were to ask the Office of the Inspector General and the Office of Professional Responsibility to examine the Department's handling in the Bill Allen case?

Attorney General HOLDER. Well, that certainly would be within your discretion to do that. I don't think that is necessarily warranted on the basis of the decision here. I am confident that the decision was made, or all of these decisions were made, on the basis of the appropriate guidelines.

We can certainly say that with regard to the case that I have not shown an unwillingness to do things that might have been a little controversial, maybe even unpopular, with regard to matters in Alaska, you know, the Stevens dismissal.

Senator MURKOWSKI. And I appreciate that.

Attorney General HOLDER. And the decision here, as I said, I am confident follows the rules that always apply.

Senator MURKOWSKI. Well, Mr. Attorney General, I appreciate your comments, and I certainly appreciate your actions with the Ted Stevens matter. This is something that has so troubled Alaskans to the core, that you have an extremely high-profile political figure, extraordinarily wealthy, truly abusing in a very terrible way a 15-year-old girl over a period of years. The assumption is just that, you know, the wealthy politician or the wealthy guy with the political connections is able to get away with a level of criminality that simply would not be accepted elsewhere.

I will tell you that we are not done attempting to resolve this issue, and I will be asking for your support as we try to pursue this.

Attorney General HOLDER. Okay. I just want to assure you, Senator Murkowski, I have great respect for you—we have always had, I think, good interactions—and the people of Alaska, that you might not agree with the decisions that have been made in connection with cases that have come before the Department of Justice, but the decisions had nothing to do with political connections, whether somebody has cooperated in a case, or anything like that.

The decisions were made only on the basis of the facts, the law, and the principles that we have to apply. And nothing beyond that entered into any decisions that we have made.

But I understand the concerns that you have expressed and that people in Alaska have. I can't get into much detail with regard to why particular decisions are made in particular cases, but I really do want to assure you and the people of your State that the extraneous things that you mentioned did not factor into that decision-making.

Senator MURKOWSKI. Well, we will keep working with you on this.

Thank you, Madam Chairman.

Senator MIKULSKI. Senator Pryor, thank you for your patience.

Senator PRYOR. Thank you, Madam Chair.

General Holder, it is always good to see you, and thank you for being here today.

#### DEFENSE OF MARRIAGE ACT (DOMA)

I want to start with a question about your responsibilities as Attorney General. And I know you have a lot of responsibilities. You have to balance a lot of things. I had a little taste of that when I was my State's Attorney General a few years ago.

But one of the things we were very committed to in my office was always trying to follow the law. And with that said, I am curious about your decision recently with regard to the DOMA. My view would be that even if you have concerns about the constitutionality, et cetera, the Congress has passed it. It is the law until the court—in this case, maybe the U.S. Supreme Court—tells you it is not.

I am curious about your legal rationale. And again, I don't really want to get into the details of DOMA, the policy. I happen to support it, but I am not even really talking about DOMA itself. I am talking about the process that you all went through to come to a

decision to basically stop defending one of the laws that we have on the books.

Attorney General HOLDER. Sure. As a general principle, this Department of Justice takes seriously its responsibility to defend acts of the Congress where reasonable arguments can be made with regard to their constitutionality, and we have done that. There come rare circumstances where a decision is made within the Department when that cannot be done, and that was the case with regard to DOMA.

We were faced with a situation that was, in some ways, different. We had defended DOMA in those circuits where the rational basis standard was the standard. We were faced in the Second Circuit with a circuit where no determination had been made as to what was the appropriate standard to judge the constitutionality of the statute.

We looked at the facts. Given the history of discrimination that gays and lesbians have experienced in this country, it was our belief the President accepted the recommendation that I made to him—that a heightened level of scrutiny was appropriate.

Under that heightened level of scrutiny, the determination that we made was that the statute was unconstitutional. And as a result, we made the determination that we would not defend the constitutionality of the statute. But we will continue to enforce the statute until it is either repealed by the Congress, or the Supreme Court makes the determination that it is, in fact, unconstitutional.

Senator PRYOR. You mentioned that this is a rare decision by the Justice Department. What are the other recent instances where your administration or previous Justice Departments have made a decision to not defend a Federal statute?

Attorney General HOLDER. Yes, I have in front of me a 4-page document that has 10 to 15 cases in which that has occurred. I know that Chief Justice Roberts, when he was the acting Solicitor General in the Metro Media case, made a determination not to defend the constitutionality of a statute.

There are other instances that I would be more than glad to share with you and provide you with this document. It is, as I said, something that is rare. It has happened during the course of this administration probably about eight or nine times or so, more often than not for technical reasons that we decide not to defend a statute.

What we did with regard to DOMA was extremely unique and not indicative of any desire or lack of desire on the part of the Department to do what it traditionally has done, which is defend the constitutionality of statutes.

Senator PRYOR. I would like to look at those because I have the concern about future Presidents that may disagree with some act of the Congress and just decide, “Hey, you know, we are not comfortable with this, and so we are not going to defend it.” And I think that part of the checks and balances is that the Justice Department and the administration should defend the laws that the Congress puts on the books, regardless of what their personal views may be on those.

## BUREAU OF PRISONS CONSTRUCTION FUNDING

Let me go to my next question, if you will. I noticed that in one of the accounts that you have for building of prisons, for the Bureau of Prisons, my understanding is that there is some money to build prisons. But I am concerned that there may not be enough there to build the adequate bed space that you need. Do you have any comments on that?

Attorney General HOLDER. Yes. That is something I am very concerned about. We have really gotten as low as we possibly can get. We have the need for additional bed space. It is a question of safety not only for the prisoners, but for also the guards who work in these facilities.

With overcrowding comes insecure conditions, and we want to build new prisons to the extent that we can. We want to acquire the Thompson facility, for instance, in Illinois, that would be used to house high-security prisoners, where we have a particular problem.

We want to expand the facility that we have in Arkansas. We think we have had a good experience there, and there is a high-security facility that we would like to put there. But we would need the support of the Congress not only this year, but in subsequent years so that we can, in fact, construct these facilities, which I think are very much needed. Because the reality is that as we are successful in doing our jobs, there are increasing numbers of prisoners who come into the system.

Senator PRYOR. Right. Yes, I think the Federal prison system is fairly overcrowded at this point. So we need more bed space.

Madam Chair, thank you. Thank you.

Senator MIKULSKI. Senator Lautenberg.

Senator LAUTENBERG. Thank you, Madam Chairman.

Mr. Holder, good to see you. We both spent time at Columbia University. I don't remember seeing you around the campus, but—

Attorney General HOLDER. I was there.

Senator LAUTENBERG. Yes. Maybe it was before I was there.

You didn't have President Eisenhower give you your diploma, did you? I did.

Attorney General HOLDER. No, I did not. I did not.

## EFFECT OF CUTS TO THE COPS PROGRAM

Senator LAUTENBERG. You have had a lot of experience in all kinds of criminal prosecutions and white collar prosecutions. And I know how arduous you are, how you want to catch them. But you know, the one thing we know is, that you can't try criminals or offenders if you don't first arrest them. And you can't arrest them if we don't have the police on the streets and in the communities.

And we see the cuts in the COPS program. It is such a good program, and they wanted to decimate it, the Republican side. And there was an amendment offered to restore some of the funding.

But I want to tell you, I am pleased that the President's budget included a substantial increase in funding for the COPS program. But then the House Republicans stepped in and eliminated the program altogether.

In the city of Camden, New Jersey, poor city, cops can't even answer burglary calls. They have to put them on a list. They can't answer car thefts. They don't have enough manpower. Laying off more than 100 policemen, city of Newark, I mean, we have to do the things in those cities that can make them safer than they presently are.

Now what is the effect of a combination of layoffs and eliminations that the COPS program has on safety in the streets?

Attorney General HOLDER. I think that you are exactly right, Senator. I have great concern about proposed levels of funding with regard to the COPS program.

Our budget asks for \$600 million. That is an increase of \$302 million from that which had previously been put in the COPS program. That is a vital tool for not only the State and local forces that benefit from the money, but also from us in the Federal Government.

We are only as effective as the partnerships that we try to construct with our State and local counterparts. I am greatly concerned by the situation, certainly, in Camden, that has been widely reported. But I am also concerned about the inability of other departments to do all the things that we expect them to do.

And it is beyond that which people traditionally think about our State and local partners. They are our eyes and ears. They are also the people who feed to us information that helps us on the national security front when it comes to terrorist threats. They are frequently the people who first see things that are reported to us on the Federal side.

So I think that if we want to keep the American people safe, we have to fund COPS at the level that we have suggested, and also support the \$3 billion that is in our budget for aid more generally to our State and local counterparts.

Senator LAUTENBERG. Thanks.

I want to get to a couple things, if you can give me a quick answer.

#### HIGH-CAPACITY AMMUNITION MAGAZINES

The Tucson shooter's high-capacity ammunition clip that killed 6 people and wounded 13 others: the clips were banned until 2004 as part of the assault weapons ban. And even former Vice President Dick Cheney, who strongly supports gun availability, has suggested it may be appropriate to reinstate the ban of that kind of thing.

Is it time to once again ban high-capacity ammunition magazines?

Attorney General HOLDER. I think that given what we saw in Tucson and the impact that these kinds of magazines can have, I think we should examine whether or not we want to go back to the ban that we had on them previously. So that is something that I think we should be looking at and working with the Congress in trying to determine if, in fact, the reinstatement of that ban is appropriate.

Senator LAUTENBERG. Do I take it that you are saying yes?

Attorney General HOLDER. I think that we should certainly look at this and make sure that we are doing all that we can to protect the American people.

## GUN SHOW LOOPHOLE

Senator LAUTENBERG. I hope we can. Nearly 12 years ago, the Senate passed my legislation to close the gun show loophole. It went to the House, and it died there.

And at the time, you were a Deputy Attorney General and urged the House to follow the Senate's lead and close this loophole. Recent polls found that 69 percent of NRA gun owners and 89 percent of all Americans support closing the gun show loophole.

I think everybody knows what that loophole is. It permits people to buy guns without identifying themselves. It could be Osama bin Laden. You don't ask the questions about where, do you live, what is your name? Put the money on the table, you get the bullets. Or you get the guns.

Don't you think it is time for the Congress to close the gun show loophole, once and for all?

Attorney General HOLDER. Again, I think we need to look at the existing laws that we have and the situation that we face. I am very concerned, as the chair was saying, in terms of the numbers of law enforcement officers who have been gunned down over the last 2 years. And I think we have to come up with meaningful, effective ways to protect their lives, as well as the American people.

And so, we are looking in the administration now at ways in which we can make sure that we respect the second amendment rights that people have, but come up with effective measures that will protect our law enforcement colleagues and, as I said, the American people. This is a process that is ongoing within the administration.

Senator LAUTENBERG. Well, I would hope we can get it solved, and I would hope that we could get a permanent ATF Director. The post has been open since 2006, and I think we ought to try to take care of that.

Madam Chairman, thank you.

Senator MIKULSKI. You have been a staunch champion on these issues.

Senator LAUTENBERG. Thank you very much.

Senator MIKULSKI. And we have noted the crisis that New Jersey is in.

So, Senator Brown, one of our newest members—

Senator BROWN. Thank you, my first subcommittee hearing.

Senator MIKULSKI. So we want to say hi.

Senator BROWN. Thank you, Madam Chair.

And Mr. Attorney General, thank you. And I would have been here at the beginning, but I presided today. So Mr. Attorney General, thanks for your service, and thank you for what you are doing.

Attorney General HOLDER. Good morning.

## FUGITIVE SAFE SURRENDER (FSS) PROGRAM

Senator BROWN. An announcement came out of USMS earlier this week, late last week that they were terminating the FSS program, which I know you are familiar with. FSS started in Ohio. It is a pioneering program that has made a huge difference in encouraging mostly those who have committed misdemeanors—and it is

10 percent or so felons, that committed felonies—to get them to voluntarily surrender.

They meet in a church for 2 or 3 days. Judges, prosecutors, and police officers are there. Those people with outstanding warrants voluntarily come and turn themselves in and are generally—their warrants and all are generally disposed of. It is a prime example of how law enforcement officials work together with the local community to create a safer environment for everyone.

I understand the importance of prioritizing limited budgets, but FSS is a program with relatively little expense that has made a huge difference. Nationally, some 35,000 individuals have voluntarily surrendered. It makes police officers' jobs a lot safer because they are not arresting someone for a traffic violation and that person panics and injures or kills a police officer.

Seven thousand people in Cleveland alone in 2010 turned themselves in. I was there one of those days. I had been there earlier in the program at another church. It has made such a difference.

I have written to Director Stacia Hylton and asked that you continue to work with us to restore the program. Can we expect—what can we expect?

Attorney General HOLDER. I agree that the program has a clear record of benefit to the courts, to law enforcement, and to the communities in which it has operated. There are thousands of people who have surrendered across the country without violence, without danger to officers.

There are decisions that we have to make with regard to how we can support a program that I think has worked well. I actually think this is more a State and local responsibility. It is best a State and local program versus a Federal responsibility.

On the other hand, I do think that we should try to find ways in which we can support the program. And so, I would like to work with you to see if there are grant-making opportunities, things that we might be able to do that will support a program that has proven to be beneficial.

Senator BROWN. Okay. Thank you.

I understand it is mostly local and State. And I mean, there are judges, prosecutors, all State, county, city officials there. I think the beauty of it, in part, is where after Cleveland began it, it began in Arizona. It was done other places.

And you know, just the imprimatur of the U.S. Justice Department with USMS can encourage local communities to do this with minimal, relatively minimal Federal assistance and involvement and resources and encouraging local governments to do that.

#### PRESCRIPTION DRUG ABUSE PROGRAMS

Let me talk about one other issue or, actually, two other issues, both the pill mills and what has happened around the country. Ohio has seen huge increases and larger than the rest of the country, or larger than many places in the rest of the country, abuse of, particularly, morphine-based drugs—OxyContin, Oxycodone, Percocet, Vicodin, a whole bunch of drugs.

We have, working with the Medicaid director in Ohio, established a lock-in program for high-risk individuals. My understanding is that there are currently—but, you know, we need law enforcement

help in this, obviously, as we are doing in the State, too. There are currently 37 operational tactical diversion squads nationwide, not one of them based in Ohio, the seventh-largest State in the country.

Can we work together with local law enforcement to perhaps create that in Ohio so that we can join much of the rest of the country in that kind of assistance?

Attorney General HOLDER. Sure. I would be glad to work with you about how we have deployed our resources. That is something that we have devoted a great deal of attention to and have come up with ways in which we are fighting a problem that exists in a great many States.

But I would be glad to sit down and talk to you about ways in which we might help you deal with the problem, the issue in Ohio.

#### METH LABS

Senator BROWN. Okay. And last point, Madam Chair.

On meth labs, DOJ nationally has stopped State funding for meth lab cleanups. Is that a permanent decision, or is that something you are looking at again?

Attorney General HOLDER. That was one of those tough ones. As we looked at the budget situation and had to make the decision about what we are going to do with regard to the cleanup of these meth labs when it comes to State and local operations, and it is something that we have cut in our budget request for 2012.

All I can say is that it is just one of those tough decisions that we had to make, given the monies that are available to us. It is not something that I particularly like doing, but it is something that I think we have to do if we are going to try to deal with the financial situation that we find ourselves in.

Senator BROWN. Okay. Thank you, Madam Chair. Thanks.

Senator MIKULSKI. Thank you, Senator Brown, for those excellent questions.

Mr. Attorney General, we will have additional questions that we will submit to the record.

We want to assure you this subcommittee will be working on a bipartisan basis with you. We also want to assure you we hope to go to a quick resolution of this gray area with the continuing resolution.

I think we have to come to closure on this, and I think the 2-week uncertainty and the death by a thousand cuts every 2 weeks is just terrible. And it is terrible in terms of the morale. You cannot, as the chief executive officer, appropriately plan. The FBI doesn't know if it can bring on people along with our Federal law enforcement. So we want to move to resolving this.

We will be turning to you for additional information, and we will welcome a muscular approach by the President to help us with this.

#### ADDITIONAL COMMITTEE QUESTIONS

If there are no further questions this morning, all Senators may submit additional questions for the subcommittee's official record. We request that DOJ 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 BARBARA A. MIKULSKI  
CONSEQUENCES OF FISCAL YEAR 2011 CONTINUING RESOLUTION

*Question.* The House-passed continuing resolution for wrapping up 2011 cuts the Justice Department (DOJ) \$2.6 billion below the President's request and \$833 million below 2010 levels. The Senate alternative cuts DOJ \$2.4 billion below the President's request and \$656 million below 2010 levels. We're in a holding pattern and the House Republicans want us to cut \$4 billion every 2 weeks. Currently, we are under a 3-week continuing resolution that cuts \$470 million below fiscal year 2010 levels in funding that would have helped State and local communities combat violent crime and improve criminal justice.

What would the cuts proposed in the House-passed continuing resolution and the Senate alternative mean for DOJ? What are the consequences? Is there anything else that DOJ can cut?

*Answer.* DOJ was very concerned about funding levels proposed in the House-passed and Senate alternative continuing resolutions for fiscal year 2011. At a minimum, certain accounts, such as prisons, detention, and some of our legal divisions, would have faced possible deficiency. While considered "discretionary" in appropriations parlance, much of DOJ's work is not discretionary and is impacted by factors outside our control. There is nothing discretionary about protecting the American public against terrorism and criminal threats, defending civil rights and liberties, and upholding the rule of law.

DOJ's fiscal year 2011 enacted budget (Public Law 112-10) is \$26.9 billion, which is \$806.2 million less than the fiscal year 2010 enacted budget. Under these levels, DOJ will sustain its core national security and law enforcement functions, but must reduce critical funding to State and local grants, juvenile justice programs, litigating components, and technology programs.

Some programs, such as the Integrated Wireless Network, DOJ's strategic initiative for upgrading DOJ law enforcement tactical mobile communications, received significant and unanticipated cuts, which will be difficult to plan for and execute in the remaining 6 months of the fiscal year. In addition, funding requested for new positions just appropriated in fiscal years 2009 and 2010 for DOJ's core mission areas, as well as for the continuation of financial fraud and Southwest Border enforcement activities, is not provided in the fiscal year 2011 budget. DOJ will need to closely examine existing operations and continue to implement savings and efficiencies to ensure that we can absorb the increased and unfunded costs of maintaining our current program efforts in fiscal year 2011.

DOJ understands the need to promote fiscal restraint and pursue savings and efficiencies. To keep DOJ operating effectively within constrained funding levels, we instituted a temporary hiring freeze in January 2011 and suspended all nonessential travel, training, and conferences. In addition, all expenditures across the board, including vehicles, employee moves, information technology (IT) process, equipment, supplies, and contracts, are being held to essential needs.

Wherever possible, DOJ has implemented management and administrative efficiencies to generate savings, which help to support existing priority programs and maintain current efforts. DOJ has generated creative ideas to achieve efficiencies, which have been included in the fiscal year 2011 and fiscal year 2012 President's budgets. But we cannot afford additional substantial cuts while preserving DOJ's ability to fulfill its core law enforcement.

*Question.* How is this affecting morale?

*Answer.* As I stated during the Senate Appropriations Committee hearing, employee morale associated with a long-term continuing resolution is a significant concern. The uncertainty of the fiscal year 2011 budget process has had a negative impact on morale throughout DOJ. In conversations I have had with personnel in the field and with staff here in Washington, DC, uncertainty exists with regard to the amount of funding enacted for the fiscal year, the ability of DOJ to conduct the programs we want to implement, and the question of whether or not employees will continue to have their jobs or face furloughs or pay cuts. These have all had negative impacts on morale.

Despite these morale concerns, the dedicated staff at DOJ continue to do a good job for the American people. Some of their concerns have been mitigated with the enactment of the full-year appropriation; however, employee morale will suffer again

if we are required to operate under long-term continuing resolutions in future fiscal years.

*Question.* What difficulties does DOJ face when it has to operate on short-term continuing resolutions like the five we have had to pass since October 1, 2010? Particularly the continuing resolutions that cover only 2 or 3 weeks at a time?

*Answer.* In addition to the morale concerns created by the uncertainty of repeated, short-term continuing resolutions, this method of funding also creates significant operational challenges. The way in which continuing resolutions affect DOJ often depends on the specific language in the continuing resolution and the way "current rate" is calculated. If, for example, we are limited to funding provided in the previous fiscal year (the "current rate") and we are required to fund pay raises during the continuing resolution period, components will be strapped for operational funds until further appropriations, if any, are enacted. This results in a need for limiting hiring and restricting operational spending. In the absence of a full-year appropriation, DOJ exercises particular caution in the execution of resources and closely monitors the status of funds through various reporting mechanisms. In some instances where solvency becomes a concern during the continuing resolution period, DOJ takes immediate action to remedy the situation through transfers, reprogrammings or the deferral of costs until a full-year appropriation has been enacted.

Overall, the activities most affected by continuing resolutions include contracting practices, hiring, training, and procurement of IT and other major purchases. For example, a continuing resolution creates significant uncertainty at every step of the procurement process, from budgeting through contractor performance and invoicing. Because continuing resolutions limit the funding available to a specified period of time, annual contracts must be carefully scrutinized by program and procurement officials. Depending on the type, some contracts must be fully obligated upon award. These include fixed price contracts and subscriptions. The need to obligate a large contract up front, at the beginning of the year, can result in funding shortfalls for other needs such as payroll and operations. Other contracts, such as labor hour contracts, can be segmented. In such cases, the contract's period of performance is limited to the portion of the year that is funded. When the continuing resolution is extended or a full-year appropriation is enacted, these contracts must be modified. This can be a huge workload burden for program and procurement staffs, as well as the contractors, with no value-added.

*Question.* How would public safety be impacted by these proposed cuts at each of the Federal, State, and local law enforcement levels?

*Answer.* At the fiscal year 2011 enacted level, DOJ will sustain its core national security and law enforcement functions, but must reduce critical funding to State and local grants, juvenile justice programs, litigating components, and technology programs. With the exception of the Federal Bureau of Investigation (FBI), which received an increase above the fiscal year 2010 enacted level, all law enforcement components are funded at fiscal year 2010 levels. The Bureau of Prisons and Office of the Federal Detention Trustee also received increases above the fiscal year 2010 level. However, even though the budget is essentially held flat for our law enforcement agencies, the cost of doing business-as-usual is higher this year as a result of requirements to support increased health insurance premiums, retirement contributions, rent and move expenses, and second-year costs associated with new staff appropriated in last year's budget. Funding to support these "mandatory" expenses will have to come from management and administrative efficiencies, and possibly scaled-back operations. DOJ will do all it can, however, to ensure minimal disruption to core law enforcement and public safety initiatives.

Both the House-passed continuing resolution and the Senate alternative included significant cuts to our State, local and tribal assistance programs, and the enacted budget includes a 25 percent reduction to these programs. Although DOJ certainly appreciates the gravity of the strain on State, local and tribal budgets, we will need to implement the difficult decisions reflected in the final funding levels for our State, local, and tribal partners. We will continue to award grant funding so that innovative and effective law enforcement solutions are realized and will provide whatever technical assistance possible, but our focus must also be on ensuring the availability of sufficient resources to successfully execute Federal law enforcement programs and responsibilities.

*Question.* How will these cuts impact DOJ in 2012?

*Answer.* The cuts enacted in the fiscal year 2011 appropriation will have a significant adverse impact on DOJ in fiscal year 2012. For example, I implemented a Department-wide hiring freeze in January 2011, which means components are unable to replace staff leaving through attrition. The funding levels provided in the fiscal year 2011 appropriation, which are in most cases less than the fiscal year 2010

level, are not sufficient for components to afford to “buy back” those lost positions. As a result, DOJ is directing components to eliminate these “hollow” or unfunded positions from their authorized position levels. DOJ’s workforce will be smaller in fiscal year 2012 than it is in fiscal year 2011, although the workload is likely to stay the same or increase. In addition to staffing efficiencies, DOJ is also implementing management and administrative cost savings measures, such as reductions to travel and training. DOJ’s workforce will be required to do more with less. Given the current fiscal outlook for fiscal year 2012, this trend will likely continue for some time.

Further, some program reductions proposed in the fiscal year 2012 President’s budget were enacted in fiscal year 2011. For example, both the National Drug Intelligence Center and the Integrated Wireless Network program saw considerable cuts in the fiscal year 2011 appropriation, which will be difficult to plan for and execute in the remaining 6 months of the fiscal year.

Overall, most components will need to closely re-evaluate their allocation of resources to support continued base requirements, such as increased health insurance premiums, retirement contributions, rent and move expenses, and second-year costs associated with new staff appropriated in last year’s budget. This re-evaluation may mean that operational funding previously available for law enforcement or litigation activities will be adversely impacted.

#### COPS AND BYRNE GRANT FUNDING REDUCTIONS

*Question.* The 2011 House continuing resolution proposes drastic cuts in funding for programs like Community Oriented Policing Services (COPS) and Byrne grants, which will result in fewer police officers to protect our communities, help victims recover, and combat crimes like violence against women. State and local agencies would be hamstrung as partners of Federal law enforcement, but also increasingly turn to Federal agencies to meet needs they no longer have the capabilities to address themselves.

What concerns do you have about what these cuts will do to State and local law enforcement agencies around the country?

*Answer.* DOJ understands that it is operating in an age of austerity, and that tough choices are necessary to rein in the Federal deficit and put the country on a sustainable fiscal path. However, these cuts threaten the hard-won historic crime reductions achieved by State and local law enforcement over the past decade. They also add another measure of difficulty for those agencies that support State and local law enforcement, several of which have suffered from nearly 3 years of budget cuts.

State, local, and tribal public safety agencies across the country face significant budget-related challenges that threaten their ability to deliver core services and maintain public safety. According to a December 2010 report released by the Police Executive Research Forum, more than one-half of the 608 law enforcement agencies surveyed experienced budget reductions in 2009 and 2010. Six out of 10 of these agencies have experienced additional reductions in 2011. Many of these agencies serve areas—both urban and rural—that face persistent problems with gangs, guns, and drugs.

Numerous law enforcement agencies have been forced to lay off sworn and civilian personnel, while others are disbanding specialized units, reducing or eliminating training, forgoing important technology acquisitions, and limiting on-scene responses to various categories of service calls. One of the most severe cases is Flint, Michigan. Despite a murder rate higher than Newark, St. Louis, New Orleans, or Flint has been forced to lay off two-thirds of its force over the past 3 years.

After years of increasingly progressive policing that contributed to record crime reductions, many agencies are forced to retreat to the 1970s, allocating the bulk of their resources and personnel to answer calls for service. When departments run from call to call, the gains attributed to community policing, improved analysis, and data-driven crime prevention efforts are jeopardized.

Instilling trust in crime-prone neighborhoods takes time and patience. Maintaining safe and nurturing schools often involves a stable law enforcement presence. Preventing retaliatory violence requires substantial law enforcement resources and attention. These activities, whether framed as community policing, quality of life enforcement or broken windows theory, play an important part in protecting the individual rights and liberties guaranteed by the Constitution. Despite their importance to neighborhoods across America, these programs are less tangible, produce less hard data and are very difficult to defend during a budget crisis.

The Office of Justice Programs (OJP) provides training on effective responses to such emerging and long-standing threats. OJP develops and shares knowledge about

“what works” in preventing and controlling crime, funds important innovations, and provides cost effective and supportive training and technical assistance. OJP also funds technology and equipment acquisitions that can help agencies struggling with reduced budgets to operate more efficiently.

Considering the tremendous need for DOJ’s leadership and resources among its State, local, and tribal partners in the current economic climate, the President’s fiscal year 2012 request reflects an earnest effort to maximize Federal resources, achieve efficiencies, and make the difficult decisions necessary to respond to current fiscal realities. These programs and our relationships with State, local, and tribal law enforcement agencies maximize the Federal Government’s ability to fight crime and promote justice throughout the United States.

DOJ shared your concerns over the proposed cuts to the COPS office programs, but we were pleased to see that the final fiscal year 2011 budget included these much needed resources for our partners in State, local, and tribal law enforcement. While the hiring program and other COPS office grant programs were cut to ensure a budget could be passed, they were manageable reductions and we’re looking forward to opening the hiring solicitation later this spring.

*Question.* When police departments cannot afford to put officers on the beat to prevent and combat violent crime, what impact does this have on families and communities?

*Answer.* In every corner of this country, State, local, and tribal police departments are laying off officers and civilian staff, or modifying their operations as a result of budget cuts. Police departments are now required to do more with less in this economy, especially when there are reductions in much needed Federal resources. The practice of policing has become more automated with technology filling in the gaps left by fewer cops on the beat. Law enforcement agencies have learned to better combine resources and create regional multi-agency partnerships to better address public safety issues. Recognizing these partnerships is a priority for COPS and DOJ’s grant making agencies, as they too must do more with less. The challenge will be balancing the public’s expectations and demands on police with a department’s fiscal capacity to perform its core mission.

The impact on families and communities is being felt in cities and counties across the country as government executives are cutting policing services to fill budget gaps. There are reports each week of cut backs including a city in the mid-west that is looking to cut municipal services to more than 20 percent of its 139 square mile jurisdiction. Other cities have resorted to laying off sworn police officers, which has a direct impact on the ability to patrol neighborhoods and respond to service calls. The ripple effect of shrinking budgets is being felt nationwide.

*Question.* If State and local agencies are forced to reduce their numbers because of this funding reduction, do you anticipate a greater burden placed on Federal law enforcement agencies to fill gaps in policing?

*Answer.* The economic crisis has taken a heavy toll on State and local budgets, and public safety agencies are suffering. Last summer, the city of Oakland, California laid off 80 police officers, representing 10 percent of its force. In January, more than 160 officers in Camden, New Jersey—one-half of the police department—were forced to turn in their badges. In Cincinnati, Ohio, officers are facing massive lay-offs and demotions. These are just a few of the historically high-crime cities that have seen critical public safety jobs sacrificed to shrinking municipal budgets. While OJP does not have evaluations available through its National Institute of Justice to measure the impact of these challenges, it seems inevitable that in this environment there will be increased calls for assistance to Federal law enforcement from State and local law enforcement agencies.

It is difficult to predict the impact on Federal law enforcement agencies at this stage. What we do know is that there is an ever-increasing demand for scarce Federal funding to supplement public safety initiatives. For example, when the COPS office opened the solicitation for the COPS Hiring Recovery program in 2009, which was part of the American Recovery and Reinvestment Act, the demand far outweighed the funding available with more than \$8 billion in requests for the \$1 billion that was appropriated. This demonstrates that the States’ need for financial assistance outstrips what the Federal Government can provide.

*Question.* Which Federal law enforcement agencies would State and local police turn to and would those agencies have the capabilities to help?

*Answer.* Based on historical experience with DOJ programs, the Drug Enforcement Administration (DEA), the United States Marshals Service (USMS), the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), and the FBI all have ongoing and cooperative relationships with State and local law enforcement. These agencies would be most likely to receive increased calls for assistance from State, local, or tribal agencies.

The FBI actively provides assistance to Law Enforcement Agencies (LEAs) through a variety of programs such as SSTFs, JTTFs, the National Academy, etc. To the extent possible, the FBI provides assistance to LEAs on an ad hoc basis through its field offices and the local relationships it has established.

While ATF and DEA will continue to work with State, local, and tribal law enforcement the anticipated fiscal year 2012 funding levels will result in reduced funding to support investigative and other activities. ATF, for example, may be forced to reduce funding to program areas like the National Integrated Ballistics Imaging Network, the National Tracing Center, as well as State and local training. Under level funding DEA will be forced to manage hiring, including Special Agent hiring, and will likely be unable to backfill positions at the rate of attrition.

*Question.* Are Federal LEAs set to receive any additional resources to deal with additional demand from State and local partners?

*Answer.* With the exception of the FBI, which received an increase above the fiscal year 2010 enacted level to sustain its current services, all DOJ law enforcement components are funded at fiscal year 2010 levels. DOJ will need to find additional management and administrative efficiencies and possibly re-prioritize operations in order to maintain core national security and law enforcement functions, while absorbing increases in "mandatory" expenses such as health insurance premiums, retirement contributions, and rent. DOJ appreciates the gravity of the strain on State, local and tribal budgets, and we will need to implement the difficult decisions reflected in the final funding levels for our State, local, and tribal partners. We will continue to award grant funding so that innovative and effective law enforcement solutions are realized, and we will continue to provide necessary and appropriate technical assistance.

#### STOPPING CHILD PREDATORS

*Question.* The National Center for Missing and Exploited Children (NCMEC) there are more than 100,000 noncompliant sex offenders at-large in the United States. The Adam Walsh Child Protection and Safety Act of 2006 (Public Law 109-248) gives the USMS the authority to treat convicted sex offenders as fugitives if they fail to register, as well as to assist jurisdictions to locate and apprehend these individuals.

USMS estimates it needs a dedicated force of 500 deputies to fully implement the Adam Walsh Act. Currently, there are 177 deputy marshals on board. No additional funds have been requested for Adam Walsh Act implementation and enforcement in fiscal year 2012.

If USMS estimate they need 500 deputies to fully enforce the Adam Walsh Act and keep our children safe, why has DOJ failed to request additional resources in fiscal year 2012 for USMS to hire more deputies to meet this need?

*Answer.* The Adam Walsh Child Protection and Safety Act is a landmark piece of legislation that considerably enhances the ability of DOJ to respond to crimes against children and vulnerable adults and prevent sex offenders who have been released back into the community from victimizing other people. DOJ and USMS fully support the mandates of the Adam Walsh Act. The fiscal year 2012 President's budget for USMS requests \$57 million for Adam Walsh Act related activities, an increase of \$9 million (19 percent).

*Question.* If more resources cannot be devoted to enforcing this act, what other measures could the Congress adopt which would improve the effectiveness of the investigators? Specifically, would DOJ support documentary administrative subpoena power for the USMS in its investigative capacity?

*Answer.* Additional tools, such as the ability of the USMS to secure its own documentary administrative subpoena authority, would help make sex offender investigations more robust. DOJ supports a grant of such authority. DOJ will consider and inform the subcommittee if there are other nonmonetary measures that would enhance DOJ investigations.

#### FINANCIAL FRAUD—PREDATORY LENDING

*Question.* Predatory lenders across the United States continue destroying families and communities, and undermine faith in our financial systems. DOJ's financial fraud workload continues increasing as more predatory lenders are exposed. Last year, the Congress gave you an estimated \$865 million, including resources to hire 54 new agents, 165 new attorneys, and 142 new professional support staff dedicated to investigating financial fraud. This brings the total number working on this problem to more than 4,700 Federal personnel.

When provided the resources to hire and equip full task force teams of agents, forensic accountants, analysts, and attorneys to work on the financial fraud case workload, what exactly does this mean DOJ is able to do?

Answer. These resources allow DOJ to prosecute financial fraud aggressively. Many of the financial fraud crimes that DOJ investigates are increasingly sophisticated and involve complex schemes, numerous asset transfers, and tens of thousands, if not millions, of pages of documents. Investment frauds can involve a significant money laundering component as well, and victim funds are often secreted away in numerous accounts. In order to successfully prosecute these crimes and to obtain recovery of the assets for victims, prosecutors and agents are often required to sort through voluminous bank records and other documents, and to trace fund flows into and out of bank accounts, including overseas accounts.

Similarly, many financial fraud crimes involve the use of sophisticated accounting gimmicks, joint partnerships, fraudulent accounts, and corporate shell entities. In order to pierce these schemes, investigators are required to analyze numerous records and understand accounting rules. Forensic accountants and analysts may be asked to apply their expertise in reviewing accounting records, sales agreements, third-party transactions, partnership and corporate records, and bank records.

*Question.* The phrase “economic fraud” covers a broad range of financial crimes. What types of economic fraud investigations and prosecutions are DOJ’s teams of FBI agents, U.S. Attorneys, legal divisions, and the inspector general (OIG) tackling? With each type of fraud case, give examples using successfully prosecuted convictions and recoveries.

Answer. DOJ investigates and prosecutes a wide range of crimes that could be characterized as economic fraud. For example, DOJ’s economic crime prosecutions include investment fraud, bank fraud, mail fraud, wire fraud, securities fraud, and mortgage fraud. These schemes can bring economic devastation to their victims.

One case in particular serves as an example of DOJ’s efforts to prosecute each of these types of fraud cases: the April 19, 2011, conviction of Lee Bentley Farkas, the former chairman of a private mortgage lending company, Taylor, Bean & Whitaker (TBW). In that case, in connection with a \$2.9 billion fraud scheme, a Federal jury in Alexandria, Virginia, convicted Farkas of one count of conspiracy to commit bank, wire, and securities fraud; six counts of bank fraud; four counts of wire fraud; and three counts of securities fraud. Farkas and his co-conspirators engaged in a scheme that misappropriated more than \$1.4 billion from Colonial Bank’s Mortgage Warehouse Lending Division in Orlando, Florida, and approximately \$1.5 billion from Ocala Funding, a mortgage lending facility. The scheme led to the collapse of TBW, one of the largest private mortgage lending companies in the United States, and Colonial Bank, 1 of the country’s 25 largest banks in 2009.

DOJ’s prosecution of two brothers, Matthew and Lance La Madrid, is another recent example of its efforts to prosecute mortgage-related fraud. On January 3, 2011, both defendants pleaded guilty in the southern district of California to mail fraud charges pertaining to a \$30 million mortgage fraud and investment fraud scheme. As part of the scheme, the brothers used false borrower information to obtain millions of dollars in mortgages, which they then used to fund a real estate investment fraud scheme.

DOJ has prosecuted numerous other economic fraud cases that involve investment, bank, and securities fraud. For example:

- On March 12, 2009, Bernard Madoff pleaded guilty to 11 felony counts, including counts for securities fraud and investment adviser fraud, in connection with perhaps the largest investment fraud scheme in history. On June 29, 2009, Madoff was sentenced to 150 years’ imprisonment;
- On January 27, 2010, Scott Rothstein, the former managing partner of a Florida law firm, pleaded guilty to orchestrating a \$1.2 billion fraud scheme. On June 9, 2010, Rothstein was sentenced to 50 years imprisonment;
- On December 2, 2009, Thomas Petters was convicted after trial for masterminding a \$3.7 billion investment fraud scheme that defrauded thousands of investors. On April 8, 2010, Petters was sentenced to 50 years imprisonment; and
- On May 11, 2009, Marc Dreier—the founder of Dreier LLP, a law firm with more than 250 employees—pleaded guilty to a securities fraud scheme which caused approximately \$400 million in losses. On July 13, 2009, Dreier was sentenced to 20 years imprisonment.

Recoveries from these cases have been substantial. In December 2010, for example, DOJ announced that the estate of Jeffrey Picower, a Madoff investor, had agreed to forfeit to the United States more than \$7 billion, representing all the profits that Picower had withdrawn from Madoff’s fraudulent investment advisory business.

*Question.* Since DOJ ramped up its crackdown on economic fraud, how many cases has the Justice Department successfully prosecuted? How many convictions have resulted? What did those schemes cost victims and how much in losses have been recovered?

*Answer.* DOJ has aggressively prosecuted cases involving economic fraud. According to DOJ statistics, in fiscal year 2009, the 94 U.S. Attorney's Offices (USAOs) charged at least 4,704 defendants with crimes concerning financial fraud, and obtained at least 4,091 guilty convictions against individual defendants in such cases. In fiscal year 2010, those numbers increased: the USAOs charged at least 5,459 defendants with crimes concerning financial fraud, and obtained at least 4,423 guilty convictions against individual defendants in such cases. These frauds have cost victims, and resulted in losses of, billions of dollars.

At the same time, through both criminal and civil enforcement efforts, we have sought to recover billions of dollars. DOJ estimates that in fiscal year 2010, \$4.8 billion in losses were recovered in criminal financial fraud related cases. According to the United States Sentencing Commission, in fiscal year 2010, courts ordered \$6.6 billion in restitution to victims of Federal fraud related crimes. DOJ also seeks to forfeit funds where appropriate. In December 2010, as just one example, we announced that the estate of Jeffrey Picower, a Bernard Madoff investor, had agreed to forfeit more than \$7 billion to the United States, representing all the profits that Picower withdrew from Madoff's fraudulent investment advisory business.

*Question.* How much does it cost DOJ to successfully prosecute an economic fraud case, ranging from the lowest of recoveries to the highest? Describe the resources—including personnel, time, and other tools—required to successfully prosecute this range of crimes.

*Answer.* It is difficult to quantify how much any particular financial fraud case costs DOJ to prosecute successfully. We investigate thousands of fraud cases every year, and individual prosecutors and agents work on multiple cases at any given time. Nevertheless, the component costs are identifiable as:

- personnel, including attorneys, paralegals, agents, and support staff;
- IT resources;
- electronic document collection, storage, management, and review tools; and
- litigation support for trial.

The expenses vary depending upon the size and complexity of a case. Many cases are prosecuted by one prosecutor and one agent, working with minimal administrative support. These prosecutors and agents are also working on other cases. The larger the fraud scheme, however, the more likely the case is to involve large numbers of documents, bank records, and witnesses, and therefore to require additional prosecutors, agents and litigation support resources.

Complex fraud cases, including large-scale investment fraud schemes and corporate fraud cases such as the Farkas, Petters, and other cases discussed in response to question 14, are extremely resource-intensive and cannot be successfully prosecuted and investigated without a substantial resource commitment by DOJ. These cases typically involve tens of thousands, if not millions, of pages of documents to review; numerous company and third-party witnesses, including accountants and analysts; and substantial travel.

*Question.* Neither the Senate nor the House 2011 continuing resolution provides additional funds in 2011 for FBI, U.S. Attorneys, and DOJ's litigation divisions. How will this impact DOJ's ability both this year and in 2012 to conduct fraud investigations?

*Answer.* DOJ is committed to investigating and prosecuting all forms of financial fraud aggressively, and we will continue to do so with existing resources. To the extent that the Congress appropriates additional funds for the Justice DOJ to use in prosecuting financial fraud cases, we will use those resources to bolster our already vigorous efforts in this critical area.

*Question.* How can DOJ better help State and local officials investigate predatory lenders?

*Answer.* DOJ currently works closely with its State and local law enforcement partners on financial fraud cases in numerous ways, including through regional mortgage fraud task forces and working groups; through the coordinated efforts of the Financial Fraud Enforcement Task Force, which includes many State and local enforcement officials; and through the National Association of Attorneys General and the National District Attorneys Association. DOJ will continue to use these and other avenues to work with its State and local partners in the future.

## CYBER SECURITY

*Question.* Cyber intrusions are increasing and threaten the U.S. economy and security. Foreign firms are hacking into our corporate networks, stealing trade secrets, and reducing our competitiveness. Terrorists and foreign nations with advanced cyber intrusion abilities could shut down power grids and financial systems, and steal U.S. counterterrorism information, like IED jammer technology.

DOJ requests \$167 million to combat computer intrusions, including \$129 million for FBI's Comprehensive National Cybersecurity initiative and \$38 million for digital forensics in fiscal year 2012, an increase of \$18.6 million compared to current services and equal to the fiscal year 2010 enacted level. FBI, in particular, has unique authorities to collect domestic intelligence and investigate foreign intrusions to Government and private networks.

Describe the Justice Department's efforts—particularly those of the FBI—to protect cyberspace.

*Answer.* FBI maintains a comprehensive cyber program to pursue cyber threats. This program is driven by investigative and intelligence goals, focusing on the actors and organizations behind computer intrusions. FBI has had several well-publicized arrests of criminal cyber threat actors, including extraditions and foreign government arrests of actors operating abroad. FBI's cyber program also provides insight into the tactics, techniques, capabilities, and targets of cyber threat actors, allowing FBI to share timely and actionable information to net-defenders who might otherwise be unaware of the network vulnerabilities discovered by our adversaries.

FBI is also responsible for operating the National Cyber Investigative Joint Task Force (NCIJTF), a multi-agency national focal point for coordinating, integrating, and sharing pertinent information related to cyber threat investigations. NCIJTF is the day-to-day workplace for 18 member organizations that collectively identify and prioritize cyber threat actors. NCIJTF participants work in concert to design and implement operations that mitigate the threat through any of their combined counterterrorism, counterintelligence, intelligence, and law enforcement authorities. NCIJTF focuses primarily on national security and significant criminal threats, helping to coordinate domestic operations among members and integrate these operations with intelligence activities conducted outside the United States. NCIJTF has demonstrated numerous positive outcomes in the areas of attribution and advance indications and warnings that help targeted victims mitigate the consequences of cyber exploitation or avoid attack altogether.

Other DOJ components, including the Criminal Division, National Security Division, and the 94 USAOs, through the national Computer Hacking and Intellectual Property coordinator program, collaborate with the FBI in securing lawful authority to obtain electronic evidence to assist in the investigation and prosecution of cybercrime, cooperate internationally on evidence collection and extradition, and, when appropriate, lead prosecutions against those who have used computer networks to commit crimes. DOJ also engages regularly with partner agencies, including the Departments of Defense (DOD), Homeland Security, and State, to ensure that the Department's response mission is appropriately coordinated with the protection, warning, and defense missions of other agencies.

*Question.* How will the 2011 continuing resolution impact DOJ's ability to protect U.S. information and technology networks from cyber attacks?

*Answer.* The fiscal year 2011 President's budget request included \$45.9 million in enhancements to combat cyber attacks against the U.S. information infrastructure. The fiscal year 2011 full year appropriation does not fund this request, thus limiting FBI's ability to evolve its cyber program, enhance personnel efforts against emerging cyber terrorist and critical infrastructure threats, and resource NCIJTF facilities and technology requirements.

*Question.* Although the 2012 budget request to detect and combat computer intrusions is \$18.6 million more than current services, it is actually a request equal to the fiscal year 2010 enacted budget for this purpose. Given that President Obama has identified cybersecurity as an imperative of national security, and DOJ and FBI are recognized as the leaders in cybersecurity among civilian agencies, why were no increases above fiscal year 2010 enacted levels requested in the fiscal year 2012 budget? Are you seeking the necessary resources in the fiscal year 2012 budget for this?

*Answer.* DOJ requests program increases for computer intrusions in its fiscal year 2012 budget to:

- provide increased coverage of terrorists seeking to use cyber as a means of attack;
- enable the National Cyber Investigative Joint Task Force (NCIJTF) to have 24/7 operations; and



—add capacity to FBI-wide electronic surveillance and digital forensics programs. The fiscal year 2012 budget requests an 8 percent increase in agents assigned to the FBI's CNCI program. The request level in dollars is the same as fiscal year 2010 enacted because of some changes in resource mapping in the financial system; however, the program will be enhanced by the resources requested.

*Question.* How can Justice and FBI possibly expand their cyber security capabilities in future years when faced with 2011 continuing resolution impacts?

*Answer.* Unfortunately, the fiscal year 2011 full-year appropriation fails to fund \$46 million in important improvements to FBI's CNCI program. As a result, strategic development is stalled and the program will be forced to delay making long-term investments, as limited fiscal year 2011 funds will be reprioritized for existing infrastructure, technical contract services, or other core items as needed. The capacity to expand the program will remain constrained while funding levels remain constant.

#### UNCOLLECTED COURT-ORDERED FINES

*Question.* In the last decade, Federal courts have ordered roughly \$65 billion in fines and restitution from schemers and scammers who prey on hard working, U.S. middle class families. But the Federal Government has collected only 2 cents for every \$1 owed, totaling an estimated \$3.5 billion collected to date. These fines are mainly supposed to compensate crime victims.

Who at DOJ is responsible for collecting court-ordered compensation?

*Answer.* Pursuant to 28 C.F.R. § 0.171, each USAO is required to have a Financial Litigation Unit (FLU) to enforce and collect civil and criminal debts owed to the United States and victims of crime. There are 93 FLUs (Guam and the Mariana Islands are combined). The FLU is responsible for handling civil claims and "activities related to the satisfaction, collection, or recovery of fines, special assessments, penalties, interest, bail bond forfeitures, restitution, and court costs arising from the prosecution of criminal cases . . . by the United States Attorneys." 28 C.F.R. § 0.171(a).

*Question.* How many agents, prosecutors, and support staff collect owed fines and restitution?

*Answer.* Approximately 350 positions in USAOs are dedicated to the collection of debts owed the United States and victims of crime.

*Question.* What are the obstacles standing in the way of collecting these fines? What can we do to fix those problems? What tools does DOJ need to ensure that it can aggressively collect the fines and restitutions criminals owe?

*Answer.* There are a number of obstacles to collecting court ordered fines and restitution:

- Under current law, there are no statutory provisions that require a defendant charged with an offense for which restitution is likely to be ordered to preserve their assets for restitution. In other words, under current law, we cannot start collecting or even ensure that any money that the defendant does have is preserved for victims until after the defendant is sentenced and restitution has been ordered. White collar fraud activity may take years before being discovered, investigated, and successfully prosecuted. In a January 2005 report (GAO-05-80), GAO found that in the cases they reviewed, anywhere from 5 to 13 years had passed since the time of the criminal activity before an order of restitution was entered, leaving a significant period of time for defendants to dissipate their assets.
- The orders of restitution many times tie the Government's hands. That is, courts are ordering the full amount of restitution; however, they are then adding a very small payment schedule governing the payment of the restitution by the defendant. For example, the court will order \$1 million in restitution and then go on to say that the defendant shall pay the restitution at \$100/month. Additionally, courts often fail to order payment immediately. For example, the court will order that payment is not due until after the period of incarceration.
- Under The Mandatory Victims Restitution Act (MVRA), not only must restitution be ordered for the full amount of the loss, but judges cannot take into consideration the defendant's ability to pay. As a result, financial penalties are imposed on individuals with no resources, no incomes, or have limited incomes while incarcerated, and thus this population does not effectively have a means to pay the imposed debts.
- Under MVRA, courts must impose restitution for the full amount of the victims' losses. However, this often has no correlation to the actual benefit to the defendant. In other words, restitution is not based on how much the defendant made on the fraud, (it is not a disgorgement of the defendant's gain), but rather

on the loss to the victims. This disparity can especially be seen in security fraud cases. As a result, even if the Government recovered the full amount of the defendant's gain (and took every asset the defendant possessed), we would still not recover an amount close to satisfying the restitution order.

—In a July 2001 report (GAO-01-664), GAO indicated that a lack of asset investigators, as well as the limited number of collection staff (in relation to the number of criminal debt collection cases), presents an obstacle for the USAOs in the effective collection of criminal debt. MVRA mandated that the U.S. Attorneys collect restitution on behalf of non-Federal victims of crime. While the Congress recognized the importance of ensuring that these non-Federal victims be compensated, no additional resources were given to the USAOs to carry out this mandate.

*Question.* If more court fees were recovered, would DOJ receive a portion of those collections?

*Answer.* No. While the total outstanding criminal balance is approximately \$65 billion, the amount of criminal debt collected over the past decade is approximately \$15 billion. Criminal debt is made up of several components:

- special assessments (\$100 for every count of conviction);
- fines; and
- restitution (Federal and non-Federal).

With limited exceptions, collections of both special assessments and fines are deposited into the Crime Victims Fund. These monies are subsequently disbursed by OJP to the States to fund State-run victim assistance and compensation programs. Restitution collections are disbursed directly to the victims of the crime for which the restitution was ordered. Victims can be either the United States or, for the most part, non-Federal individuals or entities. An increase in collections would not result in additional monies coming to DOJ for law enforcement purposes. In order for DOJ to retain a portion of criminal collections, there would need to be legislation authorizing the Department to do so.

#### TASK FORCES—STATE AND LOCAL LAW ENFORCEMENT

*Question.* Joint Terrorism Task Forces (JTTFs) are Federal, State, and local police and intelligence agencies that work together to identify and respond to terrorist threats at the local level. There are now more than 100 task forces led by FBI, with 4,400 participants.

These teams have been front and center in recent failed bombing attempts on a military recruiting station in my own home State of Maryland, former President Bush's home in Texas, and a holiday tree-lighting ceremony in Oregon. Their efforts have prevented what could have been deadly attacks on Americans.

How beneficial are the Task Forces in responding to terrorist threats? What unique role do they play in terrorism investigations?

*Answer.* JTTFs are highly beneficial and play an essential role in responding to terrorist threats and protecting the United States from attack:

- they enhance communication, coordination, and cooperation among the Federal, State, local, and tribal agencies (by sharing information regarding suspected terrorist activities and/or subjects on a regular basis and providing access to other investigative databases to ensure timely and efficient vetting of leads);
- they provide a force multiplier in the fight against terrorism; and
- they enhance FBI's understanding of the threat level in the United States.

Currently, FBI leads 104 JTTFs:

- One in each of the 56 field office headquarter cities; and
- Forty-eight in various FBI resident agencies.

In addition to the FBI, 688 State, local, and tribal agencies, and 49 Federal agencies have representatives assigned to JTTFs. FBI is the lead Federal agency with jurisdiction to investigate terrorism matters, and JTTFs are the FBI's mechanism to investigate terrorism matters and protect the United States from terrorist attack.

*Question.* Why have the number of Task Force participants been declining since 2009? What does it mean for DOJ when the number of Federal, State, and local participants decreases? What does it mean for your State and local partners?

*Answer.* Overall, JTTF participation has declined since 2009 from 4,597 to 4,506 members. Since 2009, State and local JTTF participation has declined by 60 full-time and 26 part-time members. During this same time period, FBI increased assigned personnel to JTTFs, and participation by other Federal agencies has increased by 20 full-time members and declined by 97 part-time members.

JTTF membership decline can be attributed to current Federal, State, and local budgetary constraints that have created manpower issues for agencies and caused them to pull back personnel from JTTFs. Federal, State, and local agency full-time

and part-time JTTF participation comes at a great manpower staffing cost to participating agencies and it will likely become increasingly difficult for agency executives to detail personnel to JTTFs due to budgetary constraints. FBI will continue to support the ability of its State and local law enforcement partners to participate in JTTFs, including by paying for overtime of State and local task force officers with funding provided by the Assets Forfeiture Fund.

It is important to ensure the overall decline in Federal, State, and local JTTF participation does not negatively impact interagency coordination, cooperation, and information sharing at all levels. Defeating terrorism cannot be achieved by a single organization. It requires collaboration with Federal, State, local, and tribal partners to identify suspicious activity and address it. Given the persistent and growing threat posed by terrorists, JTTFs require an enhanced presence of other law enforcement and intelligence entities on task forces. JTTFs cover thousands of leads in response to calls regarding counterterrorism-related issues. These leads address potential threats to national security and require a significant amount of coordination and resources.

*Question.* Do you anticipate expanding Task Forces in the future if funds are available? Or would you recommend that funding go to another priority area?

*Answer.* As noted in the response to question 27, JTTFs are extremely effective in investigating terrorism matters and protecting the United States from terrorist attacks. JTTFs enhance communication, coordination, and cooperation amongst the Federal, State, local, and tribal agencies, and provide a force multiplier in the fight against terrorism. Additional resources would help FBI and other Federal, State, local, and tribal agencies increase participation on the JTTFs, and thus assist in combating terrorism.

*Question.* What additional resources would you need to expand the program?

*Answer.* In order to expand JTTFs, funding for personnel (FBI and task force officers), overtime, space, equipment, and other items would be necessary.

#### VIOLENCE IN FUGITIVE APPREHENSION

*Question.* Over the past few months, there has been an alarming increase in the number of deputy marshals and State and local law enforcement officers who assist USMS task forces critically injured or killed while pursuing dangerous fugitives. Just days before this subcommittee's hearing with the Attorney General, a deputy marshal was shot and killed, and another deputy marshal and a task force officer were shot, as they attempted to catch a violent fugitive.

These recent acts of violence against law enforcement officers, including deputy marshals, serve as a reminder that law enforcement personnel put their lives on the line every day to keep our communities safe. Fugitive apprehension is always dangerous, as these individuals are often known to be violent and make concentrated efforts to avoid capture. When faced with the prospect of answering for their crimes, some lash out. The brave work of our deputy marshals and their partners in State and local law enforcement is vital to bringing criminals to justice. They are on the front lines of keeping us safe, so we must arm them with resources to apprehend these fugitives as safely as possible.

Recent tragedies in Missouri, West Virginia, Florida and Washington, DC, involving injuries and deaths of deputy marshals and task force officers suggest an increase in violence shown by fugitives. Why have we seen this rise in violence?

*Answer.* The National Law Enforcement Officers Memorial Fund reports that as of April 19, 2011, 29 officers have been killed in the line of duty as a result of gunfire, compared to 17 through the same date in 2010. Two of the slain officers were Deputy U.S. Marshals and another six were USMS task force officers. These statistics are sobering, but also somewhat perplexing, as a review of the FBI's Uniform Crime Reports indicates that violent crime has actually decreased in recent years. Although the violent crime rate fell 6.2 percent between 2009 and 2010, law enforcement firearm fatalities increased by 24 percent over this same time period.

Many factors potentially contribute to the increase in violence shown by fugitives. Although there is no specific explanation for the rise in violence against law enforcement personnel, one factor may be that USMS has been confronting an increasing number of violent fugitives over the past decade with the expansion of Violent Offender Task Forces (VOTF). In fiscal year 2001, VOTFs were responsible for clearing approximately 21,000 felony State and local warrants. In fiscal year 2010, more than 118,000 violent fugitives were arrested by VOTFs. It stands to reason that as encounters with violent fugitives increase, the chances of violence and risk to law enforcement personnel also increase. It is the very nature of law enforcement operations that officers are placed in the arena of violence.

However, DOJ and USMS continue to make every effort possible to mitigate the risk our officers face when arresting these individuals. Risk mitigation takes place in many forms—before, during, and after the arrest—and is responsible for the many hundreds of safe apprehensions that take place every day. In fact, in response to the recent tragic events, the USMS Director assembled a team of senior law enforcement officials—known as the Fugitive Apprehension Risk Management Assessment Team (FARMAT)—to review current training and operations procedures in an effort to reduce the serious risks inherent in performing fugitive apprehension mission. This group reports directly to the USMS Director. While the tragedies suffered in Missouri, West Virginia, Florida, and Washington, DC, have brought increased attention to violence against law enforcement in recent months, it is important to note that Federal, State, and local agents and officers arrest tens of thousands of violent felons each month without incident.

*Question.* What can DOJ, as well as the Congress, do to help our law enforcement officers stay safe and apprehend these dangerous criminals?

*Answer.* In response to this increase in law enforcement officer fatalities, DOJ launched a law enforcement officer safety initiative, directing every U.S. Attorney to meet with Federal, State, and local law enforcement officials in their districts to ensure the Department's resources are made available to help stem officer deaths. In addition, DOJ convened a meeting of law enforcement officers in Washington, DC, to solicit input for further action to improve officer safety. DOJ's Officer Safety initiative's focus is three-pronged:

- Communicate with local prosecutors to ensure that cases involving the “worst of the worst”, repeat offenders who cycle in and out of local jails and State prisons, are evaluated to determine whether the offender may instead be prosecuted under Federal law for offenses that often carry stiffer penalties.
- Ensure that State and local law enforcement partners are fully informed about the resources available to help protect officers.
- Ensure that all Federal task forces make effective use of deconfliction systems. DOJ believes risk mitigation is one of the most effective methods of keeping law enforcement officers safe. Law enforcement officials can identify gaps, make the appropriate adjustments, as well as highlight effective techniques or tools by assessing their agency's policies, procedures, training, and tactics. Most risk mitigation assessments will point to improvements in training and equipment.
- Tactical training is an integral element of DOJ component operations and is performed on a recurring basis within budgeted levels. Training helps ensure that disparate agency personnel serving in Task Forces are familiar with the lead agency's procedures, and helps reinforce critical elements that promote officer safety: preparation and planning, standard operating procedures, best practices, and team cohesiveness.
- Additionally, equipment such as for electronic surveillance can be a critical factor in reducing violence towards law enforcement officers serving arrest warrants. Electronic surveillance increases and enhances the investigator's ability to pick and choose when and where a fugitive will be contacted for arrest (many of this year's fatal shootings occurred as law enforcement officers approached locations in an attempt to contact residents while looking for a wanted suspect). A proactive electronic surveillance posture also minimizes the officer's “time on target,” which reduces an investigator's exposure to hostile threats and gun fire. Leveraging technical surveillance resources exponentially increases the odds for a safe, successful arrest.

The Bureau of Justice Assistance's (BJA) Officer Safety Training and Technical Assistance program also has specific grant programs designed to address officer safety. They include the programs listed below.

*International Association of Chiefs of Police (IACP) Center for the Prevention of Violence Against the Police.*—In response to the need for critical information on violence against the police, a BJA grant was awarded in fiscal year 2010 to IACP to launch the Center for the Prevention of Violence Against the Police. The Center is designed to reduce the frequency and severity of felony assaults on law enforcement officers by providing data collection on the key variables that are present when a felony assault on an officer occurs; analysis of why the felonious incidents occur; and a translation of the data and analysis into guidance on the steps officers can take to avoid injury or death. This data analysis and research will also be used to inform Federal, State, local, and tribal law enforcement policies and training that will prevent or mitigate officer injuries. Designed as a multiyear effort, the Center is anticipated to reduce the number of felony assaults on officers, reduce costs to governments, and increase community safety.

*Bulletproof Vest Partnership (BVP) Program.*—This program provides funds that enable law enforcement agencies to acquire bullet-resistant body armor for their personnel. Following 2 years of declining law enforcement officer line-of-duty deaths, the country saw a dramatic 37 percent increase in officer deaths in 2010. Fifty-nine of the 160 officers killed in 2010 were shot during violent encounters; a 20 percent increase more than 2009 numbers. Due to this increase and our renewed efforts to improve officer safety jurisdictions must certify during the application process that all law enforcement agencies benefiting from the BVP program have a written “mandatory wear” policy in effect for uniformed officers.

*Question.* With deep cuts facing State and local and budgets, will USMS be able to maintain robust task forces?

*Answer.* Maintaining robust task forces requires both Federal and State and local participation. While USMS hopes that State and local participation will continue at current levels, there is no guarantee that it will given current funding constraints. That being said, USMS is vested in maintaining robust task forces. USMS will support State and local participation where it can, including paying for overtime of State and local task force officers with the limited funding made available through the Asset Forfeiture Fund. Like State and local budgets, USMS budget is also constrained. The fiscal year 2011 USMS appropriation is \$12 million less than the fiscal year 2010 enacted level, which means that mandatory expenses, such as health insurance premiums, retirement contributions, and rent, must be absorbed.

#### FUNDING FOR TERRORIST TRIALS

*Question.* Continuing to loom over the Commerce, Justice, Science, and Related Agencies (CJS) spending bill this year is the debate over the transfer of Guantánamo Bay detainees to stand trial in U.S. civilian courts. In November 2009, Attorney General Holder announced DOJ’s intentions to bring five 9/11 terrorist suspects to New York City for trial, but that plan is now in limbo. However, the Ike Skelton National Defense Authorization Act for fiscal year 2011 (Public Law 111–383) included language to restrict Guantánamo Bay detainees from coming into the United States, even for prosecution. The House-passed 2011 continuing resolution reiterates that language.

DOJ does not request funds in 2012 for security costs civilian trials. But DOJ has said that if trials become necessary, they will “identify funding” for trials.

What authority would allow DOJ to “identify funding” for something that is arguably a new purpose and prohibited under current law?

*Answer.* DOJ executes critical law enforcement and national security missions every day that are vital to the Nation’s health and economic well-being. DOJ does not consider prosecuting terrorism cases a new mission. During the 24-month period from 2009 through 2010, more defendants were charged in Federal court with serious terrorism violations—offenses directly related to international terrorism—than in any similar period since 2001. More than 120 defendants were charged with such violations in 2009 and 2010. That is more than double the number charged with such offenses in 2001 (post-9/11) and 2002. Since 9/11, hundreds of defendants have been convicted of terrorism or terrorism-related violations in Federal court.

Although DOJ has a well-established record of successfully prosecuting hardened terrorists in Federal court, the Department is not currently pursuing prosecutions against the September 11 conspirators in U.S. civilian courts. On April 4, 2011, the Attorney General announced that the cases involving Kahlid Sheikh Mohammed and the four other Guantánamo Bay detainees accused of conspiring to commit the September 11 terror attacks had been referred to DOD to proceed in military commissions and that the Federal indictment against these detainees—which had been returned under seal by a grand jury in the southern district of New York on December 14, 2009—had been unsealed and dismissed.

The fiscal year 2012 budget does not request additional funds for increased security and prosecutorial costs typically associated with high-threat terrorist trials. However, the administration proposes to delete division B, title V, § 532 of the Consolidated Appropriations Act, 2010 (Public Law 111–117), which, by its terms, limits the President’s discretion regarding the disposition of detainees at Guantánamo Bay Naval Base. Further, the administration proposes to continue § 505 of the act. This general provision would allow agencies, including DOJ, to reprogram funds for obligation or expenditure upon advance notification to the Congress.

*Question.* Even if funds were identified, wouldn’t current law be an obstacle for DOJ to pursue such controversial, high-threat trials on U.S. soil?

*Answer.* The administration proposes to delete division B, title V, § 532 of the Consolidated Appropriations Act, 2010 (Public Law 111–117), regarding the disposi-

tion of detainees at Guantánamo Bay Naval Base because the language seeks to limit the President's discretion in this national security matter.

*Question.* What unique costs are associated with these trials compared to other trials held in Federal courts? What costs has DOJ estimated for all years the trials would take? What is the range of costs depending on location?

*Answer.* As explained earlier, DOJ has referred the September 11 conspirators to the DOD to proceed in military commissions, and the Department is not currently pursuing prosecutions against the September 11 conspirators in U.S. civilian courts.

The categories of costs for the 9/11 trials or trials of other Guantánamo detainees would be similar to those for other trials held in Federal courts. These categories include transportation and prisoner production, prisoner housing, security, and litigation costs. However, the security requirements associated with trying these suspects would likely have been higher than the requirements associated with most other trials.

The \$73 million requested for DOJ in the fiscal year 2011 President's budget reflected the estimated additional assets (human capital and infrastructure) needed to manage the risks associated with trying the September 11 conspirators. Specifically, the funding would have been used to harden cell blocks, housing facilities, and courthouse facilities; to increase electronic surveillance capability; and to provide increased protection for judges and prosecutors. The additional security requirements took into consideration the safety of the communities in which the trials would have occurred.

DOJ anticipated the costs for future years would have been similar to the fiscal year 2011 request, with adjustments for pay raises and other annualization costs. In developing the estimate, DOJ made certain assumptions, including the location of the trials. The location can have a significant impact on the scale and type of assets currently available and the subsequent need for additional assets. Therefore, location was an important determinant underlying the development of the planning estimates. The allocation of costs among the various functions (transportation, housing, security, litigation, etc.) may also have changed depending on location.

*Question.* Under what circumstances would DOJ be able to conduct Article III court trials at the Guantánamo Bay detention facility?

*Answer.* Under current law, we do not believe Article III trials could be conducted at the Guantánamo Bay detention facility.

#### PROJECT GUNRUNNER—ATF

*Question.* ATF's Project Gunrunner combats illegal gun trafficking and violence along the Southwest Border. Since 2005, Gunrunner teams have seized 10,000 illegal firearms and 1 million rounds of ammunition destined for Mexico. Yet violence continues spreading out and away from the Southwest Border and into the United States and Mexico.

ATF's gun tracing intelligence is critical to target and dismantle the infrastructure supplying guns to Mexican drug cartels. That is why I am troubled by reports that the ATF allowed assault rifles to be sold to suspected straw buyers who transported them into Mexico. Two of those weapons turned up at the scene of a fatal shooting of a U.S. Border Patrol agent in December 2010, although it is unclear if either of those guns was used to kill the agent. When an Immigration and Customs Enforcement agent was killed last month, ballistics tests and a partial serial number traced the weapon used in the shooting to a north Texas smuggling ring that was under ATF observation.

How is DOJ responding to these allegations?

*Answer.* I take these allegations seriously and have referred them to the acting inspector general of DOJ for investigation. I have also made it clear to our law enforcement personnel and prosecutors working on the Southwest Border that the Department should never knowingly permit illegally trafficked firearms to cross the border.

*Question.* What safeguards do you have in place to ensure that the ATF is not letting assault weapons slip across the Southwest Border and into the hands of drug cartels?

*Answer.* Since 2006, Project Gunrunner has been ATF's comprehensive strategy to combat firearms-related violence by the cartels along the Southwest Border. It includes special agents dedicated to investigating firearms trafficking on a full-time basis and industry operations investigators responsible for conducting regulatory inspections of FFLs along the Southwest Border. Since 2006, ATF's Project Gunrunner and other investigative efforts along the Southwest Border have resulted in the seizure of thousands of firearms and more than 1 million rounds of ammunition destined for Mexico.

I have made it clear to DOJ's law enforcement agencies and prosecutors working along the Southwest Border that the Department should never knowingly permit firearms to illegally cross the border. I have also asked DOJ's Acting Inspector General to investigate the allegations concerning ATF's actions in the firearms trafficking investigation known as Operation Fast and Furious.

*Question.* ATF's 2012 budget request includes \$19 million to make Project Gunrunner's nine teams permanent. In the face of these allegations that ATF may not be implementing Project Gunrunner most effectively, what assurances can you give the Congress that more aggressive oversight of and safeguards for Project Gunrunner operations will be done to continue ensuring this funding is merited?

*Answer.* Project Gunrunner remains an important investigative strategy to combat the flow of guns to Mexican drug cartels. However, I take these allegations seriously and have made it clear to our law enforcement personnel and prosecutors working on the Southwest Border that DOJ should never knowingly permit illegally trafficked firearms to cross the border. I will determine what additional oversight actions are needed once the Acting Inspector General has completed her investigation.

#### ATF DIRECTOR

*Question.* I am concerned by reports on allegations by whistleblowers that ATF allowed known straw purchasers to buy guns from United States dealers and then transported those firearms across the border to Mexico. A thorough investigation is necessary to address these serious allegations, and Attorney General Holder moved quickly to request that OIG conduct a thorough investigation of these alleged ATF activities.

It also seems to me that this is another indication that ATF is in serious need of real leadership. ATF has not had a confirmed Director for over 5 years, which hamstringing the Bureau's ability to seek appropriate funding levels and ensure proper oversight of these complex investigations.

Do you agree that it is crucial for the Senate to hold a hearing soon on Andrew Traver, to keep the process moving on his nomination?

*Answer.* I urge prompt Senate consideration of all DOJ nominations, including the nomination of Andrew Traver to be Director of the ATF.

*Question.* Why do you believe it is important to have a confirmed Director leading the ATF? How does it impact the ATF when there is only an Acting Director?

*Answer.* In the 5 years since the Congress enacted legislation designating the ATF Director as subject to confirmation, the Senate has never confirmed a nominee to serve in this position. The confirmation of a Director would strengthen the agency's ability to carry out the tasks the Congress has assigned to it.

#### ATF LONG GUNS REPORTING

*Question.* In December 2010, ATF proposed a new rule to issue "demand letters" to require gun dealers located in States along the Southwest Border—specifically California, Arizona, New Mexico, and Texas—to report multiple sales of certain "long guns" favored by Mexican drug cartels. This rule is meant to help the ATF stem the flow of guns over border and into Mexico. ATF already collects these multiple sales reports for handguns. In 2008, they generated 300 criminal investigations connected to 25,000 illegal firearms.

What value do these multiple sale reports provide to law enforcement in pursuit of cartel gun traffickers? How would this data collection help in preventing gun trafficking?

*Answer.* The goal of the current proposal is to ensure that ATF receives multiple sale reports on a narrowly defined specific category of long guns favored by drug-trafficking organizations (DTOs) in Mexico and along the Southwest Border. These reports will help law enforcement agencies detect and disrupt firearms trafficking before the firearms are used in a violent crime, whether in the United States or in Mexico.

Multiple sales reporting for the specified rifles will help us identify those conspiring with the DTOs by trafficking firearms to Mexico. While investigating violence in Mexico, Mexican law enforcement officials have recovered thousands of certain types of rifles with regularity, suggesting that violent criminals, including drug traffickers, favor these rifles. As part of our partnership with Mexico in the fight against cartel violence, ATF has traced a significant portion of the recovered firearms. This has yielded significant intelligence, which multiple sales reporting will enable ATF to develop more fully and proactively.

The trace results have shown a short time between the first individual retail purchase and recovery, and a preponderance of first retail sales in the Southwest Bor-

der States. Thus, ATF believes that firearms traffickers who bring rifles to Mexico are targeting FFLs in the Southwest Border States as their preferred source of the rifles. ATF will use multiple sale reports of the rifles to discern patterns in the purchases of the specified rifles, which will in turn enable us to narrow the field of FFLs that the DTOs are targeting. Moreover, with the identity of the purchasers known, we can conduct investigations to determine whether the purchasers are associated with DTOs or other criminal activity and develop further investigative leads.

Multiple sale reports are entered into the ATF Firearms Tracing System (FTS) and are available to all ATF field divisions via ATF's eTrace system. Investigators review the reports daily in conjunction with firearms trace data, analyzing the data for repeat purchasers and recoveries in crimes, as well as other information that may disclose trafficking patterns. This routine practice of evaluating multiple sale reports and the leads that they generate frequently results in initiation of criminal investigations, disruption of illegal firearms trafficking, and convictions. If multiple sale reports generate no investigative leads, they will be purged after 2 years.

*Question.* Does ATF already have the authority to issue "demand letters" seeking information without requiring any further action by the Congress?

*Answer.* Yes. ATF has authority under 18 U.S.C. §923(d)(5) to issue demand letters to licensees requiring them to submit "on a form specified by the Attorney General, for periods and at the times specified in such letter, all record information required to be kept by this chapter or such lesser record information as the Attorney General in such letter may specify." ATF has used this "demand letter" authority to require FFLs to submit to ATF certain information in their required records that they otherwise are not expressly required to provide, including firearm purchase information. The nature and scope of this authority has been examined in litigation and, on each occasion, upheld in court decisions. See, e.g., *RSM v. Buckles*, 254 F.3d 61 (4th Cir. 2001); *Blaustein & Reich v. Buckles*, 365 F.3d 281 (4th Cir. 2004); *J&G Sales v. Truscott*, 473 F.3d 1043 (9th Cir. 2007).

To address the problem of illegal gun trafficking into Mexico, ATF will send a letter requesting multiple sales reports for certain rifles to FFLs in the four Southwest Border States:

- Arizona;
- California;
- New Mexico; and
- Texas.

The notice relating to multiple sales reporting for rifles is posted on the Federal Register Web site: <http://www.ofr.gov/inspection.aspx?AspxAutoDetectCookieSupport=1>. The information request will be tailored to address the threat along the Southwest Border. It only applies to firearms dealers in the four border States, because those States have a significant number of crime guns traced back to them from Mexico. The prospective reporting requirements apply only if a firearms dealer sells within 5 business days to a single individual two or more long guns having all of the following characteristics:

- semi-automatic action;
- a caliber greater than .22 (including .223/5.56 caliber); and
- the ability to accept a detachable magazine.

*Question.* Where is the White House's Office of Management and Budget (OMB) in its review process of this information collection request regarding long guns?

*Answer.* As required under the Paperwork Reduction Act, ATF published the second notice for the information collection request in the Federal Register on April 29, 2011. The purpose of this notice is to allow for an additional 30 days for public comment—during the 30 days following publication, any interested person may comment on the proposed collection of information. This proposed information collection was previously published in the Federal Register Volume 75, Number 242, page 79021 on December 17, 2010, allowing for a 60-day comment period. ATF received 12,680 comments from this collection (8,928 commenters supported the collection, and 3,752 commenters opposed the collection).

The 30-day public comment period ended on May 28. OMB is reviewing the public comments received and will determine whether the collection of information should be approved in accordance with the law.

#### FEDERAL COURTHOUSE AND JUDICIAL SECURITY

*Question.* DOJ's fiscal year 2012 budget would cut the USMS courthouse account by \$11 million. These funds make security improvements (x ray machines, prisoner movement hallways, and secured prisoner elevators) to aging infrastructure, as well as handle a growing prisoner population in Federal courthouses. The current back-



log is 150 courthouse projects costing \$120 million. Old and dated infrastructure in Federal court facilities has dangerous effects on judicial security. These problems grow worse with time as courthouses age and more facilities need immediate attention.

Judicial security is a major concern, yet the 2012 budget request designates only \$3 million to Federal courthouse security improvements. Does DOJ really believe this funding is adequate to provide security for the judiciary?

Answer. Fiscal realities dictate that difficult decisions must be made. The Full-Year Continuing Appropriations Act, 2011 (Public Law 112–10) includes a \$10 million reduction to the amount enacted in fiscal year 2010 for the USMS construction appropriation, which funds Federal courthouse security improvements. So \$10 million of the \$11 million reduction for USMS construction proposed in the fiscal year 2012 President’s budget has already been cut. USMS will continue to improve its security for the judiciary by researching and implementing new technologies and equipment, continuing our training programs with the judiciary, and providing timely information on security awareness issues.

*Question.* Are more resources needed to ensure the safety of all employees of the Federal judiciary and U.S. Attorneys? What gaps in security measures are still present?

Answer. Additional resources requested in the fiscal year 2012 President’s budget will enhance DOJ’s ability to ensure the safety of the Federal judiciary and U.S. Attorneys. The fiscal year 2012 President’s budget requests nearly \$482 million for judicial and courthouse security in the USMS’ salaries and expenses account, which is an increase of \$32 million, or 7 percent, more than the fiscal year 2010 enacted level. These resources will support USMS base operations. USMS strives to enhance the level of security for the Federal judiciary and U.S. Attorneys by researching new technologies and equipment and deploying those new technologies and equipment across the country as funding allows. USMS’s Technical Operations Group (TOG) also provides direct support to Federal courthouses and enhances judicial security by providing technical assistance (e.g., maintaining technical integrity and “sweeping” for devices). USMS constantly reviews its equipment, personnel requirements, and training procedures to stay ahead of any potential gaps in judicial and courthouse security, such as those previously identified by OIG. USMS is working within its current resources to implement and resolve OIG recommendations to the extent possible.

*Question.* Given this already substantial—and growing—backlog, why did DOJ’s request decrease funding for the USMS aimed at addressing this issue of securing Federal courthouses?

Answer. Fiscal realities dictate that difficult decisions must be made. The Full-Year Continuing Appropriations Act, 2011 (Public Law 112–10) includes a \$10 million reduction to the amount enacted in fiscal year 2010 for Federal courthouse security improvements. So \$10 million of the \$11 million reduction proposed in the fiscal year 2012 President’s budget for USMS construction has already been cut. USMS will continue to improve its security for the Judiciary by researching and implementing new technologies and equipment, continuing our training programs with the judiciary, and providing timely information on security awareness issues.

*Question.* DOJ’s inspector general issued a December 2009 report on protection of the judiciary and U.S. Attorneys that found that Federal judges, U.S. Attorneys, and Assistant U.S. Attorneys (AUSAs) were inconsistently reporting threats on a timely basis to the USMS and, more troubling, not reporting threats at all in some instances. Does DOJ continue to have concerns that the Federal judiciary and USAOs may fail to participate in security and threat training? What can be done to improve communications between USMS and their protectees to clarify the categories of security threats and coordination to ensure that reporting and response processes are in place?

Answer. USMS has improved the training materials provided to the judiciary and U.S. Attorneys to better emphasize the importance of quickly reporting threats and inappropriate communications, as well as the ramifications of not doing so. Increasing awareness and disseminating this information to the Judiciary and U.S. Attorneys has lessened concerns that they may fail to participate in security and threat training. Also, the Executive Office for United States Attorneys has provided explicit instructions to every employee in the U.S. Attorney community on how to report threats and why it is important to do so, even if the employee does not believe the threat is serious.

Over the last 12 months, USMS has increased its efforts to provide training at U.S. Attorneys’ Conferences and Judicial Conferences regarding security threats. In addition, a Memorandum of Understanding (MOU) between USMS and the Execu-

tive Office for U.S. Attorneys has been completed. This MOU delineates the responsibilities for each agency regarding the reporting of threats and threat awareness.

SOUTHWEST BORDER VIOLENCE

*Question.* I continue to be concerned that DOJ lacks sufficient resources to combat violence related to drug and gun trafficking on the Southwest Border. If the current wave of violence isn't contained, cartel-related crime will most likely expand to major metropolitan areas, including areas like Atlanta, Chicago, and even Baltimore.

Violence is caused by large, sophisticated, and vicious criminal organizations—not by isolated, individual drug traffickers. DOJ's 2012 request includes \$2 billion to support investigations and prosecutions relating to border violence.

How will DOJ deal with increased violence along the Southwest Border both this year and in 2012 when no additional funds are provided in the 2011 continuing resolution for the DEA, ATF, FBI, USMS, and their Federal, State, and local law enforcement partners to expand investigations and prosecutions?

*Answer.* Because the enacted fiscal year 2011 appropriation funded all DOJ components, except for the FBI, BOP, and Office of the Federal Detention Trustee, at the fiscal year 2010 level or below, new funding that was requested to increase and sustain our ability to address violence along the Southwest Border will not be available to us. However, DOJ will still have base resources of approximately \$1.86 billion in fiscal year 2011 to continue law enforcement, prosecutorial, and detention functions on the Southwest Border. Additionally, DOJ will continue to expand its efforts to address violence along the Southwest Border in fiscal year 2011 with funds from the border security supplemental that was enacted in August 2010, which provided \$196 million to DOJ for Southwest Border enforcement activities.

The President's fiscal year 2012 budget includes \$134.7 million to annualize the border security and other prior-year Southwest Border supplementals, including funding to sustain more than 400 positions. Program enhancements to increase the OCDETF program's Southwest Border prosecutorial activities and to provide additional capacity at DEA's El Paso Intelligence Center (EPIC) have also been requested. This funding will be an important component of DOJ's ability to continue to address the challenges posed by the Mexican drug cartels and violence along the Southwest Border.

*Question.* How concerned should communities along the border—and throughout the United States as a whole—be about cartel-related violence?

*Answer.* Other than isolated incidents, "cross-over" cartel violence from Mexico into the United States is minimal. The reason for this is two-fold. First, the United States has not witnessed the same turf battles over supply and distribution routes that are occurring in Mexico. In fact, local crime reports submitted by DEA offices located along the Southwest Border show most categories of crime decreasing from 2009 to 2010.

Second, the cartels already have enormous influence in the U.S. drug trade and control the vast majority of wholesale markets, as well as many retail markets, for drugs in the United States. To engage in violence on the U.S. side of the border would be detrimental to the cartels' business because it would invite additional scrutiny at the border and increased law enforcement attention within the United States. This does not negate the fact that cities and communities in the United States should remain vigilant against the threat of violent cartel-related crime.

*Question.* How is DOJ working with the Mexican Government to dismantle these violent cartels?

*Answer.* DOJ has engaged the Government of Mexico in a variety of ways, as discussed below, in an effort to combat drug trafficking and its associated violence—and will continue to do so. DOJ recognizes that the drug-related violence along the Southwest Border and in Mexico remains significant and the Department will need to both continue its current efforts, as well as respond to emerging drug-trafficking threats to combat these problems. Considering this, DOJ will continue to partner with the Government of Mexico and Mexican law enforcement partners in efforts to dismantle DTOs and curb drug trafficking-related violence in the hopes of achieving long-term success against the violence perpetrated by DTOs and Transnational Criminal Organizations (TCOs). In spite of ongoing challenges, DOJ is optimistic that its efforts will ultimately result in reducing violence related to drug trafficking.

The progress made against the cartels in Mexico by the Calderón administration is admirable. President Felipe Calderón has taken a strong, proactive stance against drug traffickers and the associated violence and he has shown an extraordinary commitment to address the problems of the drug cartels and police corruption. Under his leadership, DOJ's bilateral inter-agency cooperation with the Government

of Mexico has also continued to develop in a positive manner. Under the Calderón administration, DOJ has experienced unprecedented levels of cooperation and solidarity with Mexico in combating DTOs.

DOJ personnel in Mexico work closely with our counterparts in the Mexican Government and together we have made significant progress in disrupting and dismantling the cartels. The noteworthy achievements by the Government of Mexico in recent years were supported, in many cases, by the information sharing and assistance of the DEA. One example was the dismantlement of the Arturo Beltran-Leyva (ABL) cartel, which took place on December 16, 2009. Information shared between DEA, the Mexican Federal Police, and the Mexican Naval Secretariat (SEMAR) facilitated the Government of Mexico's efforts in this investigation and resulted in the apprehension of 23 individuals and four deaths, including Consolidated Priority Organization Target (CPOT) Beltran-Leyva. Subsequently, DEA's Special Operations Division (SOD), in coordination with the USMS, provided information regarding ABL second-in-command Edgar Valdez Villareal, aka "La Barbie", to DEA's Mexico City country office. This information was shared with the Government of Mexico and resulted in the arrest of La Barbie on August 30, 2010 in Mexico City. Another example of the cooperation between DEA personnel and SEMAR was an enforcement operation on November 5, 2010, which resulted in the death of CPOT Antonio Ezequiel Cardenas Guillen, aka "Tony Tormenta", in Matamoros, Tamaulipas.

The most recent example of cooperation between DOJ and the Mexican authorities was the arrest of Julian Zapata Espinoza, aka "Piolin", and three other criminal associates on February 23, 2011. Piolin has been detained by the Mexican authorities and is being investigated in connection with the murder of Immigration and Customs Enforcement (ICE) Special Agent Jaime Zapata. These are but a few examples of the outstanding coordination and cooperation being carried out between DOJ and the Government of Mexico on a daily basis.

DOJ's close relationship with the Government of Mexico is also exemplified by our joint effort to restructure the Mexican Sensitive Investigative Unit (SIU) program, led by DEA with crucial support from DOJ's Criminal Division. The SIU is composed of individuals from Mexico's Ministry for Public Security (SSP) and Office of the Attorney General (PGR). Every member has been vetted and trained by DEA and assigned to autonomous groups that are tasked with pursuing a specific Mexican cartel. The Mexican SIU plays an important role in Western Hemisphere drug enforcement efforts and they are working to increase collaboration with counterparts in Colombia through an exchange of SIU personnel.

DEA has also applied many of the lessons learned in Colombia to our efforts in Mexico, including areas such as judicial wire intercepts, extradition programs, methamphetamine trafficking, and joint targets. Additionally, DEA has participated in several joint meetings with the leadership of Colombian and Mexican law enforcement and security forces to examine the best practices which could assist the Government of Mexico in combating drug cartels. These efforts have focused on conducting complex narcotics and financial investigations, which have enhanced information-sharing protocols. Since 2007, DEA has sponsored eight Tripartite meetings between Colombia, Mexico, and the United States. These meetings have included the Mexican PGR and SSP, the Colombian National Police, the Minister of Defense of Colombia, and DEA Principals. The ninth Tripartite Meeting is tentatively scheduled for October 2011.

A key component of DOJ's efforts to address violent cartels along the Southwest Border is EPIC. EPIC is a national tactical intelligence center that supports law enforcement efforts throughout the Western Hemisphere and it is DEA's long-standing and most important intelligence sharing organization focusing on the Southwest Border. Through its 24-hour watch function, EPIC provides immediate access to participating agencies' databases to law enforcement agents, investigators, and analysts at all levels of government throughout the United States and with some foreign nations. Much of EPIC's success can be attributed to the strong partnerships forged among the more than 20 agencies represented at the Center, including representatives from foreign police organizations in Mexico and Colombia.

The Government of Mexico has three representatives permanently assigned to EPIC as Liaison Officers. The first representatives from Mexico's federal investigative organizations, SSP and PGR, were assigned to EPIC in 2007 and 2008 respectively. A third representative from the Mexican Military (SEDENA) joined EPIC in 2010. While not permitted unescorted access to the entire center, the representatives have extensive access to EPIC staff and tailored database access that permits the exchange of information and intelligence on a daily basis. The presence of the Government of Mexico representatives at EPIC has enhanced the center's capabilities to develop intelligence on criminal activities, both along the border and in Mexico, using resources of both the United States and Mexico.

Additionally, ATF has cooperated with Mexico in a variety of practical ways to combat the threat posed by the cartels. Consistent with ATF and DOJ strategies, ATF has expanded our presence in the U.S. Embassy and consulates in Mexico to assist and work side-by-side with Mexican law enforcement; expanded the use of eTrace throughout Mexico, including training more than 130 Mexican officials (as of May 6, 2011) in the use of this technology; begun the expansion of ballistic technology to increase information sharing between our governments; and developed specialized teams with Mexico addressing firearms and explosives investigations. ATF works every day with our Federal law enforcement and Mexican partners to cooperate in investigations and share information and intelligence to target the cartels responsible for drug and firearms trafficking that is at the roots of the violence.

Finally, the United States and Mexico both benefit from an excellent extradition partnership. In 2009, Mexican authorities extradited 107 individuals to the United States, including several high-ranking cartel members. This was a record number for the eighth consecutive year. In 2010, 94 individuals were extradited from Mexico to the United States. This includes the extradition of a CPOT, a lieutenant in the Sinaloa Cartel, and a former Mexican state governor.

#### DANGER PAY FOR DEA AND USMS IN MEXICO

*Question.* Violence in Mexico, targeted at law enforcement personnel, has intensified in recent years. The very real and present danger faced by United States personnel working in Mexico is evident in recent deaths of consulate employees and ICE agents in Mexico. DEA and FBI receive danger pay for their personnel in Mexico due to prior authorizations, but the USMS and ATF lack the same authorization even though they face the same risks as their DEA and FBI counterparts in Mexico.

Why does the President's budget not provide for danger pay increases to USMS and ATF personnel working in Mexico?

*Answer.* Increases associated with danger pay allowances are traditionally absorbed by a component's existing base resources. Due to the potentially fluid nature of danger pay authorities, which are established by the Secretary of State, permanent resources for danger pay authority in Mexico were not requested for USMS or the ATF in the fiscal year 2012 President's budget.

*Question.* Given the rise in violence due to the Mexican drug wars, targeted attacks against United States law enforcement, and the fact FBI and DEA have danger pay in Mexico, shouldn't the USMS and ATF receive the same sort of compensation?

*Answer.* The authority to initiate and terminate danger pay allowances rests with the Secretary of State in accordance with title 5, U.S. Code (5 U.S.C.), § 5928. The Department of State regulation implementing this authority states that "a danger pay allowance is established by the Secretary of State when, and only when, civil insurrection, civil war, terrorism or wartime conditions threaten physical harm or imminent danger to the health or well being of a majority of employees officially stationed or detailed at a post or country/area in a foreign area."

The Secretary of State's authority with regard to danger pay allowances was modified through several public laws related to DEA and FBI. These modifications do not permit the Secretary of State to deny a request by DEA or FBI to authorize a danger pay allowance for any employee of either DOJ component. Consequently, DEA and FBI employees may receive danger pay allowances in posts that are not designated danger posts by the Secretary of State. Other similarly-situated employees, particularly DOJ employees in USMS and ATF, do not receive danger pay allowances unless the Secretary of State has approved the post for such allowances.

As of March 14, 2010, the Department of State has extended equal danger pay allowances to all U.S. Government personnel serving in certain posts in Mexico, which currently mitigates the pay disparity that had previously existed between the FBI and DEA employees in those posts, and similarly situated employees from other agencies, including other DOJ components. Mexican posts for which danger pay allowances were announced on March 14, 2010, include:

- Ciudad Juarez;
- Matamoros;
- Monterrey;
- Nogales; and
- Nuevo Laredo.

However, at this time, a pay disparity still exists for DOJ personnel stationed in Mexico City and Mérida; in Mexico City, FBI and DEA employees are authorized danger pay, while ATF, the USMS and other United States Government personnel are not eligible. In Mérida, DEA employees are authorized danger pay while ATF employees and other United States Government personnel are not eligible. The De-

partment of State has not extended danger pay allowances equivalent to those authorized by the FBI and DEA to these posts in Mexico.

DOJ considers danger pay disparity to be a core compensation inequity. That is, United States Government employees serving our national interests in the same overseas locations, many times working side-by-side on critical criminal investigations and law enforcement issues, should be compensated similarly.

*Question.* When can we expect to see proposed legislation to remedy this issue from DOJ?

Answer. On April 13, 2011, the Border Security Enforcement Act of 2011 (S. 803) was introduced, which contains a provision authorizing danger pay for the USMS and ATF law enforcement personnel working in Mexico. This legislation would remedy this disparity.

AFGHANISTAN—FIGHTING NARCO-TERRORISM—DEA

*Question.* DEA plays a critical role in combating narco-terrorism by helping the Afghan Government establish drug enforcement institutions and capabilities to enforce the rule of law. This means successfully identifying, disrupting, and dismantling major DTOs that fuel the insurgency and profit from the narco-economy. Were DEA to expand its operations in Afghanistan, the focus will be on high-value targets, including members of the Taliban, who use the heroin trade to fund insurgents' attacks on U.S. military forces.

What is DEA's current role in Afghanistan? Do you expect those operations to be expanded in the future and, if so, how?

Answer. DEA supports the U.S. Ambassador's Counternarcotics (CN) Strategy in Afghanistan through close partnership with the Department of State and DOD. DEA is helping Afghanistan by training, mentoring Afghan law enforcement partners and units, as well as building a sustainable capacity within those entities to investigate, disrupt, and dismantle DTOs fueling the insurgency. DEA is also working to help establish drug enforcement institutions and capabilities to enforce the rule of law. This means working bilaterally with host nation counterparts to identify, investigate, and bring to justice the most significant drug traffickers in Afghanistan and the region. These operations disrupt and deny the insurgents' ability to derive revenue from opiate production and distribution.

In fiscal year 2010, DEA completed a significant expansion effort in Afghanistan. DEA now has 82 permanent positions assigned to Afghanistan for 2-year tours of duty, including 62 agents and 7 intelligence analysts. In addition to these positions, the Kabul Country Office (KCO) is augmented by the Foreign-Deployed Advisory and Support Teams (FASTs), which provide intensive training for the Afghans and operational support to KCO. Furthermore, the KCO is supported by three temporary duty (TDY) Special Agent pilots.

A FAST deploys to Afghanistan every 120 days. Each FAST team consists of a Group Supervisor, eight Special Agents, and one Intelligence Research Specialist. DEA's FAST teams advise, train, and mentor their Afghan Minister of Interior (MOI) counterparts in the National Interdiction Unit (NIU) of the Counter Narcotics Police—Afghanistan (CNP-A). The NIU, which currently has 538 officers, is a tactical unit capable of conducting raids, seizures, and serving Afghan search and arrest warrants in a high-threat environment, much like a U.S. Special Weapons and Tactics (SWAT) team. Furthermore, FAST teams are the enforcement arm of DEA's Drug Flow Attack Strategy and Campaign Plan in Southern Afghanistan.

In addition, DEA Special Agents advise, train, and mentor their Afghan CNP-A counterparts in the Sensitive Investigative Unit (SIU) and the Technical Investigative Unit (TIU). DEA's Afghan SIU is comprised of 85 vetted and DEA-trained officers who conduct complex drug conspiracy and high-value target (HVT) investigations. These bilateral investigations focus on national and international level DTOs. TIU includes 9 officers selected from the SIU and 200 vetted Afghan civilian polyglot translators who conduct court ordered judicial telephonic intercepts pursuant to Afghan law.

DEA's Regional Training Team (RTT) has conducted effective training of Afghan law enforcement officers in hundreds of courses. RTT has also developed a highly skilled Afghan training cadre capable of carrying out not only their own organic training programs, but also of developing their own trainers. To ensure Afghan and regional stability, effective Afghan law enforcement institutions must be in place. DEA's training programs and bilateral initiatives in Afghanistan are specifically designed to accomplish this goal.

DEA, in conjunction with other United States Government agencies and the Afghan MOI, has also developed the only Afghan MOI judicially authorized wire intercept program (JWIP) in Afghanistan, which allows the use of intercepts as evidence

in court. Afghan law enforcement counterparts are able to lawfully intercept the criminal communications of not only narcotics traffickers, but also terrorists, insurgents, kidnappers, criminal financiers, and corrupt officials. Since its inception in December 2008, the JWIP has lawfully intercepted more than 15 million telephone conversations. As of December 31, 2010, 2,135 wiretaps have been performed and used to develop bilateral investigations.

DEA is also the lead agency in the Afghan Threat Finance Cell (ATFC), which is intended to identify, disrupt, and interdict the sources of funding for insurgent and terrorist organizations operating in Afghanistan. The Department of the Treasury and DOD act as co-deputies for the cell. The ATFC Director from DEA oversees all investigative, intelligence, and administrative activities of the ATFC, while the Treasury deputy coordinates intelligence matters and the DOD co-deputy coordinates operational matters. In addition to these agencies, ATFC is comprised of U.S. and coalition partner law enforcement and military officials and conducts its investigations and initiatives jointly with Afghan law enforcement, banking, and regulatory officials. ATFC also works closely with the SIU and other Afghan vetted units to conduct these complex financial investigations.

DEA's Special Operations Division (SOD) also plays a significant role in DEA's efforts in Afghanistan. SOD has the unique capability to identify investigative links between individuals and organizations involved in criminal/insurgent activity via domestic intercepts in support of bilateral Afghan-led investigations. Information obtained through these intercepts routinely has direct implications on force protection, anti-corruption efforts, and support for Afghan rule of law, as well as disrupting the material support of the insurgency fueled by drug and weapons trafficking and money laundering activities. With the assistance of SOD, DEA Special Agents in Afghanistan and their Afghan counterparts conduct enforcement efforts against identified High Value Targets (HVTs). These HVTs provide support to the Taliban and other insurgent groups that threaten the coalition and Afghan efforts to provide the citizens of Afghanistan with a strong central government.

Currently, DEA has no plans to further expand operations in Afghanistan.

*Question.* Are there any limits on DEA operations and capabilities—funding, policy or otherwise—that may hinder DEA's ability to carry out its mission in Afghanistan?

*Answer.* DEA has approximately \$19.2 million in direct base resources for ongoing DEA efforts in Afghanistan. This funding supports 13 positions and associated operating costs, three DEA FAST teams, and three TDY pilots. The rest of DEA's permanent presence in Afghanistan, including funding for 69 positions and associated operating costs, is funded through transfers from the State Department as part of a State Department-led civilian staffing uplift in Afghanistan. Currently, the State Department has committed to providing \$50.8 million in resources for DEA's Afghanistan activities for fiscal year 2011.

DEA's success depends on the commitment, willpower, and tenacity of the Afghan Government. DEA personnel operate in conjunction with and largely under the authorities of Afghan law enforcement. In terms of policy, although there is not a formal bilateral extradition relationship between the United States and Afghanistan, DEA has successfully brought a number of significant Afghan traffickers to the United States to stand trial before U.S. courts. This was accomplished by lawful means, including extradition by Afghanistan under the 1988 U.N. Drug convention, extradition from third countries, expulsion, and voluntary travel to the United States. Working in consultation with the Department of State, we are continuing our efforts with Afghanistan to regularize our use of existing legal authorities for the return of defendants for trial in the United States.

*Question.* How are DEA's activities coordinated with those of the United States and Afghan military, as well as other United States agencies operating in Afghanistan? Is what DEA can dedicate in direct resources to Afghanistan sufficient to cover its personnel, operations, and other mission responsibilities there? Are the resources transferred to DEA from other United States Federal partners in Afghanistan sufficient to cover its personnel, operations and other mission responsibilities there? What is the impact if insufficient resources are not transferred to DEA from other agencies?

*Answer.* DEA's KCO has built successful relationships with DOD, the Central Intelligence Agency (CIA), the National Security Agency (NSA), North Atlantic Treaty Organization/International Security Assistance Force (NATO/ISAF), the State Department, DOJ, Department of Homeland Security (DHS), Office of National Drug Control Policy (ONDCP), and U.S. military, to include the 101st Airborne Division, 82nd Airborne Division, First Marine Expeditionary Force, and Combined Joint Special Operations Task Force (C-JIATF). These enhanced relationships have led to successful operations through battle space deconfliction; utilization of unmanned

aerial vehicles, quick reaction forces, close air support, and medical evacuation; development of concepts of operation; provision of logistical life support to DEA. DEA's FAST units also regularly conduct operational missions along with the U.S. military and their Afghan host country counterparts.

*Question.* Is what DEA can dedicate in direct resources to Afghanistan sufficient to cover its personnel, operations, and other mission responsibilities there?

*Answer.* DEA's base salaries and expenses budget includes approximately \$19.2 million for ongoing DEA efforts in Afghanistan. This funding supports 13 positions and their associated operating costs, three DEA FAST teams, and three pilots. The rest of DEA's expanded presence in Afghanistan, including funding for 69 positions and their associated operating costs, has been funded through transfers from the State Department as part of a State Department-led civilian staffing uplift in Afghanistan. In addition to transfer funding received from the State Department, DOD has provided significant financial, logistical and operational support for DEA's counter-narcotics mission in Afghanistan. DOD has provided training, equipment, infrastructure, and airlift to the Afghans supporting the counter-narcotics mission. Operational support provided by DOD, including air mobility support, troop support, and interagency intelligence sharing and targeting, has led to several successful investigations against identified High Value Targets. Such support from DOD has been and continues to be vital for DEA's expanded mission in Afghanistan.

*Question.* Are the resources transferred to DEA from other United States Federal partners in Afghanistan sufficient to cover its personnel, operations and other mission responsibilities there? What is the impact if insufficient resources are not transferred to DEA from other agencies?

*Answer.* DEA, as well as other DOJ entities participating in the State Department-led civilian staffing uplift in Afghanistan, do not have base funding to cover the cost of the expanded presence and mission in Afghanistan. Sufficient support for personnel and operations connected to the civilian staffing uplift must be provided by the State Department. The appropriate level of support required will vary depending upon the level of staffing required and the operational needs determined to be in support of the U.S. Afghan Strategy. In fiscal year 2010, the State Department transferred \$58.6 million to DEA for activities in Afghanistan. The State Department has committed to provide \$50.8 million to DEA in fiscal year 2011.

*Question.* DEA plays the lead role in investigating and alerting U.S. military about High Value Targets (HVT) and has identified 13 such individuals who are Taliban members or have close ties. Does DEA have the resources it needs to continue to track down these high-value targets?

*Answer.* As of April 2011, DEA had identified 17 High Value Targets (HVTs), all of whom have ties to, or are members of, the Taliban. The HVT list is constantly reviewed and updated by DEA in coordination with other U.S. Government and Coalition elements. Additionally, DEA has identified more than 30 Priority Targeted Organizations (PTOs), almost all of which have ties to the insurgency. Through focused mentoring of elite Afghan counternarcotics forces and an operational presence that works in tandem with Afghan partners, DEA's Afghanistan expansion, which was completed in fiscal year 2010 as part of the State Department-led civilian staffing uplift in Afghanistan, has been focused on the support of major investigations directed at HVTs, including members of the Taliban involved in the drug trade, and those traffickers supporting the Taliban and other insurgents. DEA's base salaries and expenses budget includes approximately \$19.2 million for ongoing DEA efforts in Afghanistan. The State Department provides resources to cover the cost of DEA's expanded presence and mission in Afghanistan. In fiscal year 2010, the State Department transferred \$58.6 million to DEA for activities in Afghanistan. The State Department has committed to provide \$50.8 million to DEA in fiscal year 2011.

#### HEALTHCARE FRAUD

*Question.* Now that the historic healthcare reform legislation is law, we must do more to combat healthcare and insurance fraud that cost U.S. citizens more than \$60 billion annually. We need to make sure law enforcement has the resources it needs to investigate these crimes and prosecute the scammers.

*What role does DOJ play in healthcare fraud investigations and prosecutions?*

*Answer.* DOJ has committed to fighting healthcare fraud as a Cabinet-level priority, both at DOJ itself and in cooperation with the Department of Health and Human Services. Through the creation of the Health Care Fraud Prevention and Enforcement Action Team (HEAT), a senior-level joint task force, we are marshaling the combined resources of both agencies in new ways to combat all facets of the problem. Our Medicare Fraud Strike Force prosecutors and agents are using billing data to target a range of fraudulent healthcare schemes, deploying appro-

appropriate criminal and civil enforcement tools in hot spots around the country. In fiscal year 2010, DOJ charged 931 defendants with criminal healthcare fraud. This was a record—an approximately 16 percent increase more than fiscal year 2009. We also convicted more than 725 healthcare fraud defendants—another record and a nearly 25 percent increase more than fiscal year 2009.

DOJ has also brought successful civil enforcement actions to protect taxpayer dollars and the integrity of government programs from fraud. In fiscal year 2010, we obtained record recoveries of more than \$2.5 billion in healthcare fraud matters pursued under the False Claims Act. In the 2-year period beginning in January 2009, DOJ has won or negotiated healthcare fraud recoveries in False Claims Act matters totaling nearly \$5.4 billion. During that same period, DOJ won or negotiated restitution, fines, forfeitures and penalties in Food, Drug & Cosmetic Act matters that exceed \$3.3 billion.

*Question.* How is DOJ carrying out new responsibilities placed on it by the Patient Protection and Affordable Care Act in terms of healthcare fraud?

*Answer.* The Patient Protection and Affordable Care Act of 2010 provides several additional statutory tools that will enhance Federal law enforcement's ability to combat healthcare fraud. Among the most significant for criminal enforcement is the directive to the U.S. Sentencing Commission to amend the Sentencing Guidelines with respect to calculating loss in healthcare fraud cases and increase the guideline ranges for healthcare fraud schemes involving losses of \$1 million or more. DOJ has worked closely with the commission to develop guideline amendments to:

- provide for tiered sentence enhancements beginning at loss amounts of \$1 million or more; and
- provide that the aggregate dollar amount of fraudulent bills submitted to the Government healthcare program constitutes prima facie evidence of the defendant's intended loss.

The commission promulgated the amendments on April 6, and the Congress has 180 days to review them. The amendments have a designated effective date of November 1, 2011, unless the Congress acts affirmatively to modify or disapprove them. On the civil side, the act made several amendments to section 3730(e)(4) of the False Claims Act (commonly known as the public disclosure bar), including authorizing the Government to "oppose" a defendant's motion to dismiss a qui tam action under this provision. The Supreme Court has held that these changes to the public disclosure bar are not retroactive, and thus DOJ has not yet had an occasion to exercise its authority to oppose a defendant's public disclosure motion.

The Affordable Care Act also makes other changes. Among other things, the act:

- Clarifies that use of the term "willfully" in the healthcare fraud and anti-kickback statutes does not require proof that the defendant knew of the existence of, or intended to violate, those specific statutes.
- Amends the anti-kickback statute to provide that a claim that includes services or items resulting from a violation of the statute would constitute a false or fraudulent claim for purposes of the False Claims Act. The act also adds the anti-kickback statute to the definition of "Federal health care offense" in 18 U.S.C. 24.
- Clarifies that the obstruction of justice statute, 18 U.S.C. 1510(b), applies to healthcare fraud subpoenas issued pursuant to 18 U.S.C. 3486.
- Confers new subpoena power on the Attorney General to demand records and access to institutions when investigating claims under the Civil Rights of Institutionalized Persons Act.
- Makes several significant changes to the law governing employee group health benefit plans subject to title I of the Employee Retirement Income Security Act of 1974 (ERISA) and multiple employer welfare arrangements (MEWAs) regulated by ERISA by prohibiting false statements in the sale or marketing of employee health benefits by MEWAs and adding certain ERISA offenses concerning the sale and marketing of employee group health benefit plans to the definition of "Federal health care offense", 18 U.S.C. 24.

DOJ has distributed guidance to our agents and prosecutors about these statutory revisions and we expect they will assist many current investigations and case development efforts.

*Question.* How is the role DOJ plays in the Health Care Fraud Prevention and Enforcement Action Team (HEAT) initiative evolving and do you expect an expansion of the HEAT initiative in coming years?

*Answer.* DOJ has expanded the number of Strike Force locations from two to nine cities since announcing our HEAT initiative in May 2009. In February, we announced the two newest locations, Chicago and Dallas. Since HEAT's inception, the Medicare Fraud Strike Force has charged more than 660 defendants with seeking to defraud Medicare of more than \$1.3 billion taxpayer dollars. In fiscal year 2010,



the Strike Force secured 240 criminal convictions—217 guilty pleas and 23 defendants convicted at trial—the most since the Strike Force was created in 2007, and both numbers almost double those from the prior fiscal year.<sup>1</sup> In the 4 years since launching the Strike Force in May 2007, prosecutors from DOJ Fraud Section and USAOs have filed criminal charges against more than 1,000 defendants for a variety of healthcare fraud offenses that collectively exceed \$2.3 billion in fraudulent billings to Medicare.

We will continue to expand to additional cities to the extent additional funding becomes available. In fiscal year 2011, DOJ's discretionary funding, which is used to support HEAT expansion, was funded at the fiscal year 2010 level, thus hampering the Department's ability to expand to additional Strike Force locations, or expand HEAT's civil fraud enforcement. The fiscal year 2012 budget contains a \$63 million increase in funding for HEAT, which would allow for expansion of DOJ's criminal and civil healthcare fraud efforts.

*Question.* DOJ's efforts to combat healthcare fraud are funded by the Health Care Fraud and Abuse Control account, administered by HHS. The fiscal year 2012 request has \$300 million for these activities. How does DOJ use these funds to stop fraud in Medicare, Medicaid, and other healthcare benefits programs?

*Answer.* In fiscal year 2012, DOJ is requesting a total of \$283.4 million to investigate and prosecute healthcare fraud. This funding request includes both mandatory and discretionary Health Care Fraud Abuse and Control (HCFAC) account funding, as well as mandatory funding provided to FBI through the Health Insurance Portability and Accountability Act. This request represents a \$63.5 million increase more than the fiscal year 2011 enacted funding level of \$219.9 million.

The fiscal year 2012 requested funding increase will allow DOJ to expand the number of Medicare Fraud Strike Force locations beyond the current nine locations. The Strike Forces are an essential tool for DOJ in addressing criminal fraud in locations where fraudulent billing is rampant. In addition to supporting an expansion of criminal enforcement efforts, the fiscal year 2012 increase will support additional civil enforcement efforts, such as addressing pharmaceutical fraud, off-label marketing, and other fraud schemes.

The requested resources will support additional attorneys, support staff, and special agents, which are essential for expanding DOJ's efforts in addressing fraud in the Medicare program. The increase in HCFAC discretionary resources has allowed for the expansion of DOJ's healthcare fraud enforcement efforts, and the additional resources requested in fiscal year 2012 will allow us to continue to expand our efforts.

#### EARMARKS BAN—CONGRESSIONAL COMMUNICATIONS

*Question.* Pursuant to Executive Order 13457, "Protecting American Taxpayers from Government Spending on Wasteful Earmarks," issued on January 29, 2008, DOJ took steps to postcongressional communications recommending that funds be committed, obligated or expended for an earmark. DOJ has on its Web site a page where such communications is supposed to be posted. The most recent communication posted on that Web page from a Member of Congress regarding earmarks is dated May 11, 2010.

Since the earmark moratorium was put in place—first by the House on November 18, 2010, and then by the Senate on February 1, 2011, how many communications has DOJ received from Federal lawmakers who appeal to the Department to fund their earmarks with available funds? Please provide the subcommittee with a list of those lawmakers along with the accompanying communication or request, whether it be via post, email, telephone, or other means of communication.

*Answer.* Since the earmark moratorium was fully put in place by the Congress, we are aware of only one communication from a Federal lawmaker regarding earmarks. As you know, Executive Order 13457 provides guidance on how agencies should interpret and execute earmarks, and requires agencies to make public within 30 days of receipt any congressional communications from Federal lawmakers or their staffs regarding earmarks. Since DOJ began implementing Executive Order 13457 in 2009, there have been a total of 23 communications from Federal lawmakers regarding earmarks; this is current as of May 9, 2011. The majority of these communications seek to clarify the intent of an earmark included in a previously enacted appropriations bill or to make technical changes, such as updating the name of the grant recipient. These communications are related to earmarks already

<sup>1</sup>The Strike Force conviction statistics are included among the overall number of defendants convicted during fiscal year 2010 cited in response to the healthcare fraud question posed earlier by Chairwoman Mikulski.

included in enacted appropriations bills, and do not request DOJ to fund or augment earmarks with other resources.

The complete and up-to-date list of congressional communications related to earmarks can be found at <http://www.justice.gov/jmd/ccre/>. This site contains the requesting Member of Congress or office, the date of the communication and a link to the communication received.

*Question.* A March 16, 2011, New York Times piece titled, “Lawmakers Find a Path Around an Earmarks Ban”, detailed that—under the earmark ban—not only have lawmakers been appealing directly to Federal agencies to push them to direct available funds to their preferred projects, but also agency officials may be responding positively to those requests, despite the Executive Order 13457. Has DOJ received requests of this type to fund Member’s pet projects and how does the Department respond to such pressure?

*Answer.* Since the earmark moratorium was implemented, we are only aware of one communication from a Federal lawmaker appealing for DOJ to direct available resources to a preferred project not otherwise funded. DOJ adheres to the principles outlined in Executive Order 13457, and executes resources only for earmarks written in the appropriations bill language. However, DOJ often works with the committees on appropriations and individual Member offices to ensure that appropriately designated earmarks are executed per the intent of the requesting member.

*Question.* Who at DOJ is responsible for updating the congressional communications Web page? Why has DOJ’s congressional correspondence Web page not been updated since May 11, 2010? In a time when the President, the Congress and the American public are calling for more oversight and accountability in how and where taxpayer dollars are spent, don’t you believe DOJ should do a better job keeping this Web page up-to-date in order to help transparency?

*Answer.* The process of keeping the congressional correspondence Web page updated involves several components and offices in DOJ. The recipient of a congressional correspondence regarding earmarks—typically one of the Department’s grant components, i.e., OJP, the Office of Community Oriented Policing Services or the Office on Violence Against Women (OVW)—forwards any correspondence they believe is subject to Executive Order 13457 to the Justice Management Division’s (JMD) budget staff. The budget staff works with JMD’s Office of General Counsel and the Assistant Attorney General for Administration to determine whether the correspondence meets the criteria established in Executive Order 13457 and gain approval to post it. If it is determined that a piece of correspondence should be posted pursuant to Executive Order 13457, budget staff removes all personally identifiable information, or PII, as appropriate and provides the redacted correspondence to the Office of the Chief Information Officer’s e-Government staff to post to DOJ’s Congressional Communications Web site. Last, JMD makes efforts to notify the recipient component and the Committees on Appropriations staffs at least 24 hours prior to the cleared correspondence going “live” on the Web site (<http://www.justice.gov/jmd/ccre/>).

DOJ understands the subcommittee’s desire for transparency and timely reporting, and we work very hard to make these types of communications public as soon as possible. Only three communications have been submitted after the May 11, 2010, correspondence was posted. We will continue to ensure that all stakeholders in this process are aware of the requirement to postcongressional communications regarding earmarks and that we are efficient in our processing and posting of such information.

*Question.* Would DOJ support a new Executive order—similar to Executive Order 13457, with the goal of seeking transparency—that would require Federal agencies to post on their Web sites a list of any meetings with registered lobbyists, a synopsis of what was solicited by those lobbyists, and the Department’s response to those lobbyists?

*Answer.* DOJ appreciates the subcommittee’s interest in increased transparency and accountability, and we always strive to uphold the tenets espoused in recent efforts to increase transparency and accountability. We defer to the administration, however, on predecisional matters regarding possible new Executive orders.

#### CURBING LAVISH SPENDING

*Question.* The previous administration exercised lavish spending at DOJ. There was one instance when the Department spent \$1.4 million to host a single conference, and another report of spending \$4 on Swedish meatballs. In the wake of such extravagant spending, I required the Justice Department to create uniform, internal guidelines on conference spending to avoid irresponsible spending.

What steps has DOJ already taken and continues taking to ensure that it is following requirements to avoid lavish spending and cost overruns so that the American people's tax dollars are not being squandered?

Answer. The Justice Management Division issued policy guidance in April 2008 on Conference Planning, Conference Cost Reporting, and Approvals to Use Non-Federal Facilities. This guidance outlines a uniform policy for all components within DOJ to follow, and sets limits on the amount that may be spent on meals and refreshments. It also provides guidance for selecting appropriate venues, appropriately handling non-Federal attendees, and reporting costs in a timely manner.

Since that guidance was written, the Assistant Attorney General for Administration issued a memorandum to DOJ's component heads in June 2008, and the Deputy Attorney General issued a similar memo in May 2009, highlighting the importance of fiscal responsibility with respect to conferences sponsored by the Department. In January 2011, the Attorney General issued a memorandum to DOJ's Component Heads that re-emphasized the need for fiscal responsibility particularly with respect to conferences and training. The following summarizes the relevant parts of these memoranda:

- Conference locations are to be selected based on business need and minimization of travel and other costs.
- Lavish or resort-type locations and accommodations should be avoided. Component heads are required to approve in writing if the facility gives the appearance of being lavish or is a resort location, and this Component Head approval cannot be delegated.
- Components must restrict the number of people traveling to conferences to the minimum necessary to accomplish the official purpose.
- Components must ensure the selected lodging location is within per diem rates.
- Meals should be provided on an infrequent basis and only as a working meal when necessary to accomplish the purpose of the event. Refreshments should be kept to an absolute minimum. Grantmaking organizations should instruct grant recipients that DOJ grant funding is not be used for lavish food, refreshments, or entertainment purposes.
- Components must ensure that travelers are aware of their responsibility to reduce per diem when meals are provided at the conference.
- Components must ensure that reporting of costs for all non-Federal facility events and conferences are submitted by Component Heads no later than 45 days following the close of each fiscal quarter.

In addition, my office submits to the inspector general a report of conferences held by DOJ. The report is submitted on a quarterly basis. OIG is concluding an audit of DOJ's fiscal year 2008 and 2009 conference reports. DOJ will address any areas of weakness identified by this internal review.

By establishing a uniform policy across DOJ, regularly reminding senior management and staff of the importance of fiscal prudence, and reviewing past performance, the Department is able to assure the American people that their money is being well spent.

*Question.* American families are tightening their belts in this tough economy. What are other ways that DOJ can tighten its belt and clean up waste, fraud, and abuse?

Answer. Within DOJ, we regularly examine opportunities for savings and efficiencies as part of our day-to-day operations. In addition, DOJ instituted a formal review of savings and efficiencies in fiscal year 2010. On July 22, 2010, the Attorney General established a Department Advisory Council for Savings and Efficiencies (SAVE Council). The SAVE Council develops and reviews Department-wide savings and efficiency initiatives and monitors component progress to ensure positive results for cost savings, cost avoidance, and efficiencies. In addition, the SAVE Council has provided a framework to identify and implement best practices for saving taxpayer dollars, realizing efficiencies, and monitoring our savings progress. The SAVE Council institutionalizes DOJ's pilot savings efforts that began in June 2009. Through fiscal year 2010 the SAVE Council has directed more than \$39 million in savings throughout DOJ in areas ranging from double-sided printing to consolidated procurements which have leveraged the Department's buying power.

The fiscal year 2012 budget funds DOJ's critical missions in a fiscally responsible manner. Resources requests for the Department's highest-priority programs have been offset by administrative and programmatic savings. In total, \$1.9 billion in program and management offsets and rescissions were identified so as to lower our bottom line without impacting mission or capability.

These offsets include administrative efficiencies and savings, task force and space consolidations, a reduction of DOJ's physical footprint, component-specific program savings, IT project management efficiencies, relocation efficiencies, reductions to less

effective grant programs, elimination of earmarks, and rescissions of prior year balances.

Beyond DOJ internal operations, the Attorney General chairs the Financial Fraud Enforcement Task Force, an interagency task force established by Executive order of the President to combat financial crime and fraud. It is the broadest coalition ever brought to bear in confronting fraud. The mission of the Task Force is to improve efforts across the Government and with State and local partners to investigate and prosecute financial fraud, recover proceeds for victims, and address discrimination in the lending and financial markets.

DOJ will use all of the enforcement tools at our disposal to combat financial crime and fraud in all its forms, including mortgage fraud, securities and investment fraud, and procurement fraud, and to stop fraudsters who would attempt to take advantage of our efforts at economic recovery.

The Congress' financial support of our criminal and civil enforcement is critical to protecting the American taxpayer's hard earned money. Moreover, the amount of taxpayer money restored to the United States Treasury through our criminal and civil enforcement efforts far exceeds what we spend to recover that money.

#### PRISONS—THOMPSON PRISON FACILITY

*Question.* The 2012 budget request has \$67 million for the Federal Prison System to get up and running the Thomson Correctional Center in Illinois, which assumes that the Congress will be able to provide \$170 million this year to buy the facility. Under the continuing resolution, buying Thomson is in jeopardy due to the rapidly dwindling availability of funds.

I support our Federal investigators and prosecutors who are so very successful. But this means Federal prison inmate population grows exponentially. In fact, growth in that population has far outpaced growth in prison capacity and reached grave proportions.

What are DOJ's plans for the immediate future—to relieve dangerous overcrowding now—not only this year but beyond?

Answer. At the same time, DOJ has proposed sentencing reforms that will slow the rate of Federal inmate prison population growth in the long-term. The legislative proposals continue to provide inmates with incentives for good behavior as well as to participate in programming proven to reduce the likelihood of recidivism. The proposed sentencing reforms include an increase in the amount of credit an inmate can earn for good behavior and a new sentence reduction credit, which inmates can earn for participation in education and vocational programming.

*Question.* How would purchasing the Thomson facility—or any other prison facility—address BOP crowding?

Answer. In general, increasing capacity—either by acquiring and renovating existing structures, expanding existing facilities where infrastructure permits, or constructing new prison facilities—reduces crowding. In particular, the Thomson acquisition will allow BOP to add high-security administrative bed space expeditiously and at a lower cost than construction of a new administrative/high-security facility.

Acquisition and full activation of the Thomson facility by fiscal year 2012 would reduce inmate crowding in BOP high-security institutions from the current 51 percent to 38 percent over rated capacity. Without the acquisition, crowding in BOP high-security institutions would increase to 63 percent over rated capacity. The Thomson facility is unique and suitable for the BOP's needs since it was built specifically to house maximum security inmates. The number of Administrative Maximum (ADX) beds available in BOP facilities has not increased since ADX Florence was activated in 1994, when the total inmate population was 95,000. Thus, in addition to housing general population high-security inmates, USP Thomson would also be used by the BOP to house a number of inmates with ADX custody, other inmates who have proven to be difficult to manage and inmates who are designated for Special Management Units (SMUs). Conditions of confinement for SMU inmates are more restrictive than for general population inmates. The Thomson facility would provide the physical structure and security to appropriately house inmates who are designated for SMU placement. The Thomson facility has 1,600 cells, of which the BOP anticipates using 400 for ADX type inmates (400 single-bunked beds). The remaining cells would yield 1,500 beds at high-security rated capacity. However, the actual number of SMU inmates housed there would probably be much higher given the current and projected crowding levels.

*Question.* The fiscal year 2011 budget request had \$170 million to purchase Thomson, but now I'm told the facility could cost upwards of \$220 million, simply to buy. What is the actual cost to buy the Thomson facility and on what is this cost based? What factors have contributed to the cost difference between what DOJ estimated

in the fiscal year 2010 budget request to purchase the Thomson facility and what subsequent appraisals done by both the State of Illinois and the Federal Government now estimate the cost to be? Will the increase in cost to buy the facility increase the amount needed to make the necessary renovations and outfitting for it to meet Federal requirements for an ADX USP?

Answer. The cost to buy the Thomson Correctional Center has been negotiated by DOJ and State of Illinois representatives; \$165 million has been agreed upon. The negotiated cost is based on current professional appraisals ordered by the U.S. Government.

The main factor contributing to the cost difference is that the fiscal year 2011 budget request was an estimate based on previous construction cost rather than current professional appraisals of the actual value of the Thomson facility, which were not available at the time the budget was developed.

No, the cost identified in the fiscal year 2011 budget included the estimated cost to purchase Thomson, an estimate of the amount necessary to renovate it and also an estimate to begin activation of the facility. An increase in the purchase price will not cause the cost of renovations or the activation to increase or decrease. However, the length of time that Thomson remains inactive may impact renovation costs. We note that BOP has a critical need for penitentiary prison capacity and this is an extremely cost advantageous means of acquiring that critical bedspace.

#### PRISONS—OVERCROWDING

*Question.* I understand that DOJ would house at the Thomson facility—once purchased, renovated, and outfitted as an ADX USP—high-security inmates, some Supermax inmates, and inmates designated for Special Management Units (SMU). I am also concerned about the current crowding rate at high-security institutions. By the end of 2012, DOJ expects 227,000 inmates incarcerated in BOP institutions nationwide.

What is the current crowding rate in Federal prisons?

Answer. As of April 21, 2011, BOP institutions are operating at 37 percent over rated capacity system-wide and at the following rates by security level:

- High security, 51 percent over rated capacity;
- Medium security, 42 percent over rated capacity;
- Low security, 39 percent over rated capacity; and
- Secure female, 47 percent over rated capacity.

*Question.* What does it mean for staff and inmate safety?

Answer. BOP faces continued challenges as the inmate population continues to grow. BOP facilities are operating at 37 percent above rated capacity system-wide. More than 174,000 Federal inmates (81.5 percent of the total inmate population) are imprisoned in BOP-operated facilities intended to house about 127,000 inmates. The remainder, more than 39,500 inmates (18.5 percent), are in contract care, including privately operated secure facilities, facilities managed by State and local governments, residential re-entry centers, or home confinement.

A 2006 BOP study found that an increase in prison crowding (the percentage of inmates above rated capacity) could lead to increases in serious assaults. The study concluded that an increase of one inmate in a Federal prison's inmate-to-custody staff ratio increases the prison's annual serious assault rate, by 4.5 per 5,000 inmates. The fiscal year 2012 President's budget supports both system capacity expansion and staffing increases, which are important tools in addressing crowding and providing safer environments for both staff and inmates.

Further, it is critical to acquire high-security bed space, such as that potentially provided by Thomson, to alleviate crowding at the upper security levels (42 percent and 51 percent over rated capacity at medium- and high-security facilities, respectively). The combined inmate population confined in medium- and high-security facilities represents nearly 40 percent of the entire inmate population. At the higher-security levels, more than 70 percent of the inmates are drug offenders, weapons offenders, or robbers, another 10 percent have been convicted of murder, aggravated assault, or kidnapping, and one-half of the inmates in this population have sentences in excess of 12 years. Furthermore, nearly 70 percent of high-security inmates have been sanctioned for violating prison rules, and more than 90 percent have a history of violence. One out of every six inmates at high-security institutions are gang affiliated. There are much higher incidences of serious assaults by inmates on staff at medium- and high-security institutions than at the lower-security level facilities.

*Question.* Can you help the subcommittee understand the impact that would be made on this problem by having the additional bed space at Thomson or other prisons you have ready for activation or may want to purchase?

Answer. Currently, more than 174,000 Federal inmates are in facilities operated by BOP, and these facilities have a rated capacity of only about 127,000 beds. Acquiring an existing higher-security institution would be the quickest and most economical means to add bed space. The Thomson facility would add 1,600 cells for SMU and ADX inmates, thereby freeing up high-security bed space that is now being used at existing institutions for these type inmates. Acquisition and full activation of the Thomson facility by fiscal year 2012 is expected to reduce inmate crowding in BOP high-security institutions from the current 51 percent to 38 percent over rated capacity.

There are no other high-security facilities under construction. However, BOP has three prisons (Federal Correctional Institution [FCI] Mendota, California; FCI Berlin, New Hampshire; and Secure Female FCI Aliceville, Alabama) for which construction has already been completed or will be completed in fiscal year 2012. Construction is complete at FCI Mendota and FCI Berlin, and construction at the Secure Female FCI Aliceville is scheduled for completion in November 2011. FCI Mendota and FCI Berlin facilities will each add 1,152 male medium-security and 128 minimum-security work camp beds to capacity. These facilities currently remain unopened because funds are needed to begin or continue the activation process. When operational funding is received, the Secure Female FCI Aliceville will add 1,792 beds for female inmates. Together, these three newly constructed prisons total more than 4,350 additional prison beds which could be utilized to ease high levels of inmate overcrowding in BOP institutions if activation funding is provided as requested in the fiscal year 2012 President's budget.

*Question.* Why does DOJ's budget request include no additional funding for new prison construction projects or to purchase existing prison facilities in fiscal year 2012? Does DOJ anticipate including such funding in its requests for fiscal year 2013 and beyond? What level of prisons do you anticipate will be shovel ready come 2012 and beyond, how long will it take to build and get those facilities online, and how will those facilities alleviate prison overcrowding?

Answer. While the fiscal year 2012 President's budget does not include new construction funds for BOP, nearly \$185 million is requested to continue or begin five new prison activations. In total, these prisons will add more than 7,500 prison beds to the Federal Prison System from fiscal year 2010 through fiscal year 2012. Further, the administration proposed legislative changes to increase the amount of sentence-reducing credits that inmates can earn for good behavior. This is the right thing to do. It will also help address prison population growth and potentially alleviate crowding in the long term.

For fiscal year 2013 and beyond, DOJ will continue to review, analyze and make recommendations on BOP's budget requirements.

BOP has seven partially funded projects in the site and planning phase that require additional funding to move forward to award a construction contract. Two of the proposed projects are to construct medium security FCIs and five are to construct high-security USPs. Exhibit O, Status of Construction, in the fiscal year 2012 President's budget request for buildings and facilities gives additional information on these projects.

By the end of fiscal year 2018, when all of these planned institutions could be fully activated, pending future funding availability, inmate crowding is projected to be 55 percent at medium-security and 14 percent at high-security levels (this estimate includes the proposed capacity for Thomson). However, without Thomson and the five USPs above, the BOP estimates high-security crowding would increase to 61 percent over rated capacity.

#### PRISONS—UNDERSTAFFING

*Question.* Understaffing of prisons puts prison guards and inmates at great risk. The number of correctional guards who work in Federal prisons, however, is failing to keep pace with this tremendous growth in the prison inmate population.

The Federal Prison System is currently staffed at an 89 percent level, as opposed to 95 percent staff levels in the mid-1990s. BOP says the minimum staffing level for maintaining safety and security should not be less than 90 percent. The current BOP inmate-to-staff ratio is 4.8 inmates to 1 staff member, versus the 1997 inmate-to-staff ratio of 3.6 to 1.

The President's 2012 request for BOP provides funding to hire an additional 1,800 correctional staff, including 823 correctional officers, in BOP facilities. Will this address the shortfall in staffing?

Answer. The fiscal year 2012 President's request supports a critical need to increase 1,200 staff at existing Federal prisons and requests additional positions for

the activation of three new prisons. If the fiscal year 2012 President's request is enacted, BOP estimates it would provide staffing at 90 percent of the authorized level.

*Question.* If the Congress fully funds the President's request so that BOP may hire new correctional staff, would this conflict with the Attorney General's DOJ-wide hiring freeze? Or would the Attorney General have to implement an exception for BOP to hire new correctional staff?

*Answer.* DOJ has not yet determined if the fiscal year 2011 hiring freeze will be extended to fiscal year 2012. However, if the fiscal year 2012 President's request were fully funded for BOP and a DOJ-wide hiring freeze was in place, then BOP would seek an exception from the Attorney General to hire new correctional staff.

*Question.* There have been numerous assaults on prison guards, including an incident at a BOP facility when an inmate stabbed an officer seven times. What steps are you taking to protect officers in BOP facilities?

*Answer.* BOP employs many management techniques to prevent and suppress inmate violence. BOP has enhanced its population management strategies in a variety of areas, including an improved inmate classification/designation system, more targeted training of staff, intelligence gathering, gang management, controlled movements, pre-emptive lockdowns, and proactive interventions to prevent violence and other serious misconduct.

Beginning in fiscal year 2008, BOP began operating SMUs, targeting inmates who have proven to be violent or confrontational, resistant to authority, and disrespectful of institution rules. Designation to a SMU is considered when an inmate's behavior poses a threat to the safe and secure operation of BOP facilities.

Improvements have also been made in the architectural design of new facilities, and a variety of security technologies (e.g., enhanced video cameras, improved body alarms, stab-resistant vests, more sophisticated perimeter detection systems, etc.) are now available. All of these changes and new technologies have helped staff to monitor and supervise the growing number of inmates. Further, recent President's budgets, including the fiscal year 2011 and fiscal year 2012 requests, have supported staffing increases at existing institutions. Increasing staff in Federal prisons improves the inmate-to-staff ratio, which results in better supervision and enhanced prison security.

#### STATE AND LOCAL GRANTS MANAGEMENT

*Question.* DOJ awards billions of dollars in State and local law enforcement grants each year. This year, we expect it to administer up to \$3 billion in grants alone. We must make sure OJP, the COPS office, and OVW have tools to get grants out the door and monitor how those funds are spent.

Now that the Congress has a moratorium on earmarks and States and communities are facing budget cuts, do you expect dramatic increases in grant applications for State and local programs?

*Answer.* DOJ has already experienced a significant increase in inquiries, visits, and other requests for information from organizations that have traditionally received earmarks. It is expected that this increased interest will be reflected in the number of grant applications received.

*Question.* What is DOJ doing to improve accountability of taxpayer dollars when processing and awarding grants?

*Answer.* Proper grants management is one of DOJ's highest priorities, and we are fully committed to ensuring that the grants process is transparent, fair, and managed in a manner that avoids waste, fraud, and abuse.

Accounting for taxpayer dollars and overall grants management have been greatly enhanced through the establishment of DOJ-wide Grants Management Challenges Workgroup. This workgroup, created in February 2010, is an interagency initiative established by the Office of the Associate Attorney General. Led by the Deputy Associate Attorney General and consisting of representatives from COPS, OJP, and OVW, the workgroup meets every 2 weeks to share information and develop consistent practices and procedures in a wide variety of grant administration and management areas, including application review and award procedures, monitoring guidelines, high-risk grantee criteria, and the expeditious handling of OIG grantee audits. Additionally, the three components are sharing monitoring plans that will better position each component to target those grantees who pose the greatest compliance risk. In recent testimony, the OIG praised the efforts of this workgroup in improving numerous areas of grant management, and thus improving the accountability of taxpayer dollars.

During the last 2 years, OJP, OVW, and COPS have also:

—Developed and provided DOJ-wide training, including ongoing training, to all American Recovery and Reinvestment Act recipients. Issued our tribal grants

under a single Coordinated Tribal Assistance Solicitation in 2010 and 2011, and coordinated the application review and award process. Developed joint training and technical assistance programs for tribal grantees. Developed and implemented procedures for managing a DOJ-wide high-risk grantee designation program to ensure that all high-risk grantees are treated consistently across DOJ. Developed a DOJ-coordinated monitoring plan to allow for maximum joint on-site monitoring visits by DOJ grant program offices and OJP's Office of the Chief Financial Officer.

We also continue to seek ways to collaboratively develop tools for effective grants management. For example, we are currently developing a DOJ-wide, online financial training tool for DOJ grantees. We also have, in draft form, a guide for grantees that outlines OJP's expectations for how grantees are to report on their accomplishments that are funded by Federal dollars.

*Question.* Will you need additional resources to administer grants and ensure no waste, fraud, or abuse in your grantmaking?

*Answer.* Yes. DOJ requires additional resources to fulfill its commitment to perform quality and complete grant monitoring across its grant programs to detect and prevent waste, fraud, or abuse.

For OVW, the fiscal year 2012 President's budget request includes an additional \$7 million and 32 positions. The funding requested is needed to properly administer OVW's grants workload and to transfer certain costs previously distributed to grant programs to management and administration.

For COPS, the fiscal year 2012 President's budget request includes an additional \$2.9 million and 22 positions. The funding requested will allow the COPS office to have the staff and the systems in place to handle additional hiring grant awards and to continue to efficiently monitor, maintain, and close grants awarded in previous fiscal years.

For OJP, the fiscal year 2012 President's budget request includes \$39.8 million and 28 additional positions to meet responsibilities for OJP's programs. Some of the newly requested staff will support the implementation of the Adam Walsh Act, while others are essential to fulfill OJP's stewardship obligations. Just more than \$8 million of OJP's S&E request would go to strengthen OJP's Grants Management System (GMS). GMS—through which practitioners file grants with OJP—is the backbone of the OJP's grants delivery system; but it is aging, and needless hours are spent compensating for the inefficiencies of this system.

---

#### QUESTIONS SUBMITTED BY SENATOR DIANNE FEINSTEIN

##### EXTRADITIONS FROM MEXICO (DRUG CAUCUS)

*Question.* As Chairman of the Senate Caucus on International Narcotics Control, I am convinced that there is no greater threat to Mexican drug traffickers than extradition to the United States.

Ninety-four drug trafficking organization leaders were extradited from Mexico to the United States in 2010 and 107 were extradited in 2009. This is up from a mere 12 in 2000. Defendants who have been extradited to the United States often receive significant sentences.

Over the past year, the Mexican Government has been particularly successful in arresting high-profile drug traffickers. Fourteen top kingpins were arrested or killed in 2010 and a total of 28,216 Mexican nationals and 342 foreigners were arrested in the country on drug-related charges.

As the Mexican Government increases its enforcement efforts, what is the Department of Justice (DOJ) doing to ensure that extraditions continue to expeditiously take place?

*Answer.* DOJ shares your assessment that extradition is an important and powerful means of bringing drug traffickers and other criminals to justice, particularly as Mexico undergoes the reform of its own criminal justice system. To ensure that extraditions continue to take place expeditiously, this point is reiterated at every meeting with our counterparts at every level of the Mexican Government. Extradition is a vital piece of our comprehensive strategy to dismantle drug trafficking organizations.

The Criminal Division's Office of International Affairs (OIA) and its Attaché's Office in Mexico City have primary responsibility for submitting requests for extradition to Mexico and tracking the progress of extraditions of fugitives that are wanted for prosecution at both the State and Federal levels. With funding from the 2010 Border Security appropriations bill, DOJ increased OIA's Mexico/Central American team to 16 trial attorneys and eight paralegals and added another attaché to the



United States Embassy in Mexico—the only post to which two OIA attorneys are assigned—to support our increasing law enforcement cooperation with Mexico.

Moreover, Mexican officials, working closely with the U.S. Marshals Service (USMS) and the Federal Bureau of Investigation (FBI), have used their authority under their immigration laws to remove hundreds of U.S. citizen fugitives who can be repatriated more expeditiously through deportation, as opposed to extradition.

In addition, USMS, Drug Enforcement Administration (DEA), and FBI have increased their efforts to assist Mexico in locating fugitives wanted in Mexico. In 2003, USMS established an office in Mexico City, which has been expanded from 2 to 5 inspectors; and added 10 additional positions at our Embassy and consulates, which are being staffed now. Moreover, the work of our permanent USMS staff assigned to Mexico is frequently supplemented by temporary duty officers and the 50-person USMS Mexico Investigative Liaison program, which focuses on fugitives cases with Mexico and along our Southwest Border.

In light of our increased successes and the increased volume of our work, the U.S.-Mexico Fugitive Working Group meets twice yearly to review pending cases, address systemic problems, and work toward improved procedures and practices. This working group is comprised of representatives from OIA, USMS, FBI, the Department of State, and their Mexican counterparts.

The results of this increasing cooperation have been significant. As you note, Mexico extradited 94 fugitives in 2010 (of these 94, 42 were wanted for drug trafficking offenses, while the remaining fugitives were wanted mostly for violent or sexual assault offenses, such as murder, rape, and physical or sexual child abuse), compared to only 12 in 2000. As of April 2011, the number of extraditions from Mexico for 2011 is on track to meet or exceed that number.

*Question.* Are extraditions keeping up with the pace of high-profile arrests in Mexico?

*Answer.* Extraditions from Mexico to the United States have improved significantly over the last few years. In the past 2 years, Mexico has extradited 201 fugitives to the United States, making Mexico one of the United States' most active extradition partners. Among those extradited are several high-value fugitives, including some associated with notorious Mexican drug trafficking organizations, such as the gulf, Arellano Felix, and Sinaloa cartels. Some of the most notable since the beginning of 2009 include:

- February 2009 extradition of Miguel Angel Caro-Quintero, who led the family drug organization after the arrest of his brother Rafael Caro-Quintero (who was complicit in the kidnapping, torture, and murder of DEA Special Agent Enrique Camarena);
- January 2010 extradition of Jesus Navarro Montes, charged with the 2008 murder of Customs and Border Protection Agent Luis Aguillar and with drug conspiracy;
- February 2010 extradition of Sinaloa cartel leader and DEA fugitive Vicente Zambada-Niebla (son of Ismael Zambada-Garcia);
- March 2010 extradition of Oscar Arriola Marquez, a designated Foreign Narcotics Kingpin;
- April 2010 extradition of Juan Jose Quintero Payan, former head of the Juarez cartel, who had been in Mexican custody since 1999;
- May 2010 extradition of Mario Villanueva Madrid, former Governor of Quintana Roo and alleged abettor of the Juarez cartel, on drug, money laundering, and bribery charges;
- June 2010 extradition of Pedro Bermudez Suaza, a.k.a. “El Arquitecto”, who orchestrated the smuggling of cocaine from Medellin, Colombia, to Mexico;
- January 2011 extradition of Sinaloa Cartel leader and DEA fugitive and Consolidated Priority Organization Target (CPOT) Oscar Nava Valencia, a.k.a. “El Lobo”; and
- March 2011 extradition of CPOT Esteban Rodriguez Olivera.

Extradition of high-profile fugitives, however, depends significantly on the ability of Mexican authorities to first locate and arrest them. (In the extradition context, those initial arrests are referred to as “provisional arrests” pending extradition.) The location and arrest of high-profile fugitives can be very challenging and dangerous. USMS, FBI, and other U.S. law enforcement agencies provide critical intelligence and technical support to their Mexican counterparts in these efforts by developing and sharing information on fugitives' whereabouts.

However, once fugitives are arrested, we find that the extradition process in Mexico can be lengthy, litigious, and often formalistic. In some cases, it can take several years before a fugitive exhausts all of his or her appellate rights and is extradited to the United States. In other cases, extradition principles akin to our double jeopardy restrictions can limit or complicate Mexico's ability to extradite major figures

who are also charged in Mexico. Thus, we expect that continuing to pursue the extradition of significant cartel targets from Mexico will be a resource-intensive endeavor for our staff in OIA and the Federal prosecutors with whom they work. At the same time, DOJ will continue its work—at both leadership and staff levels—to work with our Mexican counterparts to expedite and streamline the extradition process when possible.

---

QUESTION SUBMITTED BY SENATOR BEN NELSON

CUTS TO STATE AND LOCAL ASSISTANCE

*Question.* As I mentioned during the March 10, 2011 hearing, I believe we need to work together to exercise serious spending restraint in the current fiscal climate. We all know we have to cut back. In reviewing the Department of Justice's (DOJ) fiscal year 2012 budget request, State, local, and tribal assistance programs seem to take a particularly significant cut while other areas of your budget see increases. Specifically, these cuts impact programs such as Regional Information Sharing Systems, a multi-state, multi-jurisdictional program responsible for many law enforcement successes in Nebraska and across the country. As the fiscal year 2012 budget and appropriations process proceeds I hope to work with your Department to identify meaningful cuts while prioritizing those programs that are most relevant to DOJ's core missions.

It appears there will be a serious discussion this year to cut total domestic discretionary funding back to fiscal year 2008 levels. Perhaps that will not happen in fiscal year 2012, but rather fiscal year 2013, as suggested by the President's fiscal commission. As you know, that would mean a nearly 15 percent cut to DOJ.

My question is, if you had to get back to 2008 levels, where would you cut specifically? And what practical effect would those cuts have on DOJ and your mission?

*Answer.* At the fiscal year 2008 funding level, DOJ would be cut to a level that would have serious consequences for the American public. For 2011, DOJ's discretionary budget is \$26.9 billion. In 2008, the discretionary budget was \$23 billion. DOJ would need to cut \$3.9 billion from the 2011 full-year continuing resolution level if funding is reduced to 2008 levels.

This shortfall is further intensified when compared to DOJ's true operational requirements for 2012, which reflect compulsory cost increases associated with maintaining the prisons and detention systems and safeguarding resources to perform our national security responsibilities. DOJ would be forced to cover mandatory prison and detention costs at the expense of other critical law enforcement and prosecutorial priorities.

Currently, there are approximately 63,000 detainees in Federal custody awaiting sentencing, which is 11 percent higher than the 2008 population. Without the additional resources provided to the Office of the Federal Detention Trustee since 2008, DOJ would be unable to pay for mandatory detention costs and would be forced to turn away additional detainees remanded to Federal custody.

Because DOJ's total budget is nearly 60 percent salaries and benefits, with the other portion largely consumed by "mandatory" prison and detention costs, as well as fixed costs such as rent and utilities, the Department will lose staff if funded at the 2008 levels. This would impact national security, and traditional law enforcement and litigating missions. DOJ's ability to respond to continuously evolving threats and emergencies—such as the Deepwater Horizon oil spill and the Tucson, Arizona shootings—would be severely threatened.

Reductions to the national security workforce could leave our Nation vulnerable to attacks in a time when we are experiencing a spike in national security incidents. New intelligence analysts would be eliminated, hindering domain management, collection management, HUMINT collection, tactical intelligence, and intelligence production and dissemination capabilities.

Funding reductions would also result in the elimination of hundreds of counterintelligence and counterterrorism agents.

Simply put, fewer agents mean fewer investigations of national security threats, drug trafficking, cyber intrusions, child pornography, human trafficking, financial scams, and a host of other crimes under the jurisdiction of the Federal Government. Fewer attorneys mean fewer prosecutions for criminal offenses. Finally, DOJ would be forced to reduce grants to our State, local, and tribal law enforcement partners. For example, the COPS hiring program, which places more cops on the beat in local jurisdictions to tackle violent crime, would be reduced and fewer officers would be funded. This would impact the ability of many law enforcement agencies in Congressional Districts across the country to provide safe streets and communities.

## QUESTIONS SUBMITTED BY SENATOR MARK PRYOR

## PROBLEM-SOLVING COURTS

*Question.* Can you describe your commitment to ensuring that problem solving courts remain strong and effective?

*Answer.* The Office of Justice Programs (OJP) has funded drug courts since 1995. The President's fiscal year 2012 budget proposes to consolidate the Mentally Ill Offender Act and Drug Court programs into a new Problem Solving Courts program that will provide greater flexibility in using these funds. The fiscal year 2012 budget request for the consolidated program equals the fiscal year 2010 enacted level for the two separate programs.

OJP has made a total of 2,609 drug court awards to 1,853 different drug court programs. In the last 2 fiscal years, OJP has been able to fund more than 50 percent of all eligible applicants, which represents a very high funding rate. Of the drug court programs funded under OJP, 95 percent are still operational today.

In fiscal year 2010, OJP placed a priority on building the capacity of existing drug courts to increase participation rates. The statutory provisions of the JAG formula allow State, local, and tribal jurisdictions to support drug courts. The Problem Solving Courts program will allow State, local, and tribal grantees increased flexibility to fund evidence-based strategies that address unique local needs and expand collaboration among drug courts, mental health, and substance abuse providers. Programs funded under the new Problem Solving Courts initiative may serve as models to other courts nationwide.

*Question.* Are the limited resources that are available for problem solving courts adequate for handling the huge case loads these courts have?

*Answer.* The priorities of the Problem Solving Courts program are to:

- support States, tribes, and localities by funding evidence-based grants generated around best practices;
- merge funding streams with funding from other Federal agencies to maximize resources;
- target problem solving court resources for offenders and practices, which research has shown to most improve public safety and reduce recidivism; and
- explore how to bring problem solving principles to scale in general jurisdiction courts.

The recently completed Multi Adult Drug Court Evaluation overseen by the National Institute of Justice has provided insight regarding how offenders benefit from the program. In fiscal year 2011, resources are targeted to those drug courts that aim to serve offenders with both high criminogenic risks and substance abuse treatment needs.

In fiscal year 2010, OJP began collaborating with the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment to administer the Enhancing Adult Drug Court Services, Coordination, and Treatment grant program. The purpose of this streamlined funding program is to enhance drug court capacity by inviting jurisdictions to submit one application to fund a comprehensive strategy to address both criminal justice and substance abuse treatment services. This interagency funding partnership maximizes Federal resources at the State, local, and tribal levels.

The proposed Problem Solving Court program would provide even greater flexibility in meeting jurisdictional needs based on their own resource gaps and will assist OJP in exploring with jurisdictions innovative ways to bring problem solving principles to work in general jurisdiction courts. While this program, with limited funding, will not be able to fully meet the needs of the jurisdictions, it can help court systems determine how to address these challenges in a systematic fashion.

*Question.* It's my understanding that in fiscal year 2010, the Methamphetamine Enforcement and Cleanup program received \$40.3 million through the Community Oriented Policing Services (COPS) program. Of this \$40.3 million, \$10 million was transferred to the Drug Enforcement Administration (DEA) to administer these meth cleanup funds. The \$10 million has been spent and no funds are currently available through this program to assist with the cleanup of meth sites. The President's fiscal year 2012 budget request zeros out methamphetamine enforcement and cleanup.

I am concerned that without this dedicated funding from the DEA that local law enforcement agencies will not be able to bear the cost of cleanup. This could result in openly contaminated meth labs not being cleaned up.

Can you provide additional details about how this program has worked in the past and why the choice was made to cut funding that would support the cleanup of these meth sites?

Answer. For a number of years, DEA received funding through the COPS program to administer various contracts across the country that provide specialists to remove the hazardous waste and chemicals found at illegal drug laboratories. The contractors that perform the actual cleanup services have been properly trained and licensed and are required to submit background security applications to determine their suitability to conduct this type of sensitive work.

The entire Federal Government is being asked to tighten its belt and make tough decisions on programs that can be consolidated, reduced, or eliminated. The elimination of the funding for the COPS methamphetamine enforcement and cleanup program represents just one of the difficult decisions DOJ had to make in the formulation of the 2012 budget.

DEA will continue to clean up the labs it investigates with funding from the Assets Forfeiture Fund. In addition, State and local agencies have a few options for dealing with these labs. One option is for them to use Byrne Justice Assistance Grant funding from the Bureau of Justice Assistance for lab cleanup. Also, several States (Alabama, Kentucky, Illinois, Indiana, and Oklahoma) already have container programs set up that allow State and local law enforcement officers to expedite the removal of seized chemicals from clandestine laboratory sites to temporary secure containers pending removal by a contractor. These programs lower the cost of clean-up. DEA is willing to provide technical assistance to any other States that want to implement the container program.

*Question.* Do you have concerns that a lack of funding for local law enforcement agencies could lead to an increase in the number of openly contaminated meth labs that are not cleaned up?

Answer. DOJ understands it will be a challenge for the States to address this new responsibility, and we will provide all of the assistance we can. DEA has a clandestine lab training facility at its Academy in Quantico, Virginia. At this facility, DEA trains Federal, State, local, and foreign law enforcement officials on the latest techniques in clandestine laboratory detection, enforcement, and safety. In fiscal year 2010, the Clandestine Laboratory Training Unit conducted training for a total of 1,306 State and local law enforcement officers.

In addition, State and local agencies have a few options for dealing with these labs. One option is for them to use Byrne Justice Assistance Grant funding from the Bureau of Justice Assistance for lab cleanup. Also, several States (Alabama, Kentucky, Illinois, Indiana, and Oklahoma) already have container programs set up that allow State and local law enforcement officers to expedite the removal of seized chemicals from clandestine laboratory sites to temporary secure containers pending removal by a contractor. These programs lower the cost of clean-up. DEA is willing to provide technical assistance to any other States that want to implement the container program.

*Question.* How will DOJ work with local law enforcement agencies in the future to ensure that our citizens are properly protected from such dangers?

Answer. DEA continues to work collaboratively with State and local law enforcement agencies to protect citizens from drug threats. Further, State and local agencies have a few options for dealing with clandestine lab cleanup. One option is for them to use Byrne Justice Assistance Grant funding from the Bureau of Justice Assistance. Also, several States (Alabama, Kentucky, Illinois, Indiana, and Oklahoma) already have container programs set up that allow State and local law enforcement officers to expedite the removal of seized chemicals from clandestine laboratory sites to temporary secure containers pending removal by a contractor. These programs lower the cost of clean-up. DEA is willing to provide technical assistance to any other State that wants to implement the container program.

DEA also has a clandestine laboratory training facility at the DEA Academy in Quantico, Virginia. At this facility, DEA trains Federal, State, local, and foreign law enforcement officials on the latest techniques in clandestine laboratory detection, enforcement, and safety. In fiscal year 2010, the Clandestine Laboratory Training Unit conducted training for a total of 1,306 State and local law enforcement officers. DEA will continue some State and local lab training during fiscal year 2011 with funding available from COPS. In addition to the clandestine lab training facility at Quantico, DEA has two Tactical schools and one Site Safety School scheduled in 2011. Tactical training is designed for officers involved in clandestine laboratory raids but who have limited training and experience, and Site Safety School is designed to certify attendees as Clandestine Laboratory Site Safety Officers. Advanced assessment and investigative techniques are also taught at this school.

## QUESTIONS SUBMITTED BY SENATOR KAY BAILEY HUTCHISON

## THE PRESIDENT'S ANNOUNCEMENT ON GUANTÁNAMO DETAINEE TRIALS

*Question.* Attorney General Holder, in July 2009, the Guantánamo Task Force established a system for the evaluation and referral of detainees for prosecution. In November 2009, you announced that the 9/11 hijackers were going to be tried in civilian courts, while the U.S.S. *Cole* suspect was going to be tried via military commission. Monday's announcement expressly referred to a military commission trial for the U.S.S. *Cole* bomber.

What change does this really signal other than an end to the delay, if the person who was slated for military commission trial 18 months ago is merely going to be tried via military commission?

*Answer.* The administration, working on a bipartisan basis with Members of Congress, successfully enacted key reforms to the military commission process in the Military Commissions Act of 2009. These reforms included a ban on the use of statements obtained as a result of cruel, inhuman or degrading treatment, and a better system for handling classified information, among others. As a result of these reforms, the Department believes the military commissions can deliver fair trials and just verdicts and will meet constitutional standards. That said, it is essential that the government have the ability to use both military commissions and Federal courts as tools to keep this country safe.

*Question.* Second, does this mean the 9/11 conspirators, including Khalid Sheikh Mohammed, are going to be tried via military commission as the Bush administration was in the process of doing before the Obama administration reversed course and cancelled those proceedings in January 2009?

*Answer.* Since these questions were presented, and after the passage of the fiscal year 2011 National Defense Authorization Act, a final decision was made to try several alleged 9/11 conspirators, including Khalid Sheikh Mohammed, by military commission.

*Question.* Have any decisions been made regarding the 9/11 conspirators trial venue—for example, has a final decision been made that they will not be tried in a U.S. civilian court in New York or elsewhere?

*Answer.* Since these questions were presented, and after the passage of the fiscal year 2011 National Defense Authorization Act, a final decision was made to try several alleged 9/11 conspirators, including Khalid Sheikh Mohammed, by military commission.

*Question.* You told the House Appropriations Committee last spring that the Khalid Sheikh Mohammed decision was coming soon. We are now at more than a year later. How long will the families of the victims of 9/11 have to wait before you decide where to try these terrorists? This isn't a new question, and it wasn't a surprise when you took the job of Attorney General. It will be 10 years in September, so how long?

*Answer.* Since these questions were presented, and after the passage of the fiscal year 2011 National Defense Authorization Act, a final decision was made to try several alleged 9/11 conspirators, including Khalid Sheikh Mohammed, by military commission.

## FORT HOOD SHOOTINGS

*Question.* The Senate Homeland Security and Government Affairs Committee issued a report on the events surrounding the shootings at Fort Hood that took place in November 2009. The report criticizes the Federal bureau of investigation (FBI), citing that FBI field offices failed to recognize warning signs that Nidal Malik Hasan was a threat. The report also concluded that FBI had sufficient information to detect that he was a "ticking time bomb" who had been radicalized to violent Islamist extremism, but failed to understand and act on it. FBI has been provided significant funding since 9/11 to bolster its intelligence program which includes the hiring and professionalizing its intelligence analyst workforce. According to the report, FBI failed to use its analysts in this situation.

Next month FBI Director Mueller will appear before this subcommittee and I plan to take this matter up with him, but I'm interested in hearing from you too.

What is your response to this report and what has DOJ, and FBI, done in response to the Fort Hood shootings?

*Answer.* During the internal FBI review undertaken immediately after the attack at Fort Hood, FBI identified several of the areas of concern outlined in the report and, as noted in the report, has implemented changes to its systems and processes to address them. FBI will review each of the report's recommendations and adopt them, as appropriate.

While concluding that FBI's transformation to an intelligence-driven organization remains a work in progress, the report recognizes FBI's substantial progress and many successes, led by Joint Terrorism Task Forces (JTTFs), in disrupting terrorist plots by homegrown extremists.

In addition, at the request of FBI Director Mueller, Judge William H. Webster is conducting an independent, outside review of FBI's actions with respect to Fort Hood. Judge Webster and his team are evaluating the corrective actions taken to determine whether they are sufficient and whether there are other policy or procedural steps FBI should consider to improve its ability to detect and prevent such threats in the future.

DOJ supports FBI in its efforts to evaluate the Fort Hood shooting and to take the appropriate actions in response to the findings of the reviews that have been conducted in its wake.

*Question.* What changes have you made to ensure this tragedy does not happen again?

*Answer.* Immediately after the tragedy, FBI Director Robert Mueller ordered a preliminary review of FBI's actions, as well as any relevant policies and procedures that may have guided FBI's actions before the shooting. In addition, the Director asked for recommendations as to what changes should be made as a result of that review.

On December 8, 2009, Director Mueller asked Judge William H. Webster to conduct a more comprehensive, independent review of FBI policies, practices, and actions. That review is currently underway. The goal of these reviews is to look at both the actions of individuals involved and the systems in place at the time of the tragic events at Fort Hood, and to ensure that investigators have the tools they need to effectively carry out their responsibilities in today's evolving threat environment. The paramount concern in this process is to make sure that the systems and policies that are in place support public safety and national security.

In addition, as a result of the internal review, FBI identified four areas for immediate adjustment and improvement.

#### *Protocols With the Department of Defense (DOD)*

Although information-sharing has dramatically improved since September 2001, there is still room for improvement in certain areas, especially given the changing nature of the terrorist threat, and the need to constantly recalibrate approaches and responses. Working with DOD, FBI has formalized a process for centrally notifying DOD of FBI investigations involving military personnel. This should streamline information-sharing and coordination between FBI and all components of DOD, where appropriate, and as permitted by law. Improved processes for exchanging information will help ensure that FBI task force officers, agents, and analysts have all available information to further their investigations.

#### *Additional Levels of Review*

FBI determined that intelligence collected in connection with certain threats—particularly those that affect multiple equities inside and outside the FBI—should have a supplemental layer of review at the headquarters level. This redundancy in the review process will limit the risk of human error by bringing a broader perspective to the review. In this way, FBI should have a better institutional understanding of such threats.

#### *Technological Improvements*

During the course of the internal review, FBI identified information technology improvements that should be made to its systems. Those improvements, which are being engineered, should strengthen FBI agents' and analysts' ability to sift through information by automatically showing certain connections that are critical to uncovering threats.

#### *Training for Members of JTTFs*

FBI increased training for members of JTTFs to better ensure JTTF members know how to maximize access to all available information and to best utilize existing tools to identify and link critical information. Specifically, JTTF Task Force Officer (TFO) training consists of three components:

- Orientation and operations training;
- Database training;
- and Computer-based training.

Training addressing legal restrictions that govern the retention and dissemination of information was also expanded and strengthened.

The JTTF TFO Orientation and Operations Course (JTOOC) was established prior to Fort Hood and has continued to evolve as training is evaluated to ensure the best

possible instruction is provided to TFOs. JTOOC is now a 5-day course designed to develop a basic familiarization with counterterrorism investigations for all TFOs assigned to JTTFs. JTOOC classes are designed around a notional counterterrorism case to facilitate discussion and participant interaction.

In fiscal year 2010, in response to the initial Fort Hood findings, the FBI Counterterrorism Division (CTD) mandated that JTTF members receive hands-on training on key FBI databases and systems. Database training is now required for all JTTF members including special agents, TFOs, Intelligence Analysts and other personnel assigned to JTTFs who have access to systems and conduct investigative work.

FBI provides computer-based training to its employees via the FBI Virtual Academy system. CTD has identified 12 specific Virtual Academy training modules as the baseline level of training for JTTF personnel. All personnel assigned to a JTTF or working counterterrorism matters are required to complete these baseline training modules.

#### ICE AGENT SHOOTING IN MEXICO

*Question.* General Holder, as stated earlier, on February 15, U.S. Immigration and Customs Enforcement (ICE) agent Jaime Zapata was murdered, and ICE agent Victor Avila was wounded in an attack in Northern Mexico. The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) traced the murder weapon, where it was linked to a sale in Dallas and three men were arrested in connection with the sale of the weapon used in this incident.

In response to the shootings, DOJ created a joint task force to investigate the shootings where FBI is the lead agency.

What can you tell us about the investigative efforts of this task force since this tragic incident in Mexico?

*Answer.* Upon notification of the attack against the ICE agents, FBI immediately organized a multi-agency task force located in Washington, DC, with a multi-United States Federal agency Command Post (CP) at the United States Embassy in Mexico. The task force and CP communicate daily regarding all facets of the investigation. Additionally, numerous FBI field offices have organized multi-agency efforts to assist in the investigation (Dallas, Houston, Las Vegas, Miami, Phoenix, and San Antonio to name a few). Through their Mexican liaison contacts, CP members have gathered significant information and evidence regarding the perpetrators and accomplices of the ICE attack. Two of the alleged perpetrators have been transported to the United States; those two and two others (a total of four) have been indicted on multiple charges. The United States Government has presented the Government of Mexico with the necessary documentation to transport two other alleged perpetrators, including the leader of 1 of the 2 teams that attacked Agents Zapata and Avila. As of now, 5 of the 8 individuals identified as perpetrators are in custody, either in Mexico or the United States.

Mexican law enforcement officials are conducting a parallel investigation into this incident. The Mexican Government and its agencies have an "open door" for all United States requests for access to evidence, interviews, and support to our Embassy personnel in conducting this investigation. Members of the Embassy staff meet regularly with Mexican counterparts to ensure necessary information is shared.

*Question.* Are Mexican law enforcement authorities cooperating and/or assisting in this investigation?

*Answer.* Mexican law enforcement officials are conducting a parallel investigation into this incident. The Mexican Government and its agencies have an "open door" for all United States requests for access to evidence, interviews, and support to our Embassy personnel in conducting this investigation. Members of the Embassy staff meet regularly with Mexican counterparts to ensure necessary information is shared.

*Question.* Are discussions taking place to have the perpetrators extradited to the United States for prosecution of this crime?

*Answer.* Yes, such discussions are taking place. The DOJ prosecution team, consisting of two prosecutors from the U.S. Attorney's Office in the District of Columbia and two prosecutors from DOJ's Criminal Division, has been working virtually around the clock both here in Washington and on the ground in Mexico since the tragic murder of Agent Zapada. United States prosecutors are in close contact with the Mexican office of the Attorney General (PGR) to discuss progress in the case, and DOJ officials at the highest levels have reached out to the Mexican Attorney General and other PGR officials to discuss the need to have the perpetrators extradited to the United States for prosecution. Our goal is to bring all of those involved in the murder of Agent Zapada to justice in the United States.

## ATF'S NATIONAL INTEGRATED BALLISTICS IMAGING NETWORK (NIBIN)

*Question.* ATF's budget cuts NIBIN (N-eye-bin) by nearly 50 percent, crippling State and local law enforcement efforts investigating violent gun crimes. NIBIN has received unequivocal support across multiple venues and national and international law enforcement organizations. The President's own national Southwest Border Counterdrug and Violence Strategy calls for upgrading and modernizing ballistics imaging technology. General Holder, you and President Obama have publicly stated support for upgrading NIBIN and committed to data sharing along the Southwest Border with Mexico.

Explain this proposed cut to a tool critical in solving violent gun crime and investigating violent crime along the Southwest Border and in Mexico?

*Answer.* The NIBIN program has supported DOJ's nationwide efforts to investigate and prosecute gun-related crime. However, the entire Federal Government is being asked to tighten its belt and make tough decisions on programs that can be consolidated, reduced, or eliminated. The reduction of funding for ATF's NIBIN program represents just one of the difficult decisions DOJ had to make in the formulation of the 2012 budget. ATF will work to minimize the impact to operations, both along the Southwest Border and throughout the United States, as ATF scales back the NIBIN program.

*Question.* State and local law enforcement have devoted significant time and effort in building up the NIBIN database and the program is a force multiplier for more than 200 NIBIN partners. Under this budget, more than 120 NIBIN sites will be shut down.

If 120 sites are shut down, how and where will these jurisdictions have access to the ballistics information they need to fight gun crime?

Isn't that creating a huge void in the system?

*Answer.* Where feasible, ATF will consider relocating equipment in a regional manner, so that State and local participants can still have access to NIBIN equipment and databases. If there is significant interest from State and local agencies to maintain the program, ATF may consider implementing a user fee or cost-sharing proposal to ensure widespread access is available. State and local agencies will also be able to submit evidence to an ATF laboratory for analysis and correlation, as capacity permits.

*Question.* How will this affect the day-to-day operations of law enforcement officer investigating a gun crime?

*Answer.* Minimizing the impact to day-to-day operations will be one of the foremost goals as ATF scales back the NIBIN program. Law enforcement officers without access to a NIBIN system can still submit ballistics evidence to ATF laboratories, as capacity permits. Additionally, through regionalization, the NIBIN program will concentrate its efforts in high crime and high gun trafficking areas. It is important to note that the ability of law enforcement officers to trace recovered firearms will not be affected by the cuts to the NIBIN program.

## ATF'S NIBIN—HOUSTON

*Question.* In 2009 in my home State of Texas, the Houston Police Department Crime Lab Division used this technology to link firearms evidence in 12 different investigations involving members of the La Tercera Crips (LTC) gang over a 10-month period. The use of NIBIN and its underlying technology resulted in the arrest of eight gang members. To supplement a portion of the cut to NIBIN, the request proposes a "user fee". Details of the "fee" are not clear but it would clearly be a new cost to already cash-strapped State and local law enforcement agencies.

How would this user fee work?

*Answer.* The user fee or cost-sharing arrangement is still under development and is not currently available; however, DOJ is aware of the tight fiscal environment under which State and local partners are operating. Any user fee or cost sharing proposed will be developed based on factors that are fair and appropriate to the actual costs of operating the program and its use by partners. The proposal will also have to go through the traditional development process for regulations, including a public comment period.

*Question.* Would State and local law enforcement be required to pay for access to the NIBIN database?

*Answer.* If sufficient demand exists for the system and a fee or cost-sharing arrangement is implemented, then State and local law enforcement would be asked to pay for access. The cost sharing would be applied toward the maintenance and software upgrade costs that are needed for the technology currently in use.

*Question.* What is the rationale behind shutting down more than one-half of this program?



*Answer.* The entire Federal Government is being asked to tighten its belt and make tough decisions on programs that can be consolidated, reduced, or eliminated. The reduction of funding for ATF's NIBIN program represents just one of the difficult decisions DOJ had to make in the formulation of the 2012 budget. ATF will work to minimize the impact to operations, both along the Southwest Border and throughout the United States, as ATF scales back the NIBIN program. ATF will reduce underutilized sites and reorganize the remaining sites to focus on higher-impact locations (such as the Southwest Border), allowing a smaller NIBIN program to invest in newer technology while reducing existing maintenance costs for many of the sites that have older, costlier technology.

*Question.* The Washington Post reported on January 31 that the initial proposal from Office of Management and Budget (OMB) was to drastically cut the operations of ATF. I'm gratified to see that DOJ successfully argued to restore most of the cuts proposed by the White House, but I remain concerned about the cut to NIBIN. Reducing funding to this ballistics tracing program by \$10 million, almost cutting it in half, seems like a dangerous cut that will leave State and local law enforcement agencies without an important tool to catch violent criminals. We hear from DOJ and DHS about how critical the need is to stop gun crimes in the United States and the flow of guns to Mexico and other areas.

Will a new strategy for enforcing gun laws be proposed if this cut is enacted?

*Answer.* While the NIBIN system provides a useful tool in combating violent crime and enforcing the Nations firearms laws, ATF uses a variety of intelligence led enforcement initiatives to enforce firearms laws. The intelligence for these enforcement efforts comes from a number of sources, most notably crime gun trace data accessible through ATF's eTrace system. The eTrace system is separate from the NIBIN system and the proposed cut will not hamper ATF's ability to focus its enforcement efforts through the use of crime gun trace data. Regionalizing the NIBIN systems will help to ensure that the high crime and high gun trafficking areas will still have systems available for them to enter their evidence and test exhibits. The capability will still be available, if not locally then through the ATF laboratories (as capacity permits).

*Question.* Does the Mexican Government participate in NIBIN?

*Answer.* ATF is currently working with the Government of Mexico to implement a NIBIN system. The Government of Mexico has NIBIN equipment in their country and is currently working with ATF to establish an MOU in order to share ballistic data internationally. ATF and the United States Government have been working with the Government of Mexico to come to agreement on the sharing of ballistic data between the two countries.

#### LAW ENFORCEMENT WIRELESS COMMUNICATIONS (LEWC) 2

*Question.* The fiscal year 2012 request for the LEWC account is \$103 million, which keeps the older, legacy systems running. Last year, DOJ requested more than \$200 million, which would buy roughly \$100 million in new radios and network equipment. When we send agents from FBI, the Drug Enforcement Administration (DEA), ATF, and the U.S. Marshals Service (USMS) to catch violent criminals, we give them the tools they need to do their job, like a gun, vehicle, computer, and radio. Some agents believe the radio is the most important tool they have. There is a growing concern that Mexican drug cartels and sophisticated crime organizations have better communications equipment than the agents we send to track them down and bring them to justice.

Would you comment on why the request simply sustains this account instead of improving it?

*Answer.* For fiscal year 2012, DOJ's Integrated Wireless Network (IWN) will absorb a reduction of \$105 million in the President's budget. The fiscal year 2012 President's budget assumed a fiscal year 2011 level of more than \$200 million; however, less than \$100 million was enacted. This will require DOJ to re-evaluate our strategy going forward. During fiscal year 2011 and fiscal year 2012, the Department will focus most of its resources on advancing ongoing strategic deployments rather than on significant new deployments. This will allow sufficient time to further detail a re-plan of the program capitalizing on establishing baseline capabilities in an expedited manner that meet Federal security and radio spectrum usage mandates, using FBI's existing system as a platform for consolidation where possible. DOJ is currently working on re-evaluating best practices, including other cost-effective technology, to ensure a flexible deployment strategy that can take advantage of new technologies when they become available.

*Question.* Do you believe that law enforcement radios are an issue of agent safety?

Answer. Yes, law enforcement radios are an issue of agent safety. Within the DOJ's four law enforcement components—FBI, DEA, USMS, and ATF—tactical communications using radios are critical for coordination and performance of operations by teams involved in hostage rescue, high-risk arrests, investigations, surveillance, national events, incident response, and major disasters/incidents, to name just a few. More than 20,000 law enforcement officers operating in urban, rural, and suburban areas nationwide communicate with individuals within their respective groups, with other groups, and with on-scene and off-scene incident command and control.

The land mobile radio infrastructure is a vital communications link used by DOJ law enforcement officers to conduct mission-critical work, and it provides device-to-device, one-to-many instantaneous “off network” communications.

*Question.* What effect will this fiscal year 2012 request have on law enforcement?

Answer. For fiscal year 2012, DOJ's IWN will absorb a reduction of \$105 million in the President's budget. During fiscal year 2011 and fiscal year 2012, DOJ will focus most of its resources on advancing ongoing strategic deployments and upgrading legacy network capabilities rather than on significant new deployments. This will allow sufficient time to further detail a re-plan of the program capitalizing on establishing baseline capabilities in an expedited manner that meet Federal security and radio spectrum usage mandates, using FBI's existing system as a platform for consolidation where possible.

*Question.* How will it affect operations along the Southwest Border?

Answer. Fortunately, the Southwest Border is one of the geographic areas that are already underway and funded with prior year monies and, therefore, we do not expect the reduction to impact Southwest Border operations. Specifically, the infrastructure in some of the divisions along the Southwest Border is being upgraded to meet the narrow-banding and current security requirements, to refresh circuits/equipment where necessary, and to add capacity to the upgraded FBI system to allow the other components (DEA and ATF only as USMS is already using the FBI's system) to utilize the shared system and decommission their own individual systems, as appropriate. In addition, subscribers (radios) will be upgraded or replaced in order to ensure that they are capable of working on the upgraded infrastructure.

#### EFFECTS OF FISCAL YEAR 2010 LEVELS ON FBI

*Question.* Although this hearing is about the fiscal year 2012 budget request, this subcommittee is also currently negotiating the fiscal year 2011 budget. There has been much talk of not reducing DOD and Homeland Security budgets, but no mention of DOJ in these discussions. FBI, DEA, USMS, and ATF have protected us against more than any non-DOD agencies combined. This subcommittee is committed to protect national security. Specifically, we have heard that DEA could be on the verge of instituting furloughs and FBI will be facing deficits of more than \$200 million if left to operate at fiscal year 2010 funding levels.

Is this true, and how will this affect this country's national security?

Answer. We appreciate Senator Hutchison's recognition of the fact that DOJ's roles and responsibilities are varied and critical to the security and safety of our homeland and the American people. DOJ—including FBI, DEA, USMS, and ATF—not only performs a key role in preventing terrorism and promoting the Nation's security, but also has a central role in combating violent crime in the Nation and maintaining safe communities for Americans. The fiscal year 2011 enacted appropriation funded FBI's current services requirements and there is not a \$200 million shortfall. With the exception of FBI, all DOJ law enforcement components are funded at less than fiscal year 2010 levels, including DEA. While DEA does not plan to institute a furlough, it will need to find savings through attrition, nonpersonnel reductions, and administrative efficiencies. Overall, DOJ intends to sustain its core national security and law enforcement functions with the fiscal year 2011 appropriation. However, even though the budget is essentially held flat for our law enforcement agencies, the cost of doing business-as-usual is higher this year as a result of requirements to support increased health premiums, retirement contributions, rent and move expenses and second-year costs associated with new staff appropriated in last year's budget. Funding to support these “mandatory” expenses will have to come from management and administrative efficiencies and possibly scaled-back operations. DOJ will strive to ensure minimal disruption to core national security, law enforcement, and public safety initiatives.

*Question.* Can agents be furloughed or is there a prioritization of personnel in all of the enforcement agencies?

Answer. Agents can be furloughed. DOJ would take into account the safety of human life or protection of property when making decisions about furloughing staff. However, DOJ does not anticipate furloughing any staff in fiscal year 2011.

*Question.* How does this affect the fiscal year 2012 budget that we see before us today?

Answer. Because the fiscal year 2012 President's budget request was developed using the fiscal year 2011 current rate as the starting point, the fiscal year 2011 enacted budget has little impact on the fiscal year 2012 request. The fiscal year 2012 budget request includes mandatory increases and annualizations needed to maintain current investigative and litigating efforts.

#### COST OF GUANTÁNAMO BAY DETAINEE TRIALS

*Question.* On March 7, 2011, the President signed an Executive order allowing detainees held at Guantánamo Bay to again be tried via military commissions. In his statement, the President also referred that all aspects of the judicial system, including trial in Article III courts, would be used.

While DOJ did not include funding for Guantánamo detainee trials in the fiscal year 2012 budget, the fiscal year 2011 President's budget included a planning estimate of \$72.8 million for the Department's anticipated increases in security and prosecutorial costs associated with high-security threat trials.

The requested resources would finance a variety of standard functions, including transportation and prisoner production, prisoner housing, security, litigation, and other costs associated with high-threat trials. More than one-half of the request was anticipated for security and resources requirements related to USMS, including armored vehicles, communications and security equipment, personnel, training, funds for overtime and travel, and interpreters to communicate with the defendants.

The security requirements associated with trying these suspects are higher than most other trials, which increase the cost. For example, for these trials, DOJ anticipates needing additional funding to harden cell blocks, courthouse facilities, and housing facilities, to increase its electronic surveillance capability, and to provide increased protection for judges and prosecutors.

How many detainee trials do you anticipate holding in Article III courts? When will a decision be made?

Answer. As long as the restrictions passed by the Congress in early 2012 are in place, we will not be bringing any Guantánamo Bay detainees to the United States for trial in Federal court, so any detainees at Guantánamo who are to be prosecuted will be prosecuted in military commissions. Individuals tried by military commission must be afforded the full range of legal protections established by the Congress in the Military Commissions Act of 2009, including the right to counsel; the presumption of innocence; the right against self-incrimination; the right to present evidence, cross-examine the Government's witnesses, and compel the attendance of witnesses in their defense; the right to exculpatory evidence; the right to suppression of evidence that is not probative or that will result in unfair prejudice; protection against double jeopardy; the right to an appeal; and others.

*Question.* What is the estimated cost for 1 year to hold criminal trials of detainees? How much of that is needed for security?

Answer. The costs of conducting criminal trials are dependent on a range of factors (location, number of detainees, etc.). The Department's fiscal year 2011 budget request included a planning estimate of \$72.8 million for the anticipated increases in security and prosecutorial costs associated with high-security threat trials. Of the amount requested, \$22.8 million was related to security. The enacted fiscal year 2011 and fiscal year 2012 budgets do not include new resources for the Department to pursue or assist in trials associated with detainees currently held at Guantánamo Bay Naval Station. In addition, current law prohibits the Department of Defense (DOD) from using funds to transfer Guantánamo detainees to the United States and places unwise and unwarranted restrictions on the Department's ability to prosecute Guantánamo detainees in Article III courts.

*Question.* What steps are you taking to ensure that communities will be safe if these detainees are transferred to the United States?

Answer. As long as the restrictions passed by the Congress in early 2012 are in place, we will not be bringing any Guantánamo Bay detainees to the United States for trial in Federal court; thus any detainees at Guantánamo who are to be prosecuted will be prosecuted in military commissions. Individuals tried by military commission must be afforded the full range of legal protections established by the Congress in the Military Commissions Act of 2009, including the right to counsel; the presumption of innocence; the right against self-incrimination; the right to present evidence, cross-examine the government's witnesses, and compel the attend-

ance of witnesses in their defense; the right to exculpatory evidence; the right to suppression of evidence that is not probative or that will result in unfair prejudice; protection against double jeopardy; the right to an appeal; and others.

*Question.* USMS' fiscal year 2012 request includes a \$5 million offset in perimeter security and I understand this will be reduction to the Southern District of New York. Considering this administration planned to try Khalid Sheikh Mohammed and other 9/11 terrorists in New York, why would you suggest cutting courthouse security?

*Answer.* The fiscal year 2012 budget proposed a \$5 million offset to reduce perimeter security that USMS provides on a nonreimbursable basis for Federal complexes in the Southern District of New York. The proposed offset was not included in the fiscal year 2012 enacted budget. However, this offset would not have reduced security for the facilities, but would merely have transferred responsibility for perimeter security for the Southern District of New York complexes back to the Federal Protective Service (FPS). FPS charges Federal agencies fees to provide comprehensive coverage of Federal facilities and their occupants, including contract protective security officer and perimeter security services. The proposed offset amount funds non-personnel costs (i.e., contract guards and security equipment). This security cost adjustment would not have negatively affected USMS's ability to accomplish its strategic and performance goals as perimeter security for Federal buildings is not a core USMS mission. USMS does not use Deputy Marshals for perimeter security and there is no USMS payroll expended for this program.

Further, as long as the restrictions passed by the Congress in early 2012 are in place, we cannot bring any Guantánamo Bay detainee, including Khalid Sheikh Mohammed and the other alleged co-conspirators of the September 11, 2001 terrorist attacks, to the United States for trial in Federal court, and any detainees at Guantánamo who are to be prosecuted will be prosecuted in military commissions.

*Question.* Should this subcommittee expect to see a supplemental request for resources to hold criminal trials?

*Answer.* Because current law prohibits DOD from using funds to transfer Guantánamo detainees to the United States. I am not aware of any plan by the Administration to request supplemental resources to conduct criminal trials of the Guantánamo detainees in the United States.

#### LAW ENFORCEMENT WIRELESS (LEWC)—TECHNICAL

*Question.* One of the more interesting sections of DOJ's budget request is the suspension of the Law Enforcement Wireless program, with the exception of operational and maintenance funds to sustain it. It is my understanding, based on the most recent LEWC quarterly reports, this program is being run efficiently.

What has fundamentally changed between the last quarterly report and the fiscal year 2012 budget request to?

*Answer.* The LEWC program is being run efficiently and the budget reduction does not intend to reflect otherwise. As stated in the response to the question above, the reduction was the result of the austere budget environment—DOJ remains committed to the program and will continue to support it going forward. Budget permitting, we will continue to revamp our wireless strategy and explore new technologies and innovative solutions to cut near- and long-term costs. For instance, we are considering utilizing some State law enforcement systems while adding capacity, encryption, and narrow banding to our legacy systems.

*Question.* The administration continues to make public remarks about a Government-wide commitment to full and open competition and recently issued an OMB directive that agencies be technology neutral in their procurement. Yet, it is my understanding that the component agencies within DOJ have continued to sole-source numerous contracts for new radios in order to avoid competition. Further, any open contracts have included requirements for one vendor's proprietary technology.

What specific steps has DOJ and its law enforcement components taken to promote such competition with respect to its procurements related to the LEWC program and its communications upgrades?

*Answer.* DOJ's contract for systems integration in support of the IWN implementation was awarded to General Dynamics using full and open competitive procedures. General Dynamics then performed a competitive procurement for the infrastructure equipment for use within the National Capital Region and Harris Corporation was chosen as the supplier. Contracts to maintain legacy systems, narrowband legacy systems, and purchase radios have been awarded using other than full and open competitive procedures when justified in accordance with the Federal Acquisition Regulation (FAR).

DOJ's mission demands leave it no choice, but to purchase Motorola radios unless:

- State and local entities upgrade to narrowband, P25 compliant systems;
- DOJ has funding sufficient to compete a replacement of its legacy systems;
- Other suppliers of multi-band radios license the proprietary functionality from Motorola; or
- The P25 standard is complete across all required aspects of the land mobile radio (LMR) infrastructure.

In those cases where Motorola equipment is needed for mission-critical reasons, DOJ has based its requirements on information gathered during market research and publicized its intentions. In other words, DOJ has been open and up front regarding its needs, publicizing them as required by the FAR, and no vendor has protested DOJ's actions. DOJ's plan has been and will continue to utilize full and open competition based on P25 standards and in accordance with the administration's memo to be technology neutral. However, until such time as any of the above-identified circumstances become reality, DOJ must continue to rely on equipment compatible with legacy systems.

*Question.* Does that not contradict the administration's memo to be technology neutral?

*Answer.* DOJ's contract for systems integration in support of the IWN implementation was awarded to General Dynamics using full and open competitive procedures. General Dynamics then performed a competitive procurement for the infrastructure equipment for use within the National Capital Region and Harris Corporation was chosen as the supplier. Contracts to maintain legacy systems, narrowband legacy systems, and purchase radios have been awarded using other than full and open competitive procedures when justified in accordance with FAR.

DOJ's mission demands leave it no choice, but to purchase Motorola radios unless:

- State and Local entities upgrade to narrowband, P25 compliant systems;
- DOJ has funding sufficient to compete a replacement of its legacy systems;
- Other suppliers of multi-band radios license the proprietary functionality from Motorola; or
- The P25 standard is complete across all required aspects of the LMR infrastructure.

In those cases where Motorola equipment is needed for mission-critical reasons, DOJ has based its requirements on information gathered during market research and publicized its intentions. In other words, DOJ has been open and up front regarding its needs, publicizing them as required by the FAR, and no vendor has protested DOJ's actions.

DOJ's plan has been and will continue to utilize full and open competition based on P25 standards and in accordance with the administration's memo to be technology neutral. However, until such time as any of the above-identified circumstances become reality, DOJ must continue to rely on equipment compatible with legacy systems.

*Question.* What steps will you take to ensure fair and open competition in component contracts that are technology neutral and to prevent sole sourcing in the future?

*Answer.* DOJ remains committed to pursuing full and open competition based on P25 standards, in accordance with the administration's memo to be technology neutral.

#### DANGER PAY FOR MEXICO

*Question.* Violence in Mexico, particularly toward law enforcement personnel, has steadily intensified over the past several years. The very real and present danger faced by United States personnel working in Mexico is evident in light of the recent deaths of United States consulate employees and an ICE agent in Mexico. While DEA and FBI receive danger pay for their personnel in Mexico due to prior authorizations passed in 1990 and 2002, USMS and ATF do not have this same authorization language. USMS and ATF personnel face the same risks as their DEA and FBI counterparts in Mexico and should be equally compensated.

Why does the President's budget not provide for danger pay increases to USMS and ATF law enforcement personnel working in Mexico?

*Answer.* Increases associated with danger pay allowances are traditionally absorbed by a component's existing base resources. Due to the potentially fluid nature of danger pay authorities, which are established by the Secretary of State, permanent resources for danger pay authority in Mexico were not requested for USMS or the ATF in the fiscal year 2012 President's budget.

*Question.* Given the rise in violence generally, the targeted attacks against U.S. law enforcement officers, and the fact FBI and DEA already provide danger pay for

their employees in Mexico, that USMS and ATF should receive the same sort of compensation.

When can we expect to see proposed legislation to remedy this issue from DOJ?

Answer. To address disparities as a result of the separate authorities afforded to DEA and FBI, DOJ has been planning to engage in ongoing policy-level discussions with the Department of State, OMB, and the Office of Personnel Management to pursue alternatives to resolve these pay disparities in an effective, lawful, fair and expeditious manner, and alleviate the concerns voiced by the committees on appropriations and others. DOJ considers this a pay disparity between FBI and DEA, and ATF and USMS. That is, United States Government employees serving our national interests in the same overseas locations, many times working side-by-side on critical criminal investigations and law enforcement issues, should be compensated equitably.

On April 13, 2011, the Border Security Enforcement Act of 2011 (S. 803) was introduced, which contains a provision authorizing danger pay for USMS and ATF law enforcement personnel working in Mexico. This legislation would remedy this disparity.

#### PROJECT GUNRUNNER

*Question.* National media reports now appear to support allegations that ATF has gun allowed dealers to proceed with suspicious firearms transactions, in hopes of tracking the movements of those guns and their buyers. Reportedly, field agents strongly protested the operation, especially after the guns started turning up in trace reports related to criminal activity. On March 3, ATF promised to convene "a multi-disciplinary panel of law enforcement professionals to review the bureau's current firearms trafficking strategies."

When does ATF expect the panel's review to be completed?

Answer. As I discussed during my testimony, I have asked the acting inspector general to review the matter. ATF is postponing the creation of a multi-disciplinary panel until the acting inspector general has completed her work, in part to avoid redundancies that simultaneous reviews of the same matter could create. After the acting inspector general's work is completed, ATF will revisit the option of convening a multi-disciplinary panel. Any such panel would then be able to consider the acting inspector general's conclusions and recommendations in conducting their review.

*Question.* Did ATF allow these transactions to proceed, as alleged in the media reports?

Answer. I take these allegations seriously and have referred them to the acting inspector general of DOJ for investigation. I have also made it clear to our law enforcement personnel and prosecutors working on the Southwest Border that the Department should never knowingly permit illegally trafficked firearms to cross the border.

*Question.* If so, did DOJ approve use of this technique? Is this an investigative technique ATF has used in the past? What were the results in past investigations?

Answer. Allegations that ATF knowingly allowed the sale of guns to straw purchasers in hopes of tracking the movements of those guns and their buyers are under investigation by the acting inspector general.

*Question.* Is the practice being continued during this review and investigation?

Answer. There is an ongoing investigation into the shooting death of Customs and Border Patrol (CBP) Agent Brian Terry. Accordingly, I cannot comment on that investigation at this time.

#### STATE AND LOCAL LAW ENFORCEMENT CUTS

*Question.* Attorney General Holder, 11 percent (\$3 billion) of DOJ's budget request is comprised of State and local law enforcement grants. Five years ago, DOJ was responsible for soliciting and administering approximately 72 grant programs. Today, more than 100 grant programs and solicitations exist. Even in these tough budget times, the number of grants continues to grow and no serious proposals for consolidation or elimination of narrow and duplicative programs exist. Effective broad-use programs supported by law enforcement, such as Byrne-JAG and SCAAP, have been cut or eliminated to make room for more narrowly focused programs with limited purpose areas.

What is DOJ doing to curtail the ballooning number of grant programs?

Answer. DOJ is looking both at consolidating the way some grant programs are administered and at reducing or consolidating the number of grant programs that we are requesting. One example of consolidation and increased coordination is our CTAS. During a number of tribal listening sessions and conference calls with tribal

leaders, concern was expressed regarding the need to improve DOJ's tribal grantmaking process. Beginning last year, we issued one, single CTAS that encompassed DOJ's available tribal government-specific grant programs. Under the fiscal year 2010 Coordinated Tribal Assistance Solicitation, DOJ asked each tribe to submit a single application for all available DOJ tribal government-specific grant programs, according to the tribe's needs. The advantage of this coordinated process is that, when DOJ reviewed a single application from a tribe, it had a better understanding of the tribe's overall public safety needs. The grantmaking components then coordinated in making award decisions to address these needs on a more comprehensive basis. DOJ continued with CTAS this year and made improvements where necessary to respond to tribal governments' needs and concerns.

Additionally, in the fiscal year 2012 President's budget, the Office on Violence Against Women (OVW) request includes \$14 million for a new Consolidated Youth-Oriented program. This grant program consolidates the purpose areas of four previously funded programs under one competitive program. The four programs in the consolidation include:

- Services to advocate for and respond to youth;
- Grants to assist children and youth exposed to violence;
- Engaging men and youth in preventing domestic violence; and
- Supporting teens through education.

This consolidation will allow OVW to leverage resources for maximum impact in communities by funding comprehensive projects that include both youth services and prevention components.

*Question.* How can DOJ be more proactive in providing flexibility to law enforcement agencies with broad purpose area grants when the number of narrow grants continues to grow?

*Answer.* This year's COPS hiring program grants will be much different than previous years. COPS established an initiative to enhance the integration of community policing into its grant programs, and to better align COPS grant programs with the advancement of community policing. This year, applicants will be asked to address how grant funding will assist them in building partnerships, solving problems, and sustaining organizational change. The application will allow applicants to identify specific community crime and disorder problems that they seek to address with COPS funding, and the specific community policing strategies and tactics they plan to employ against these problems. DOJ is also requesting funding for the Byrne Justice Assistance Grant program, which provides the States the maximum flexibility both in categories and in the number of years they have to spend the funding. Last, as part of an administration-wide effort, DOJ is looking at ways through internal regulations and guidelines or through changes we might propose to the Congress that would make grant programs more flexible for States and localities. As an example, the fiscal year 2012 President's budget proposes to set-aside 7 percent of OJP funds to create a flexible tribal grant program that will replace several individual tribal grant programs.

*Question.* Please explain how SCAAP was cut by \$194 million, DNA grants cut by \$51 million, and Coverdell grants were eliminated—yet narrowly focused COPS Hiring grants was increased by \$302 million to \$600 million?

*Answer.* Due to tight fiscal restraints, important trade-offs were necessary in the budget, including reductions to some State and local criminal justice assistance programs.

DOJ responds to State, local, and tribal law enforcement by developing programs and initiatives that provide flexibility for their public safety needs. The COPS hiring program advances community policing through partnerships, problem solving and organizational change. While the goal of the program may simply appear to be adding officers, the results show stronger relationships between communities and police, more efficient and effective policing practices and an overall commitment to better public safety.

The requested increase for the COPS hiring program pales in comparison to the demand and needs of the field. For example, when the COPS office opened the solicitation for its COPS hiring recovery program in 2009, which was part of ARRA, the demand far outweighed funding available with more than \$8 billion in requests for the \$1 billion that was appropriated.

#### ATF—GUNRUNNER ALLOWING FIREARMS TO BE TRAFFICKED

##### *Gun Traced to Border Patrol Agent Shooting Death in Arizona*

*Question.* Since its inception in 2006, ATF has had many successes with Project Gunrunner, seizing nearly 10,000 firearms and 1.1 million rounds of ammunition destined for Mexico. Yet, news reports have indicated that the ATF encouraged the

sale approximately 2,000 weapons to known traffickers in an operation called Fast and Furious, in order track them to cartels and larger crime organizations in Mexico. The reports also indicate that two weapons recovered at the scene of the December 14, 2010, murder of CBP Agent Brian Terry in Arizona, were connected to Operation Fast and Furious and allowed to be smuggled into Mexico by ATF.

Can you verify whether the weapons recovered at the scene of Agent Terry's death in Arizona were allowed by ATF to be sold to known traffickers and smuggled into Mexico?

Answer. There is an ongoing investigation into the shooting death of CBP Agent Brian Terry. Accordingly, I cannot comment on that investigation at this time.

*Question.* As I said in my statement, on February 15, ICE agent Jaime Zapata of Brownsville, Texas, was murdered in Mexico. The weapon used in Agent Zapata's murder was traced to a sale in Dallas, where three men suspected of weapons trafficking were arrested.

Are there any indications that the weapon used in Agent Zapata's death was knowingly allowed to be sold to the three Dallas gun smugglers?

Answer. There is no evidence that the weapon used in the death of Agent Zapata was knowingly allowed to be sold to the Dallas gun smuggler, nor is there evidence that it was allowed to be transported across the United States-Mexico border.

*Question.* Are you aware of any senior members of ATF or DOJ encouraging ATF agents to allow gun dealers to sell weapons to known gun traffickers?

Answer. Allegations that ATF knowingly allowed the sale of guns to straw purchasers in hopes of tracking the movements of those guns and their buyers are under investigation by the acting inspector general.

*Question.* I understand you have instructed the inspector general to investigate this matter. Have you been given any preliminary reports that you can share with us?

Answer. I have not received any preliminary reports.

---

#### QUESTIONS SUBMITTED BY SENATOR LINDSEY GRAHAM

*Question.* On March 14, 2011, the New York Times reported that Ahmed, who was convicted for his role in attacks upon American embassies, was assigned to the U.S. Penitentiary (USP) in Florence, Colorado, but not the Supermax. Four other Embassy bombing conspirators are imprisoned at the Supermax.

Please explain the decision to hold Ghailani in a prison other than the Supermax.

Answer. Inmate Ghailani received a life sentence for Conspiracy to Destroy Buildings and Property of the United States. On March 11, 2011, inmate Ghailani was designated to USP Florence, pending a due process hearing for Administrative-Maximum (ADX) placement. The ADX referral is based on his offense conduct and the imposition of Special Administrative Measures restrictions, as determined by the Attorney General.

Inmate Ghailani's initial designation to USP Florence is appropriate to begin the ADX referral process. Placement at the ADX is guided by the BOP's Program Statement 5100.08, Inmate Security Designation and Custody Classification. The referral process usually takes 6 to 10 weeks.

Please be assured that public safety is the highest priority for DOJ and BOP and is paramount in all decisions made regarding the housing of Federal inmates.

*Question.* Will Ghailani be held in the general population of the penitentiary at Florence?

Answer. Inmate Ghailani will not be placed in general population while at USP Florence.

#### SUBCOMMITTEE RECESS

Senator MIKULSKI. This subcommittee stands in recess until March 31, at which time we will take testimony from the Administrator of NASA.

[Whereupon, at 12:20 p.m., Thursday, March 10, the hearing was concluded, and the subcommittee recessed, to reconvene Thursday, March 31.]



**COMMERCE, JUSTICE, SCIENCE, AND RE-  
LATED AGENCIES APPROPRIATIONS FOR  
FISCAL YEAR 2012**

THURSDAY, APRIL 7, 2011

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

The subcommittee met at 10:03 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Lautenberg, Pryor, Hutchison, Johnson, and Collins.

DEPARTMENT OF JUSTICE

FEDERAL BUREAU OF INVESTIGATION

**STATEMENT OF HON. ROBERT S. MUELLER, III, DIRECTOR**

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Good morning. The Subcommittee on Commerce, Justice, Science, and Related Agencies will come to order.

Today, we are taking the testimony of Director Robert S. Mueller, III on the Federal Bureau of Investigation's (FBI) budget and priorities for fiscal year 2012.

I know Senator Hutchison is on her way, but I'm going to open with my remarks while she's on her way, because we're going to do what we have been doing the last 3 years, which is to have an open hearing on the FBI's—here she is—the FBI's budget and their priorities for funding. And then we will take, around 11 o'clock, a 15-minute recess, until we go to the Intelligence Committee's room. Senator Feinstein has graciously made available that hearing room for us, where we will meet in a classified briefing on the request.

Sixty percent of the FBI's appropriated requests now are in the area of national service—excuse me—national security. After 9/11, shortly after Director Mueller was appointed, the United States of America, faced with one of its greatest attacks since Pearl Harbor, had the decision on how it would deal with domestic threats; responding to international terrorism; “Should we set up our own MI5?” But, we chose not a new agency, not a new bureaucracy, but to turn to one of the most trusted agencies in the United States Government, our FBI. And we stood up an agency within an agency, but we wanted them to act as one agency. And Director Mueller has just done that.

(75)

This hearing has some poignancy to it, because it will be Director Mueller's last. I'm kind of misty here. Director Mueller and I have been through so much together—not with each other. But, I went on the Intelligence Committee just weeks before the attack on the United States, and the Director was appointed. And we went through so much in establishing this agency: the 9/11 commissions; how do we respond to the great threats facing the United States; and with the FBI not neglecting the criminal enterprises, even though, with the terrorists, it was the criminal enterprises against us. So, I think he's been a fantastic FBI Director.

We know that, today, it's his last appearance before the subcommittee. I know the subcommittee just has considerable respect for him and his excellent executive ability, his patriotic dedication. And, as the Washington Post referred to him, he's one of the night-hawks that stay up with these late briefings and threats around the world.

So, we want to hear from you, Director Mueller, because, I know you want this hearing not to be about you, but about the FBI and what we need to do to make sure the FBI has the right resources to do the job that we ask them to do.

We acknowledge that we're in uncertain times. The FBI is operating at \$500 million below the President's 2011 request. We want to know, how is the FBI addressing this cut? We need to know how it's affecting staff and morale.

As I said, we'll begin with unclassified, and then we'll go to the closed hearing.

As head of this subcommittee, I have three priorities when examining the FBI's budget: one, its national security, its security related to our communities. How is it our keeping our—working with local law enforcement—streets and neighborhoods safe? And how are we dealing with the new challenges, particularly in financial services: mortgage fraud, and Medicare fraud. The Congress makes a big show sometimes of saying, "We're going to go after fraud and abuse." Well, you know what? The FBI actually does it. They actually go after crooks that are scheming and scamming people through their mortgages and also through our Medicare fund. So, we're going to learn more about its 2012 budget request, exactly on accomplishing those objectives.

The five highlights of the new budget include gathering intelligence on cyberthreats, \$120 million; fighting mortgage fraud and white-collar crime, \$245 million; going after those despicable sexual predators, \$90 million; tracking weapons of mass destruction, at \$89 million; and tracking international terrorist networks, at \$316 million.

Our Nation faces these growing threats, and they're absolutely crucial that we stay online. The growing threat of cybersecurity, which we also work very closely with, with the Intelligence Committee, is a critical component for our Nation's infrastructure. We worry about online banking and commerce, the electrical power grids, air traffic control systems, and we need to make sure that we are able to respond to a whole other war, called "the cyberwar". This year, the request is \$129 million, and we want to hear more about those details, but we'll reserve that for the classified time.

The FBI is requesting \$3.3 billion for counterterrorism activities. It's a 4 percent increase, and a \$128 million increase over the current level. The FBI is using these funds—and this is really important—to disrupt terrorist plots, investigate terrorist crimes, and identify, track, and defeat terrorist sleeper cells operating in the United States. I want to know more about this.

I know my colleague from Texas will also be asking questions about another war front that we're on, which is the Southwest Border, and the role of the FBI in working to defeat the drug cartels that want to—that are engaged in such horrendous and horrific activity.

When we look at violent crime—and part of this is going on right at our Southwest Borders—we know that there is a \$2.6 billion request for fighting what is the traditional role of the FBI. And again, this is a 5.4 percent increase.

But, you know, the criminal organizers and enterprisers are—again, these are very sophisticated criminal organizations: trafficking in children, schemers of middle-class homes, trying to bilk Medicare. It seems that wherever—there's no end to the ingenuity of crooks and thugs in our country. But the FBI is on it.

We want to congratulate the FBI on what it is doing in mortgage fraud. They have an incredible success rate in going after those who have bilked our constituents. And right now, the subcommittee will find—and the Director will speak to it—they have a 3,000 case backlog in mortgage fraud. This is why we're troubled by the FBI freeze that they're mandated to follow.

There will be issues related to accountability, particularly in technology. We know that the Sentinel program has had speed bumps, potholes, and a variety of other metaphors that we could use. But, I understand that working—that the FBI now has that on track, and we'll look forward to it.

#### PREPARED STATEMENT

We want to really hear from the FBI Director. So, I'm going to take a more extensive statement, ask unanimous consent to put it into the record, turn to Senator Kay Bailey Hutchison, and then we'll go right to questions. And, Senator Johnson, your opening remarks, if you have some, I'd like you to incorporate it in your questions. And we'll give you some wiggle room. Okay?

[The statement follows:]

#### PREPARED STATEMENT OF SENATOR BARBARA A. MIKULSKI

Good morning and welcome to the second hearing of 2011 of the Commerce, Justice and Science (CJS) Subcommittee. Today, the CJS Subcommittee will hear from FBI Director Robert S. Mueller, III about the FBI's budget and priorities for fiscal year 2012.

We continue our examination of the President's 2012 budget although we still have not finished 2011. I am mindful that whatever happens in our 2011 wrap-up will affect what the FBI can do in the future. We'll learn today what these cuts mean for the FBI.

I acknowledge we are in uncertain times. The FBI is operating at \$500 million below the President's 2011 request. We need to know how the FBI is addressing this cut and how it is affecting morale and staff retention.

We'll begin with an unclassified hearing to focus on the FBI's general budget request, and then we will move to a closed hearing to discuss budget requests for the FBI's classified operations.

We welcome Director Mueller to his last scheduled hearing before the CJS Subcommittee. He will be the longest serving FBI Director since J. Edgar Hoover and he is the only Director to serve out a full 10-year term. He came into this job just a week before the 9/11 terrorist attacks. His leadership has transformed the FBI from a traditional domestic law enforcement agency into a global anti-terrorism and anti-crime police force keeping us safe from threats here at home.

As Chairwoman I have three priorities when examining the FBI's budget—first, national security, or how the FBI is keeping America safe; second, community security, or how the FBI is keeping our families safe; and third, oversight and accountability, or how the FBI is ensuring our tax dollars are spent wisely.

Today, we will learn more about how the FBI plans to use its fiscal year 2012 budget request to carry out its extraordinary responsibilities of keeping us safe from terrorism and violent crime, such as dismantling organized crime and drug cartels, combating gang violence, stopping illegal drug and gun smuggling, and catching child sexual predators.

The President's budget request for the FBI in fiscal year 2012 is \$8.1 billion—a \$227 million, or 2.9 percent, increase above the 2010 omnibus and current continuing resolution levels. Five highlights of this budget request include:

- \$129 million for gathering intelligence on cyber threats to stop cyber crooks from hacking into U.S. networks;
- \$245 million for fighting mortgage fraud and white collar crime by targeting scammers who prey on hard working families;
- \$89 million for tracking weapons of mass destruction (WMD) to prevent terrorists from acquiring WMD materials;
- \$90 million for catching child predators and stopping sexual deviants who exploit children on the Internet; and
- \$316 million to track international terrorist networks and expand surveillance capabilities that help shut them down.

Our Nation faces a growing and pervasive threat overseas from hackers, cyber spies, and cyber terrorists. Cyber security is a critical component to our Nation's infrastructure. We need safe and resilient networks to protect our online banking and commerce, electrical and power grids, air traffic control systems and digitalized records.

In 2010, the CJS Subcommittee appropriated \$118 million for the FBI's cyber efforts, called the Comprehensive National Cybersecurity Initiative. This year, the request is \$129 million—an \$11 million increase that will provide 14 new agents and 5 new professional staff. We will hear more about the details on the FBI's cyber efforts in the classified session, but I am pleased that the FBI is a key guardian of our Nation's cyber security.

After 9/11, the FBI was charged with a new national security mission—to protect us from international terrorism and track WMD that could hurt the United States. Today, counterterrorism makes up more than 40 percent of the FBI's budget. The FBI requests \$3.3 billion for counterterrorism activities—a \$128 million, or 4 percent, increase above the current level. The FBI is using these funds to disrupt terrorist plots before they happen, investigate terrorist crimes after they occur, and to identify, track and defeat terrorist sleeper cells operating in the United States and overseas. I want to know if this budget request is enough to tackle all counterterrorism responsibilities including WMD, cyber computer intrusions, foreign counterintelligence, and critical incident response.

I also want to know how the FBI is protecting Americans from violent crime in their communities. The budget requests \$2.6 billion for traditional crime fighting efforts here in the United States—a \$134 million, or 5.4 percent, increase above the current level of \$2.5 billion. This request allows the FBI to hire 35 new special agents to focus on cyber crimes and violent crimes in Indian country. It also supports FBI efforts to target sophisticated criminal organizations that prey on the vulnerable, traffic children for prostitution, and scam middle class families out of their homes. These organizations will do anything to make a profit. But I am worried that this budget request is flat to fight violent crime and gangs.

I also want to know if this fiscal year 2012 request is enough to help protect hard-working families and their homes. Mortgage fraud is the FBI's number one white collar crime problem. The FBI is investigating more than 3,000 mortgage fraud cases and more than 55 corporate fraud cases in the subprime mortgage industry. The budget requests \$245 million to combat mortgage fraud with 94 mortgage fraud task forces made up of agents, forensic accountants, and financial analysts to investigate complex financial schemes.

Director Mueller, I know you are with me. We want to send a clear message to the predators. No more scamming or preying on hardworking Americans. If you break the law, you will suffer the consequences.

This budget request includes \$90 million for the FBI to protect children by catching deviants who use the Internet to prey on them and break up international sex trafficking and prostitution rings. The FBI plays an important role in enforcing the Adam Walsh Act and it is responsible for monitoring and targeting Internet predators. In 2009, the FBI's Innocent Images national initiative convicted over 1,200 producers, distributors and possessors of child pornography.

Since 2003 when it was established, the FBI's Innocence Lost Initiative has rescued more than 1,100 children. The youngest victim rescued was 9 years old. The program has convicted more than 500 pimps, madams, and their associates who exploit children through prostitution. I want to hear from you if the 2012 request is sufficient to enhance child predator investigations and target predators before they strike so we can save children's lives.

Any future plans for the FBI must protect taxpayers from Government boondoggles. We must ensure strict accountability, oversight, and management to ensure that taxpayer dollars are not wasted and avoid cost overruns and missed deadlines. I am concerned about many delays and cost overruns on the FBI's Sentinel program, which upgrades the electronic case management system used by analysts and agents. It is a technological tool to help protect our citizens.

Last fall, you decided the FBI would take over management to implement and complete Sentinel—a move that was made to keep Sentinel from becoming another techno-boondoggle. I want to know where we are on Sentinel. What steps have you taken to ensure that Sentinel gets back on track? Where is Sentinel in the development and deployment process? How long will the program be delayed and how much will this cost?

In conclusion, I want to say how proud I am of the men and women at the FBI who are fighting to keep America safe from terrorism and violent crimes. They are on the job 24 hours a day, seven days a week. We must ensure that the FBI has the resources it needs to protect the lives of 311 million Americans. But we also want to make sure the FBI is a good steward of taxpayer dollars. We have to make sure every dollar we spend to keep our Nation safe is a dollar well spent.

I thank Director Mueller for his leadership. I look forward to continuing our productive relationship with both him and his team.

#### STATEMENT OF SENATOR KAY BAILEY HUTCHISON

Senator HUTCHISON. Thank you, Madam Chairman.

I do want to just take a moment to say thank you so much for your service. You are the second longest serving FBI Director in our Nation's history, after Hoover. So, you've had a major impact. You took on the job about a couple of weeks before 9/11. And after that time, of course, it was added to the mission of the FBI to take on counterterrorism. And so, you've had a huge impact on our law enforcement. And you have been so accessible. And I agree with everything the chairwoman said regarding your service. And we are sorry to see you go.

Let me just say that, because of the changes that have happened during your time, the focus that you have now gone into, of course, is the counterterrorism, cybersecurity; that's all a whole new field, as well. And you've done very well. I do want to focus on the Southwest Border, because, Mr. Director, we're in a war there. And I just want to give a couple of statistics for the record:

Since the beginning of last year, more than 3,000 drug-related murders have been reported in Juarez, Mexico. It is, of course, just across the river from El Paso. And you have, of course, an office there. But, this is stunning. And it is coming over into our country. It is affecting our crime rates.

Let me just give you a few excerpts from the director of the Department of Public Safety (DPS), who was testifying before a State legislative committee. He said he is very concerned that crime in Dallas, Houston, Austin, and San Antonio is very much connected

to Mexican drug cartels operating through the potent prison gangs—the Texas Syndicate and Texas Mafia.

Last year, law enforcement agencies operating in the Rio Grande Valley apprehended what they refer to as “287 Other Than Mexicans,” illegal immigrants from countries with active al Qaeda cells or Taliban activity, places like Yemen, Iran, Pakistan, and more. The Government Accountability Office has said that they believe we catch about 6.5 percent of the illegal criminal activity that is coming across our border. So, you can multiply the 287.

And these people are very crafty. There are reports of instructions, in Arabic languages and foreign languages, on what to do when you get across the border—where you go, where your connections are. And so it’s very troubling.

The State has increased its resources—the State of Texas, which, of course, has the giant share of the border—but this is a Federal issue. And I am very concerned that your budget has \$130 million out of \$8.1 billion. Now, I am told that, in the recent Southwest Border supplemental, the FBI was denied additional resources. I understand—I am also told that the FBI was denied new border enhancements in the fiscal year 2012 request. I want to know more about that—and I will ask, during the question period—because this war is going to affect our country, and it is as important as any war we’re fighting, anywhere. And I hope that, because of the great record that the FBI has, that we will be able to fully commit the resources that are needed for this fight, because it’s not thousands of miles away; it is on our border. And two Americans were killed at a border crossing just last week.

And I’ve talked to the mayors of our major cities. They know that there are drug cartel activities in the four cities that were mentioned by the DPS director. So, that’s going to be a major focus for me, I will tell you. And I will want to know more, what we can do and how we can make it a priority for the Justice Department to involve the FBI, because, where the FBI is, they—everyone says they are very helpful. All the local law enforcement people I talk to, the Drug Enforcement Administration (DEA), everyone is complimentary of the FBI input. But we have a pittance compared to what we need.

I also will want to ask you about the shooting of the Immigration and Customs Enforcement (ICE) agents in Mexico, one of whom was killed. And you were tasked with a major part of the investigation. And I will want to know how that was being handled and if the Mexican Government was cooperative.

So, these are the focuses, in addition to what the Senator from Maryland, the chairwoman of this subcommittee, has said. But you have a big job. You’ve done a great job. We need to know what we can do to make sure that you can operate in the future.

Thank you.

Senator MIKULSKI. Thank you, Senator Hutchison. And I’m so glad you’re—you know, so persistent on this issue. And it’s one of the reasons I also will have the classified hearing with the FBI at 11:15 a.m., because a lot of your questions really need to be talked about in a different forum, and at the level of detail I know you’ll want in the answers.

But, I want to pledge to you, on this Southwest Border issue, and to the Southwest Senators, this is an American issue. So, you're not fighting this by yourself. You can count on me as a full partner on this.

Senator HUTCHISON. That means a lot. Thank you very much.

Senator MIKULSKI. Director Mueller, why don't you begin your testimony.

SUMMARY STATEMENT OF ROBERT S. MUELLER, III

Mr. MUELLER. Well, thank you, and good morning, Chairwoman Mikulski and Ranking Member Hutchison.

And, at the outset, thank you for your remarks. I think we've worked exceptionally well together over the years, and I am tremendously appreciative of the support that this subcommittee has given, most particularly to the FBI, but also to me, personally. Thank you.

And also, thank you for the opportunity to appear before you today.

As you have started to point out, and I'll follow up on, the FBI now faces unprecedented and increasingly complex challenges. We must identify and stop terrorists before they launch attacks against our citizens. We must protect our Government, businesses, and critical infrastructure from espionage and from the potentially devastating impact of cyber-based attacks. We must root out public corruption, fight white collar and organized crime, stop child predators, and protect civil rights. We must also ensure we are building a structure that will carry the FBI into the future by continuing to enhance our intelligence capabilities, improve our business practices and training, and develop the next generation of FBI leaders. We must do all of this while respecting the authority given to us under the Constitution, upholding civil liberties, and the rule of law. And we must also do this in what some would say are uncertain fiscal conditions.

The challenges of carrying out this mission have never been greater, as the FBI has never faced a more complex threat environment than it does today. Over the past year, we have faced an extraordinary range of threats from terrorism, espionage, cyberattacks, and traditional crime.

Let me, if I could, give you a brief overview with several examples. Last October, there were the attempted bombings on air cargo flights bound for the United States from Yemen, directed by al Qaeda in the Arabian Peninsula. Last May, there was the attempted car bombing in Times Square, aided by Tehrik-e Taliban Pakistan, in Pakistan. These attempted attacks demonstrate how al Qaeda and its affiliates still have the intent to strike within the United States.

In addition, there were a number of serious terror plots by lone offenders. Their targets ranged from a Martin Luther King Jr. Day march in Spokane, Washington, to a Christmas tree lighting ceremony in Portland, Oregon, to subway stations in the Washington, DC Metro system. The motives and methods of these plots were varied, making these among the most difficult threats to anticipate and then to combat.

The espionage threat persisted as well. Last summer, there were the arrests of 10 Russian spies, known as illegals, who secretly blended into American society in order to clandestinely gather information for Russia. And we continue to make significant arrests for economic espionage as foreign interests seek to steal controlled technologies.

The cyberintrusion at Google last year highlighted the potential danger from a sophisticated Internet attack. Along with countless other cyberincidents, these attacks threaten to undermine the integrity of the Internet and to victimize the businesses and people who rely on the Internet.

In our criminal investigations, we continue to uncover billion dollar corporate and mortgage frauds that weaken the financial system and victimize investors, homeowners, and, ultimately, taxpayers.

We also exposed healthcare scams involving false billings and fake treatments that endangered patients and fleeced Government healthcare programs.

As pointed out, the extreme violence across our Southwest Border continued to impact the United States, as we saw and has already been pointed out, with the murders last March of American Consulate workers in Juarez, Mexico, and the shooting, last month of two ICE agents in Mexico.

Throughout the year, there were numerous corruption cases that undermined the public trust, and countless violent gang cases that continue to take innocent lives and endanger our communities.

As these examples demonstrate, the FBI's mission to protect the American people has never been broader, and the demands on the FBI have never been greater. To carry out these responsibilities, we need the Congress's continued support more than ever.

The support from this subcommittee and the Congress has been an important part of the ongoing transformation of the FBI. A key element of this transformation has been the ability to recruit, hire, train, and develop the best and the brightest agents, analysts, and staff to meet the complex threats we face now and in the future, and the ability to put in place the information technology and infrastructure needed to perform our everyday work.

I am concerned that our momentum, built up over the past several years with your support, is going to be adversely affected due to the constrained fiscal environment. The FBI strives to be a good steward of the funding the Congress provides, and we continually look for cost-saving initiatives and better business practices to make us more efficient. However, addressing the major threats and crime problems facing our Nation requires investments that cannot be offset by savings alone. If funded for the remainder of fiscal year 2011 at prior year levels, the FBI will have to absorb more than \$200 million in operating requirements and will have more than 1,100 vacant positions by the end of the year. The fiscal year 2012 budget that we are discussing today would actually provide a lower level of resources than the fiscal year 2011 request submitted last year, and will leave unaddressed gaps in our investigative and intelligence capabilities and capacities in all programs.

I note that the proposed continuing resolution would fully fund the Department of Defense (DOD), while all other agencies would



be extended, perhaps for 1 week. I strongly encourage this subcommittee to consider also fully funding the FBI in the continuing resolution. Under the continuing resolution, the FBI would be the only major partner in the intelligence community that is not fully funded. While our intelligence community partners would be able to proceed with planned initiatives and programs, the FBI could not. And we cannot be considered an equal partner in the intelligence arena without full funding.

As was pointed out, approximately 60 percent of the FBI's budget is scored under the DOD-related budget function. Today, FBI agents, intelligence analysts, and professional staff stand side-by-side with the military in Afghanistan and elsewhere in the world, working together to keep our country and our citizens safe from attack. Full funding for the FBI, for which both the House and Senate were in agreement in their respective marks, would enable these critical dependencies and collaboration to continue without interruption.

Last, let me say that we simply cannot afford to return to the pre-9/11 days, where hiring and staffing in the FBI was a roller coaster that left most field offices understaffed to deal with the terrorist and other threats we faced. Nor can we afford to return to the pre-9/11 days where funding uncertainty led to a degradation of the FBI's physical and information technology infrastructure.

#### PREPARED STATEMENT

Let me finish by saying, I appreciate the opportunity to be here today to talk about our 2012 budget and, inevitably, the 2011 continuing resolution. But, I also want to thank the subcommittee for your continued support on behalf of the men and women of the FBI.

And I, of course, would be happy to answer any questions that you may have.

Thank you.

[The statement follows:]

#### PREPARED STATEMENT OF ROBERT S. MUELLER, III

Good morning Chairwoman Mikulski, Ranking Member Hutchison, and members of the subcommittee.

On behalf of the more than 30,000 men and women of the Federal Bureau of Investigation (FBI), I would like to thank you for the years of support you have provided to the FBI. This subcommittee has been instrumental in ensuring the FBI has received the critical resources it needs to:

- defend the United States against terrorism and foreign intelligence threats;
- uphold and enforce the criminal laws of the United States;
- protect civil rights and civil liberties; and
- provide leadership and criminal justice services to Federal, State, municipal, and international agencies and partners.

Since 9/11, the FBI has shifted to be an intelligence-led, threat-focused organization, guided by clear operational strategies. The FBI is focused on predicting and preventing the threats we face, while engaging the communities we serve. This shift has led to a greater reliance on technology, collaboration with new partners, and human capital, requiring additional resources. FBI is a full member of the U.S. intelligence community and serves as a critical and singular link between the intelligence and law enforcement communities in the United States. FBI, as an organization, is in a unique and critical position to address national security and criminal threats that are increasingly intertwined. Our adversaries are evolving and using globalization to enhance their reach and effectiveness, creating new challenges in our efforts to counter their impact.

Today, the diversity and complexity of the threats facing the Homeland has never been greater:

- In the past year, the United States has been the target of terrorist plots from three main sources:
  - al Qaeda;
  - al Qaeda's affiliates; and
  - homegrown extremists.
- Homegrown extremists are a growing concern and priority of the FBI, as evidenced by the number of recent disruptions and arrests; and
- The asymmetric intelligence threat presented by certain foreign governments endures as the damage from compromised sensitive information and financial losses from economic espionage and criminal activity remain significant.
- Technological advancements and the Internet's expansion will continue to empower malicious cyber actors to harm U.S. national security through criminal and intelligence activities. We must maintain our ability to keep pace with this rapidly developing technology.
- The FBI's efforts prosecuting financial crimes—including billion-dollar corporate and mortgage frauds, massive Ponzi schemes, and sophisticated insider trading activities—remain essential to protect investors and the financial system, as well as homeowners and ultimately taxpayers. There also continue to be insidious healthcare scams that endanger patients and fleece Government healthcare programs of billions. Despite strong enforcement, both public corruption and violent gang crimes continue to endanger our communities.

These examples underscore the complexity and breadth of the FBI's mission to protect the Nation in a post-9/11 world.

The FBI's fiscal year 2012 budget request includes a total of \$8.1 billion in direct budget authority, including 33,469 permanent positions (12,993 special agents, 2,989 intelligence analysts, and 17,487 professional staff). This funding, which consists of \$8 billion in salaries and expenses and \$81 million in construction, is critical to continue our progress acquiring the intelligence and investigative capabilities required to counter current and emerging national security and criminal threats.

Consistent with the FBI's transformation to a threat-informed and intelligence-driven agency, the fiscal year 2012 budget request was formulated based upon our understanding of the major national security and criminal threats that the FBI must work to prevent, disrupt, and deter. We then identified the gaps and areas which required additional resources. As a result of this integrated process, the fiscal year 2012 budget proposes \$131.5 million for new or expanded initiatives and 181 new positions, including 81 special agents, 3 intelligence analysts, and 97 professional staff. These additional resources will allow the FBI to improve its capacity to address threats in the priority areas of terrorism, computer intrusions, weapons of mass destruction, foreign counterintelligence, and violent crime.

Let me briefly summarize the key national security threats and crime problems that this funding enables the FBI to address.

#### NATIONAL SECURITY THREATS

*Terrorism.*—The FBI is fully engaged in the worldwide effort to counter terrorism. We have taken that fight to our adversaries' own sanctuaries in the far corners of the world—Iraq, Afghanistan, Pakistan, Europe, Asia, and Africa. We have also worked to uncover terror cells and supporters within the United States, as well as disrupting terrorists' financial, communications, and operational lifelines at home and abroad.

Al Qaeda remains our primary concern. Al Qaeda's intent to conduct high-profile attacks inside the United States is unwavering. While the overall structure of the group has diminished, its power to influence individuals and affiliates around the world has not. Today, we still confront the prospect of a large-scale attack by al Qaeda, but the growing threat from al Qaeda affiliates, as demonstrated in the attempted Christmas Day bombing and the failed Times Square bombing, is unprecedented. Al Qaeda and its affiliates may also attempt smaller attacks that require less planning and fewer operational steps—attacks that may be more difficult to detect and prevent.

Threats from homegrown terrorists are also of growing concern. These individuals are harder to detect, easily able to connect with other extremists, and—in some instances—highly capable operationally. There is no typical profile of a homegrown terrorist; their experiences and motivating factors vary widely.

The added problem of radicalization makes these threats more dangerous. No single factor explains why radicalization here at home may be more pronounced than in the past. American extremists appear to be attracted to wars in foreign countries,

as we have seen a number of Americans travel overseas to train and fight with extremist groups. These individuals may be increasingly disenchanted with living in the United States, or angry about U.S. and Western foreign policy. The increase and availability of extremist propaganda in English can exacerbate the problem.

The Internet has also become a key platform for spreading extremist propaganda and has been used as a tool for terrorist recruiting, training, and planning, and has been used as a means of social networking for like-minded extremists. Ten years ago, in the absence of the Internet, extremists would have operated in relative isolation, unlike today.

In short, we have seen an increase in the sources of terrorism, an evolution in terrorist tactics and means of communication, and a wider array of terrorist targets here at home. All of this makes our mission that much more difficult and requires continued support.

The fiscal year 2012 budget request includes 63 positions (34 special agents) and \$40.9 million to address these national security threats, including funding for surveillance resources to combat international terrorism and foreign intelligence threats, as well as funding for the High-Value Detainee Interrogation Group, Terrorist Screening Center operations, and increased information analysis and sharing capabilities.

*Intelligence.*—Since 9/11, the FBI has dramatically shifted our intelligence program and capabilities to address emerging threats. We stood up the National Security Branch, created a Directorate of Intelligence, integrated our intelligence program with other agencies in the intelligence community, hired hundreds of intelligence analysts and linguists, and created Field Intelligence Groups (FIGs) in each of our 56 field offices. In short, the FBI improved and expanded our intelligence collection and analytical capabilities across the board.

Today, we are collecting intelligence to better understand all threats—those we know about and those that have not yet materialized. We recognize that we must continue to refine our intelligence capabilities to stay ahead of these changing threats. We must function as a threat-driven, intelligence-led organization. The FBI recently restructured its FIGs, where each group now has clearly defined requirements for intelligence collection, use, and production. With this new structure, each office can better identify, assess, and attack emerging threats.

We want to make sure that every agent in every field office approaches a given threat in the same manner, and can better turn information and intelligence into knowledge and action. The fiscal year 2012 budget request includes \$2.5 million to help with this endeavor.

*Cyber.*—A cyber attack could have a similar impact as a well-placed bomb. To date, terrorists have not used the Internet to launch a full-scale cyber attack, but they have executed numerous denial-of-service attacks and defaced numerous Web sites.

Al Qaeda's online presence has become almost as potent as its physical presence. Extremists are not limiting their use of the Internet to recruitment or radicalization; they are using it to incite terrorism. Of course, the Internet is not only used to plan and execute attacks; it is also a target itself. Osama bin Laden long ago identified cyberspace as a means to damage both our economy and our morale—and countless extremists have taken this to heart.

The FBI, with our partners in the intelligence community, believe the cyber terrorism threat is real and is rapidly expanding. Terrorists have shown a clear interest in pursuing hacking skills. And they will either train their own recruits or hire outsiders, with an eye toward coupling physical attacks with cyber attacks.

The FBI pursues cyber threats from start to finish. We have cyber squads in each of our 56 field offices around the country, with more than 1,000 specially trained agents, analysts, and digital forensic examiners. Together, they run complex undercover operations and examine digital evidence. They share information with our law enforcement and intelligence partners. And they teach their counterparts—both at home and abroad—how best to investigate cyber threats.

But the FBI cannot do it alone. The National Cyber Investigative Joint Task Force includes 18 law enforcement and intelligence agencies, working side-by-side to identify key players and schemes. This task force plays an important role in the administration's Comprehensive National Cybersecurity Initiative. Its goal is to predict and prevent that which is on the horizon, and then attribute and pursue the enterprises behind these attacks. The task force operates through Threat Focus Cells—smaller groups of agents, officers, and analysts from different agencies, focused on particular threats.

Together, with law enforcement, the intelligence community, and our international and private sector partners, we are making progress, but there is significantly more to do. The fiscal year 2012 budget request includes 42 positions (14 spe-

cial agents) and \$18.6 million to enhance the FBI's investigatory capabilities and protect critical technology network infrastructure from malicious cyber intrusions as well as improve analysis of digital evidence.

*Technology and Tools.*—The FBI has greatly improved the way we collect, analyze, and share information using technology. Intelligence provides the information we need, but technology further enables us to find the patterns and connections in that intelligence. Through sophisticated, searchable databases, we are working to track down known and suspected terrorists through biographical and biometric information, travel histories and financial records. We then share that information with those who need it, when they need it.

For example, the FBI has developed the Data Integration and Visualization System (DIVS), with the goal to prioritize and integrate disparate datasets across the FBI. The FBI currently has investigative data that is stored and accessed in multiple systems. As a consequence, our personnel are spending too much time hunting for data, leaving them less time to analyze and share that data to stay ahead of threats. Furthermore, this stove-piped architecture and inefficient process increases enterprise costs and impedes the speed, effectiveness, and responsiveness of intelligence and investigative analysis.

DIVS provides single sign-on, role-based access controls to analyze and link all FBI data that the user is lawfully allowed to see and will provide the means to efficiently feed FBI Secret data to the FBI Top Secret system. DIVS will not only significantly improve users' efficiency in searching multiple databases, it will ultimately help reduce or eliminate unnecessarily redundant data systems.

In addition to creating new technologies, like DIVS, one lesson we have learned in recent years is the need to ensure that as new technology is introduced into the marketplace, FBI and its law enforcement partners maintain the technical capabilities to keep pace. In the ever-changing world of modern communications technologies, however, FBI and other Government agencies are facing a potentially widening gap between our legal authority to intercept electronic communications pursuant to court order and our practical ability to actually intercept those communications.

As the gap between authority and capability widens, the Federal Government is increasingly unable to collect valuable evidence in cases ranging from child exploitation and pornography to organized crime and drug trafficking to terrorism and espionage—evidence that a court has authorized us to collect. We need to ensure that our capability to execute lawful court orders to intercept communications does not diminish as the volume and complexity of communications technologies expand.

FBI's fiscal year 2012 budget request includes 23 positions—3 special agents—and \$20.5 million to advance DIVS development and to strengthen FBI's and our law enforcement partners' ability to successfully conduct lawfully authorized electronic surveillance, consistent with existing authorities, by establishing a Domestic Communications Assistance Center (DCAC).

*Weapons of Mass Destruction.*—The FBI carries responsibility for responding to certain Weapons of Mass Destruction (WMD) threats in the United States, and the WMD Directorate carries out that critical charge. The Directorate was established to be a unique combination of law enforcement authorities, intelligence analysis capabilities, and technical subject matter expertise that exists nowhere else in the U.S. Government. The creation of the Directorate enabled the FBI to focus its WMD preparedness, prevention, and response capabilities in a single, focused organization rather than through decentralized responsibilities across divisions.

The global WMD threat to the United States and its interests continues to be a serious concern. The WMD Commission has warned that without greater urgency and decisive action, it is more likely than not that a WMD will be used in a terrorist attack somewhere in the world by the end of 2013. Osama bin Laden has also said that obtaining a WMD is a "religious duty" and is reported to have sought to perpetrate a "Hiroshima" on U.S. soil.

Globalization makes it easier for terrorists, other groups, and lone actors to gain access to and transfer WMD materials, knowledge, and technology throughout the world. As noted in the WMD Commission's report, those intent on using WMDs have been active and as such "the margin of safety is shrinking, not growing".

The frequency of high-profile acts of terrorism has increased over the past decade. Indicators of this increasing threat include the 9/11 attacks, the 2001 Amerithrax letters, the possession of WMD-related materials by Aafia Siddiqui when she was captured in 2008, and multiple attempts by terrorists at home and abroad to use explosives improvised from basic chemical precursors. The challenge presented by these threats is compounded by the large volume of hoax threats that distract and divert law enforcement agencies from addressing real threats.

The FBI must be poised to handle any WMD event, hoax or real. Therefore, the fiscal year 2012 budget request includes 13 positions (including 6 special agent bomb technicians) and \$40 million to acquire the necessary aircraft required to respond to a WMD incident and render a device safe.

#### CRIMINAL THREATS

The FBI faces many criminal threats, from white collar crime to organized crime to violent crime and gangs to the extreme violence along the Southwest Border. While all of these threats remain, I would like to take the opportunity to focus on two of these threats—investigations along the Southwest Border and violent crime occurring in Indian country.

*Southwest Border.*—The United States border with Mexico extends nearly 2,000 miles, from San Diego, California to Brownsville, Texas. At too many points along the way, drug cartels transport kilos of cocaine and marijuana, gangs kidnap and murder innocent civilians, traffickers smuggle human cargo, and corrupt public officials line their pockets by looking the other way. Any one of these offenses represents a challenge to law enforcement. Taken together, they constitute a threat not only to the safety of our border communities, but to the security of the entire country.

The severity of this problem is highlighted by the following statistics:

- \$18 billion–\$39 billion flow annually from the United States across the Southwest Border to enrich the Mexican drug cartels.
- 2,600 drug-related murders in Juarez, Mexico in 2009.
- 28,000 drug-related murders in all of Mexico since 2006.
- 93 percent of all South American cocaine moves through Mexico on its way to the United States.
- 701,000 kilograms of marijuana seized during the first 5 months of 2010 in Southwest Border States (Arizona, California, New Mexico, and Texas).
- 6,154 individual seizures of marijuana, cocaine, heroin, and methamphetamines during the first 5 months of 2010 in the Southwest Border States.

The FBI has 13 border corruption task forces, but to address security along the Southwest Border, we have developed an intelligence-led, cross-programmatic strategy to penetrate, disrupt, and dismantle the most dangerous organizations and individuals. This strategy begins with the deployment of hybrid squads in hotspot locations. The primary goal of the hybrid squad model is to bring expertise from multiple criminal programs into these dynamic, multi-faceted threats and then target, disrupt, and dismantle these organizations. Hybrid squads consist of multi-disciplinary teams of special agents, intelligence analysts, staff operations specialists, and other professionals. The agent composition on the squads provides different backgrounds and functional expertise, ranging from violent gangs, public corruption, and violent crimes.

The FBI's fiscal year 2012 budget request includes funding to continue these efforts, which were initially provided through supplemental funding in fiscal year 2010.

*Indian Country.*—The FBI has the primary Federal law enforcement authority for felony crimes in Indian country. Even with demands from other threats, Indian country law enforcement remains a priority for the FBI. Last year, the FBI was handling more than 2,400 Indian country investigations on approximately 200 reservations and more than 400 Indian gaming facilities throughout 28 States. Approximately 75 percent of all FBI Indian country investigations involve homicide, crimes against children, or felony assaults. American Indians and Alaska Natives experience violent crime at far higher rates than other Americans. Violence against Native women and children is a particular problem, with some counties facing murder rates against Native women well over 10 times the national average.”<sup>1</sup>

Complex jurisdictional issues and the dynamic and growing threat in Indian country requires additional FBI presence. Currently, the FBI has 18 Safe Trails Task Forces focused on drugs, gangs, and violent crimes in Indian country. The gang threat on Indian reservations has become evident to the tribal community leaders, and gang-related violent crime is reported to be increasing. Tribal communities have reported that tribal members are bringing back gang ideology from major cities, and drug-trafficking organizations are recruiting tribal members.

In order to address this situation, the FBI's fiscal year 2012 budget request includes 40 positions (24 special agents) and \$9 million to bolster existing Safe Trails

<sup>1</sup>Zaykowski, Kallmyer, Poteyeva, & Lanier (August 2008), *Violence Against American Indian and Alaska Native Women and the Criminal Justice Response: What is Known*, Bachman (NCJ #223691), at 5, <http://www.ncjrs.gov/pdffiles1/nij/grants/223691.pdf>.

Task Forces and to provide additional investigative resources to address a significant violent crime threat in Indian country.

#### OFFSETS

The FBI, like all Federal organizations, must do its part to create efficiencies. Although the FBI's fiscal year 2012 budget request includes \$131.5 million in program increases, it is offset, in part, by almost \$70 million in program reductions. These offsets include \$26.3 million to reduce funding for the FBI's Secure Work Environment program, which enables the FBI's national security workforce the ability to access top secret information within the FBI and with intelligence community partners; almost \$1 million to eliminate and consolidate FBI Violent Crime and Gang Task Forces; a \$15 million reduction to Sentinel (the FBI's case management system); \$6.3 million to reduce support of the relocation program, which strategically relocates staff to meet organizational needs and carry out mission requirements; almost \$1 million to eliminate 12 FBI resident agency offices across the country; a \$5.8 million reduction to the FBI's ability to develop new tools to identify and analyze network intrusions; a \$2.6 million reduction as a result of surveillance program efficiencies; almost \$1 million to reduce the amount requested to hire and support special agents and intelligence analysts; \$5.7 million to delay the refreshment cycle of FBI desktop and laptop computers—delaying refreshment from 4 years to 5 or more years; and a \$5.9 million reduction for administrative efficiencies, including funding for travel, equipment, conferences and office supplies.

#### CONCLUSION

Chairwoman Mikulski, Ranking Member Hutchison, and members of the subcommittee, I want to thank you for this opportunity to discuss the FBI's priorities and detail new investments sought for fiscal year 2012. Madam Chairwoman, let me again acknowledge the leadership and support that you and this subcommittee have provided to the FBI. The Congress' funding of critical investments in people and technology are making a difference every day at FBI offices in the United States and around the world, and we thank you for that support.

I look forward to any questions you may have.

Senator MIKULSKI. Well, Mr. Director, thank you very much for that candid testimony.

First of all, again, we want to thank you for your service, but we want to thank everybody who works at the FBI for what they do, because we know we have highly trained, highly dedicated special agents. But everybody who works at the FBI feels it's fighting the bad guys, whether it's the Secretary, whether it's the people who work in procurement, analysts, linguists, and so on. Everybody feels they're a part of the FBI family, part of the FBI crime-fighting, terrorist-tracking team. And I'm deeply—so, we want to thank them for what they do.

Now, this takes us to this continuing resolution situation. I think my colleagues did not realize that many of the people who work at the FBI would be considered nonessential, that you might have to furlough people. And then, the long-range consequences of trying to get caught up, between any cuts at the FBI, with the Spartan funding for 2012, would leave you with 1,000 vacancies.

Could you please, today, elaborate on what are the consequences, number one, of a shutdown, and number two, could you elaborate on what you said in your opening remarks about where we are in this continuing resolution?

#### OPERATING UNDER A CONTINUING RESOLUTION

Mr. MUELLER. Well, there are a number of aspects that are disconcerting, at best, in terms of the proposed shutdown. Already, we've had to expend substantial manpower anticipating and preparing for the shutdown. I will say that most agents, analysts, and

others that are involved in ongoing investigations will be considered critical. But, there are a number of areas, particularly at headquarters, where they would be deemed noncritical, and the initiatives, whether they relate to child pornography or cyber or other arenas, particularly on the criminal side, will suffer and have to be put on hold.

Training for our new agents, for the National Academy, and for State and local law enforcement that is ongoing would undoubtedly be disrupted. In some sense, where we have had, I believe, a great deal of momentum to transform the FBI, this will be put on hold, of course, during the extent of any particular shutdown.

Turning to the second issue, and that is the impact of the continuing resolution. As I pointed out in my opening remarks, this would dramatically set us back. And let me, if I could, give you an example—

Senator MIKULSKI. Please.

Mr. MUELLER [continuing]. In the mortgage fraud arena, which you mentioned earlier.

Because of the mortgage fraud crisis in 2009—and in 2010—there was a supplemental relating to financial fraud.

Senator MIKULSKI. Right.

Mr. MUELLER. We were given approximately 200 slots to address this crisis by the Congress. It was a supplemental, so it was a one-time payment for these individuals. And of course, we are seeking the recurrence so that we can keep those persons onboard. The fact that we are looking at a 2010 base for our 2011 budget means that we do not get those slots. We also had put in, for the 2011 budget, a request for another 150 personnel to address the crisis, which, with the previous 200 in 2010, would come to 350 persons to address the mortgage fraud crisis. We are not going to get those individuals. They are part of the 1,100 vacancies that we will be unable to fill if we are not given an anomaly or some other relief from what is proposed in the continuing resolution that is currently being discussed, at a time when the number of suspicious activity reports from financial institutions grew to almost 70,000 back in 2010.

So, acknowledged by the Congress as a threat to the financial institutions, we've sought funds, and we anticipate getting those bodies onboard. In some cases, we have. But we're not going to be able to get the funding to sustain the momentum in addressing that particular issue.

Senator MIKULSKI. Well, I'm going to make sure my colleagues have questions, here. And my questions related to cybersecurity, et cetera, I'll save for the other hearing environment. But, I—

Mr. MUELLER. May I add one—

Senator MIKULSKI. Yes.

Mr. MUELLER. I'm sorry to interrupt.

Senator MIKULSKI. Let me—go ahead. Please, Director.

Mr. MUELLER. One other thing is—I talked about what we got in 2010, in terms of 200 funded staffing level, and then another 150 would have been in the 2011 request. We're here talking about 2012. We did not get additional resources in the 2012 budget.

Senator MIKULSKI. That's right.

Mr. MUELLER. We assumed, and persons looking at our budget assumed, that we had enhanced our capabilities by 350. So, we're not even discussing getting additional mortgage fraud resources in 2012, because we had assumed that we would be beefed up by the time that we were discussing the 2012 budget.

Senator MIKULSKI. So, you really get a triple hit.

Mr. MUELLER. We do.

Senator MIKULSKI. You got a hit in the continuing resolution now, which could really be a hit. You got a hit in the 2011. And you get a hit in 2012.

Mr. MUELLER. Yes, ma'am.

Senator MIKULSKI. Now—but, just for purposes of the subcommittee background, colleagues, this was the mortgage fraud initiative and it shows the way we tried to work with agility in meeting the contemporary needs—this was a bipartisan effort in fighting mortgage fraud that came from Senator Shelby and myself—Senator Shelby, ranking member on Banking, who really knew the stuff and what was needed. And we worked together to jumpstart the FBI dealing with mortgage fraud that requires—Mr. Director, don't you have really unique skills in things like forensic accounting?

Mr. MUELLER. We do.

Senator MIKULSKI. So, it wasn't just like 300 people that, you know, you can get off the shelf from local law enforcement.

Mr. MUELLER. They have to be very well trained, experienced agents to do white-collar cases, particularly the multimillion dollar mortgage fraud cases.

Senator MIKULSKI. Like Madoff.

Mr. MUELLER. The Madoff case was a Ponzi scheme, but, in addition to the mortgage fraud crisis, where we have more than 3,000 cases, we have securities fraud and we have corporate fraud. You have the Madoffs, the Ponzi schemes that we're also responsible for investigating. The agents to investigate it have to have some experience in the financial arena. Forensic accountants are absolutely indispensable. Analysts not only work on the current caseload, but anticipate the next type of crisis, and are tremendously important as well. All of these are part and parcel of those positions that we had started growing in 2010 and anticipated to continue in 2011 and 2012.

Senator MIKULSKI. Well, I'm going to turn to Senator Hutchison. But, what I wanted my colleagues to see, some new to this subcommittee, this was a bipartisan effort to return to a national situation that was identified by the ranking member, and then we worked together on it. And now, we don't want it to sputter out. So, Senator Hutchison.

Senator HUTCHISON. Well, thank you, Madam Chairman.

I want to ask you, Mr. Director, about the lack of support for the Southwest Border efforts—the \$130 million. And if you would comment on the status of your request of the Justice Department for more funds, and what you think are the highest priorities for the Southwest Border that you would use more funds to address.



## SOUTHWEST BORDER FUNDING

Mr. MUELLER. Well, we did obtain some funds from the Southwest Border supplemental.

Senator HUTCHISON. The supplemental.

Mr. MUELLER. And our requests throughout the years has been generally directed at specific targeted activities where we have some degree of expertise. We have a number of public corruption cases that we handle along the border. We have 14 border corruption task forces that we operate with other participants.

Another aspect that you mentioned was the violence that crosses the border. There had been a spate of kidnappings, where there are individuals who may live in the United States, but have either businesses or family in Mexico who were kidnapped in Mexico, and the victim's families would be in the United States. We developed a series of task forces to address that. But that is still a continuing issue for us.

We have more than 500 agents who are working under the Organized Crime Drug Enforcement Task Force (OCDETF) program. They're looking at criminal enterprises, the drug-trafficking organizations.

And along the same lines, we have had recent successes in addressing Barrio Azteca. I'm sure you're familiar with that prison gang that has cross-border roots and has grown substantially over the last several years. That comes out of our working on what we call our "criminal enterprise cases."

Two areas of initiatives where we have sought money, have gotten some money, and relate to intelligence. We have put together an intelligence unit down in El Paso that pulls in intelligence for all of our border offices, as well as headquarters and intelligence with our legal attaché office in Mexico City. We share that intelligence with DEA and others in the intelligence community that are also collocated in El Paso.

Senator HUTCHISON. Are you saying you need more for that to be completely effective?

Mr. MUELLER. Yes, we could always use more funds to expand on the intelligence arena.

But, we also have gotten funds for what we call "hybrid squads" that pull together agents who have expertise in money laundering and narcotics trafficking, in public corruption and the various programs that are impacted along the border. We have, I think, close to 10 hybrid squads, at this point, that bring these various skill sets together, and they have been very effective in addressing the criminal issues that relate to the Southwest Border.

Senator HUTCHISON. Well, my information says that you would be facing a deficit of \$200 million if you're left at fiscal year 2010 levels in that particular hybrid squad—

Mr. MUELLER. I think that may be true. Excuse me just a second.

Yes, you're right. I just wanted to check and make certain that the \$200 million is the overall deficit that we will face, not just in the hybrid squads, but if the continuing resolution is passed, as is anticipated, then we'll have the \$200 million deficit, and in that \$200 million deficit—

Senator HUTCHISON. Is the—

Mr. MUELLER [continuing]. Are funds for the hybrid squads.

Senator HUTCHISON. Let me ask you another question on this crossing that we're finding of other-than-Mexican entrants, illegally, into our country. And it's the Somalian issue. We know that, through Big Bend, a group of Somali illegal immigrants doing criminal activity were apprehended, because the park officials, the park rangers, noticed and were alert and went to the Border Patrol. And the Border Patrol then apprehended these individuals at the next border checkpoint. And they were tried and found guilty. But, you and I discussed that we have a problem with Somalis who are engaged in terrorist activities, because there's no government to which they can be returned. How are you dealing with that? And how can we be helpful?

Mr. MUELLER. Well, it is a continuing issue. From our perspective, our role is to interview any of the special-interest aliens that come across the border, regardless of the country of origin, but particularly those who are coming across the border from those countries that are known to harbor terrorists. We work with Customs and Border Patrol (CBP) to not only identify but to interview and determine the threat that any of these individuals present.

With regard to Somalis who show up on the border, I do believe it is accurate that decisions have to be made. Inevitably, they are seeking asylum, and decisions have to be made whether they are legitimate asylum seekers, which is done by, quite obviously, the Department of Homeland Security (DHS).

Senator HUTCHISON. Right.

Mr. MUELLER. We work very closely to try to ferret out those who are here with legitimate asylum concerns and others who are here for other purposes. I would be happy, in closed session, to elaborate a little bit more on the numbers and what we have found.

Senator HUTCHISON. Well, let me just say, I have a number of questions for the closed session. I'd like to give my other colleagues a chance to question you, as well. And my time is up.

So, thank you very much.

Mr. MUELLER. Thank you.

Senator MIKULSKI. We're going to go to Senator Lautenberg, Senator Johnson, and then Senator Pryor.

Senator LAUTENBERG. Thank you, Madam Chairman.

And, Director Mueller, thank you for the job that you've done.

Mr. MUELLER. Thank you, Sir.

Senator LAUTENBERG. You've elevated the view of the FBI and the complicated tasks that it has to highly professionally skilled, and a very efficient team, and we thank you for your work.

Life has gotten more complicated—things that we never thought about before, about people who are willing to take their lives to kill others; the cyber side of things. All of these are relatively new findings in the lives we live. And it has made it tougher, and requires more resources.

And I'll try to ask you my questions in short form, and maybe we get going, because I'm sorry that I can't join you in the next meeting.

## BRADY LAW

In Tucson, the shooter used a high-capacity ammunition clip, killed 6 people, wounded 13, and was tackled when he was trying to reload. So, such clips were banned until 2004. And they were part of an expired assault weapons ban. And now, even former Vice President Dick Cheney has suggested that maybe it's time to reinstate this ban—it may be appropriate to do so. So, what do you think about it?

Mr. MUELLER. I think I'll speak generally, and leave the specific comments on particular legislation to the Department of Justice. But, anybody in law enforcement is concerned today about the high-velocity, high-caliber automatic/semi-automatic weapons, and the threat of those weapons falling into the hands of criminals. I, like just about anybody involved in law enforcement, am supportive of areas in which we can lessen the threat of weapons in the hands of criminals, particularly those weapons that do substantial damage.

Senator LAUTENBERG. Yes. Because that magazine is designed for military and law enforcement use, and it should not fall into the hands of people who don't have a purpose other than malice to deal with it.

The Brady law, Mr. Director, requires gun purchasers to undergo background checks to make sure they're not felons, convicted domestic abusers, or severely mentally ill. But, the gun show loophole allows anyone to walk into that gun show—it could be the most known criminal—put down the money, and walk away with guns. And we hear a lot about the need to enforce the laws that we have on the books. What effect does the gun show loophole have on our ability to enforce the Brady law, which says that you shouldn't be able to—that people like that should not be able to get gun permits?

Mr. MUELLER. Well, again, I'll talk generally, as a member of the law enforcement community, where to the extent that we can keep weapons out of the hands of criminals, we generally are supportive.

## GUN SHOW LOOPHOLE

Senator LAUTENBERG. Well, what do you make about the gun show loophole, Mr. Mueller?

Mr. MUELLER. To the extent that we do not have a mechanism of assuring that persons who have a criminal past or a reason for not being given a weapon, I think everybody in law enforcement would be supportive of—some mechanism that would—

Senator LAUTENBERG. I assume that's a "Yes." and that you think the gun show loophole ought to be closed. Do you want to correct me?

Mr. MUELLER. I have nothing further to say, other than, speaking generally for law enforcement, there are very few of us who would disagree with the desirability of having screening mechanisms that would enable us to keep the guns out of these hands of those persons who should not have them.

## TERRORIST ACCESS TO GUNS

Senator LAUTENBERG. Okay. The Federal law allows people on the terror watch list to legally purchase a gun or even explosives. In response to a letter I sent to you in 2005, the Department of Justice recommended giving the Attorney General the power to deny guns and explosives to a terror suspect. And I've introduced a bill that would do that.

Now, Attorney General Holder has expressed support for closing the terror gap in our laws. Do you think it's time to close the terror gap that exists?

Mr. MUELLER. I would say this is a complicated issue. I clearly want to keep guns out of the hands of would-be terrorists. It requires looking at persons who are on the terrorist watch list, and the basis for putting persons on the terrorist watch list. But, I think, generally, it goes to what I said before, that if you're trying to prevent terrorist attacks and you're trying to prevent persons who should not have weapons from getting weapons to undertake terrorist attacks, a screening mechanism is something that all of us believe is important.

Senator LAUTENBERG. Director Mueller, do you—is there some faulty process in putting people on the terrorist watch list? Is it an unreliable list?

Mr. MUELLER. No, I don't believe so, at all.

Senator LAUTENBERG. Okay. So, it strikes me as kind of an anomaly that people who are on a list that says these are suspects for terror, and they can walk in and buy a gun. And we've seen a couple of instances where some of these permits were permitted to go through and created havoc, in terms of discovering that they were involved with explosives, et cetera.

Mr. MUELLER. And I share your concern.

## PORT NEWARK AND LIBERTY INTERNATIONAL AIRPORT

Senator LAUTENBERG. Can I ask one more question, Madam Chairman? And that is, the stretch between Port Newark and Liberty International Airport has been identified—by the FBI, I might add—as the most dangerous area in America for a terrorist attack. There are chemical manufacturers, there are rail systems and the port—all kinds of things. And 12 million people live within a 12-mile radius of that 2-mile stretch. An attack on this area could not only cause untold death and injury, but also cripple the economy. And last year I believe you said that additional resources would go toward protecting this 2-mile area. Are there specific items in this budget request that will help the FBI protect this area further?

Mr. MUELLER. Well, let me start by saying that I've appeared before this subcommittee annually for a number of years now, and I know this is a topic that we would discuss each year, and have. I can assure you that since we've had the original discussion, and each year it's raised, we go back to make certain that which we have put in place to address this particular strip of territory—the Homeland Security Task Force, the Joint Terrorism Task Force (JTTF) is doing everything it can to assure that there is not an attack there. And I am continuously reassured that is the case.

Going to the question of whether there is anything specifically in the budget request that would address that, I'd have to get back to you on it.

[The information follows:]

#### BUDGET REQUEST FOR RESOURCES IN NEW JERSEY

The Federal Bureau of investigation's (FBI) fiscal year 2012 request to the Congress does not include an enhancement to specifically address the stretch between Port Newark and Liberty International Airport, however, the FBI and the Department of Homeland Security, working through Task Forces, are working diligently to combat any threats and ensure the area remains safe.

Senator LAUTENBERG. Thanks very much. And I would urge you to hang around as long as you can. I've tried it, and I like it.

Thank you very much.

Senator MIKULSKI. Senator Johnson.

Senator JOHNSON. Thank you, Madam Chairwoman, Director Mueller, again thank you for your service, not only as FBI Director, but all your public service, including being a U.S. marine.

I'm the new kid on the block here, so I'm going to try—in my questions here, try and determine the priorities of the Department. I'm an accountant, so I like doing that, actually using the budget process, in terms of where you spend your money.

#### FBI BUDGET PRIORITIZATION

So, first of all, in your budgeting process, do you categorize the areas of your concern in the—so I can kind of figure out where the money goes?

Mr. MUELLER. Absolutely. There are two processes we go through. One is the programmatic prioritization. One of the first steps we took after September 11 was setting programmatic priorities for the organization as a whole, simply put, so everybody understood what those priorities are. And they are the same priorities today: on the national security side, counterterrorism, counterintelligence, and cyber—protecting the country from terrorist attacks, theft of our secrets, and cyberattacks; on the criminal side, it's public corruption and civil rights, followed by transnational/international organized crime, followed by substantial white-collar crime and violent crime.

Everyone, from top to bottom, knows that these are the eight programmatic priorities. There are two more. One is to understand that our successes depended on our cooperation with, and support of, State and local law enforcement and our persons overseas, and the necessity of bringing the FBI into the technological age.

Our budget process is set up so that if you want additional personnel and additional resources, they have to fit into the budget framework.

On the other side, we have initiatives that we identify each year—10 or so initiatives. One initiative this last year was to establish regional intelligence centers to complement what we do throughout the country. There are about six of those.

So, our budget process sets the priorities first, and then everybody who wishes to benefit—and by that, I mean our various programs—have to understand where they fit in the prioritization process.

Senator JOHNSON. In round numbers, can you give me the top four or five, in terms of how much is spent in these areas, then?

Mr. MUELLER. Not off the top of my head. I will tell you that the way I look at it, in some sense, is we've got two sides of the house. One is the criminal side of the house which we've done traditionally for 100 years. The other is national security.

Senator JOHNSON. Can you give me numbers on those?

Mr. MUELLER. About 50/50.

Senator JOHNSON. It's about 50/50.

Mr. MUELLER. About 50/50. It used to be, before September 11, we had about 10,000 agents on the street. About 7,000 were working criminal programs and about 3,000 were working national security. We're up a couple thousand more. So, on the street we have maybe 6,000 agents who are doing the criminal programs and approximately another 6,000 who are doing the national security programs.

The one point I would make is that we had to move 2,000 agents from the criminal programs over to national security in the wake of September 11. There has not been a backfill, really, for those bodies.

Senator JOHNSON. So, you—prior to 9/11, you had about 10,000 employees, and now you've got about 32,000? 31,500?

Mr. MUELLER. We've got about 35,000 employees, now. I was talking about agents on the street. In other words—

Senator JOHNSON. Okay.

Mr. MUELLER [continuing]. Not agents at headquarters, but those that are actually out there doing investigations, of which we had approximately 10,000 prior to September 11.

Senator JOHNSON. How many agents do you have right now, then?

Mr. MUELLER. We have approximately 13,800 agents now, almost 14,000 agents. And the total in the FBI is more than 35,000 now.

Senator JOHNSON. So, how are those split, then, between the two top categories, on criminal versus counterterrorism?

Mr. MUELLER. You mean of the agents?

Senator JOHNSON. Agents, correct, on the street.

Mr. MUELLER. It's about 50/50, still.

Senator JOHNSON. Okay. So, again, you took 2,000 from criminal, basically, and put that into counterterrorism.

Mr. MUELLER. Yes.

Senator JOHNSON. And then, you added probably about 3,000.

Mr. MUELLER. Yes. Approximately 2,700.

Senator JOHNSON. Okay.

Mr. MUELLER. But most of the resources we have received over the years have been in support of the national security function, in building up the national security side of the house.

Senator JOHNSON. Okay, good. I mean, that just gives me a feel for the priorities.

#### MORTGAGE FRAUD

Can you describe who's the—who are the targets? I mean, what—who are the criminals in the mortgage—in—this in the mortgage fraud crisis? I'm—I need to be brought up to speed on this.

Mr. MUELLER. Well, they go from entities and individuals on Wall Street to various different types of schemes and scams in the various communities, which might involve the builders, the appraisers, cooperating homeowners, and Realtors. There are a variety of schemes that were used to suck money out of the mortgage market to benefit persons, both small and large, during that crisis. So, we have, from bottom to top, the investigations—some very large investigations where there are multimillion-dollar losses, to those investigations where there was an ongoing conspiracy for 2 or 3 years, where you might involve a real estate agent, the appraiser that was jimmying the appraisals, and cooperating homeowners and builders.

Senator JOHNSON. Can—just real quick—does that still pose—are we kind of mopping up after the damage, or does this still pose a pretty significant threat to our financial system?

Mr. MUELLER. I think we are on the downslope of the issue. What I find is that white collar crime is cyclical, in some sense. Back in 2002, 2003, we had Enron, we had WorldCom, we had HealthSouth, we had any number of large corporations that we were investigating for fiddling the books, particularly in their quarterlies and the like. And we had to ramp up to address that particular crisis.

This is a crisis we have ramped up to address, and we're on the downslope. Our concern, if any, is, apart from the homeowner mortgage crisis, to the commercial mortgage arena, in which we have seen an uptick in fraudulent activities, while there's been, I would say, a slowed growth in the homeowner mortgage set of cases.

Senator JOHNSON. Okay. Thank you.

Senator MIKULSKI. Part of the reason there's been a slow growth is because they've been prosecuted, and they know the FBI will come after them.

Mr. MUELLER. Yes, I should have alerted you to that. Yes. The deterrence gets out there. You've seen people hauled away in handcuffs.

Senator MIKULSKI. In other words, these are bottom fishers. I mean, the prosecutions have been a form of prevention of further activity.

But, Senator Johnson, if you want to have additional briefings from the FBI, they'll be happy to talk with you.

Mr. MUELLER. Be happy to do that.

Senator MIKULSKI. Senator Pryor and—then Senator Collins.

Senator PRYOR. Thank you, Madam Chair.

And thank you, Mr. Director.

Mr. MUELLER. Senator.

Senator PRYOR. And it's always good to see you. Thank you for being here today.

#### SOUTHWEST BORDER

For my first few questions, I'd like to focus on the Southwest Border, and particularly on the Mexican drug cartels. My first question is somewhat of a followup to Senator Hutchison's questions.

We had a hearing last week, in one of the Homeland Security subcommittees, where we talked about the new and innovative ways that drug traffickers are trying to get their product into the United States illegally. It's everything from tunnels to catapults to fake company vehicles, vehicles that have been painted up like a delivery truck, to submarines, to ultralight aircraft. They're just innovating like crazy to try to get these illegal drugs into the United States.

And sort of a general question would be—I know that you are working on this; I know DEA, CBP—everybody really seems to be working on this. But, are we getting it right? That's just a general question. Are we allocating enough resources? Do we have enough focus on those Mexican drug cartels? Are we getting it right down there?

Mr. MUELLER. In some sense, we're always reacting to the innovation that you discussed. If you take something like ultralights, we, along with DEA and others along the Southwest Border, have addressed this particular concern, and also with the help of the military, for obvious reasons, when it comes to submarines and the like. When we identify a new mechanism or way of transporting drugs to the United States, we react very effectively.

The key to success often is having the sources, not in the United States, but sources in other countries that alert you to the new mechanisms of transporting the goods into the United States. I believe we have been very effective over the years—ourselves, working closely with DEA—in gathering the intelligence that would alert us to the new mechanisms of trafficking in the United States.

Additional resources would always be helpful. Would it make a substantial impact on the ability? Because there's so many different ways that drugs are coming to the United States—there's no one pipeline that you could cut off—it's hard to tell the overall impact. But, I think we do a good job at responding to the new, innovative ways that the traffickers are attempting to get the drugs across the border.

Senator PRYOR. You know, another problem we've had—and this has been most visible in CBP, although it apparently is in other agencies, as well—is that the drug cartels are actively trying to corrupt U.S. officials, U.S. employees, Border Patrol agents, et cetera. Are you seeing that phenomenon within the FBI?

Mr. MUELLER. Not within the FBI. We do the investigations in other agencies. We may have had one or two instances where—over 4 or 5 years ago—maybe it's more than that, but certainly under 10—in which we've had, we believe, FBI employees acting improperly on behalf of those who may be affiliated with cartels.

Senator PRYOR. I know that one of the problems the CBP has had is that they've done all this new hiring—

Mr. MUELLER. Yes.

Senator PRYOR [continuing]. To try to beef up the border. The Congress has been pushing more hiring along the border. But they have not kept up with their own policies and procedures, in terms of doing polygraphs before people are hired, and doing the background checks once they're hired, et cetera. And my understanding is FBI has actually tried to lend a hand there with polygraphs. So—



Mr. MUELLER. We do.

Senator PRYOR. Yes. So, I appreciate that. And I think there—again, it sort of underscores the team effort nature of this.

Mr. MUELLER. We have border corruption task forces that we participate in along the border—

Senator PRYOR. Right.

Mr. MUELLER [continuing]. Focused just on this.

#### GANGS

Senator PRYOR. And another related issue is that the Mexican drug cartel has a big presence in the United States. And they're using a lot of gangs. Some of these are street gangs. Apparently, there's a concern about the prison system, where folks come out of the prison system and they join these gangs; they've been recruited, I guess you can say, in the prison system. Are you seeing that phenomenon? And, in your budget, are you trying to address that?

Mr. MUELLER. Well, I mentioned Barrio Azteca earlier, which is on the Texas border. In California you have the Mexican Mafia, Nuestra Familia in northern California, and across the border, you can identify those gangs that have operations or have hierarchy in Mexico and are running the trafficking through these gangs in the United States, or have relationships with the cartels, in order to bring the drugs in and distribute them.

We had to make a decision after September 11 to move 2,000 agents to counterterrorism. We sat down and looked at what we were doing. Where did we take the 2,000 agents? We took a majority of those agents from the drug programs, where they were doing enterprise cases, working with DEA and OCDETF, and moved them over to national security. We also took agents who were doing smaller white-collar criminal cases and moved them over to national security. That has meant that we have not had anywhere near the footprint we had in addressing narcotics cases in the wake of September 11. And, as I indicated, the 2,000 bodies taken from the criminal side of the house have not been backfilled. So, in our budget, that is not one of those priorities that I alluded to.

Senator PRYOR. Right.

Mr. MUELLER. And you either prioritize, or you don't. You can't pick and choose.

Senator PRYOR. Right. Thank you.

Thank you, Madam Chair.

Senator MIKULSKI. Senator Collins. And—

Senator COLLINS. Thank you, Madam Chair.

Senator MIKULSKI [continuing]. We're so glad you're—well, we're glad everybody's a member—but, as ranking member on the Homeland Security Committee, I think you really bring an incredible body of knowledge on this, and hope you can join us, also, in the classified hearing, at the conclusion of your questions.

Senator COLLINS. Thank you. I'm delighted to be a new member of this subcommittee with such great leaders. During a recent dinner with the women of the Senate, we decided that, if necessary, we're going to take over the budget negotiations, because we're confident we could produce a budget. And I say that only partially in jest. I think we really could work this out.

Mr. MUELLER. Then I'd say I look forward to working with you.  
Senator COLLINS. Exactly.

This is—I know that issue has been covered, and I just want to associate myself with the comments that have been made, to express my great concern on what the real-life impact is if Government is unable to function.

I also want to associate myself with the comments of my colleagues in thanking you for your public service. I know, as Senator Hutchison has mentioned, that you are the first FBI Director to serve the full 10 years since the Congress put that requirement in place. That continuity of leadership has allowed you to accomplish a great deal and has been extremely important as the FBI has gone through a fundamental transition in its mission.

As you are well aware from our numerous conversations, the Homeland Security Committee recently completed its investigation into the Fort Hood attack and issued a comprehensive report, which has a number of findings and recommendations that relate to FBI. I know that, last week, you testified before the Judiciary Committee, and were asked about our report, and discussed the improvements FBI has undertaken in response to our recommendations.

#### FORT HOOD SHOOTING

A critical failure that our report identified was the failure of one of the JTTFs—the one in San Diego—to fully share information about communications between Major Hassan and a suspected terrorist with the Washington JTTF and with FBI headquarters and with the DOD. Have you put in place reforms that would prevent that kind of stovepiping from occurring today?

Mr. MUELLER. Well, I'm not certain I would agree with the characterization of a conscious stovepiping. I do believe that information was shared—and we can get into this in more detail—but, I do believe information was shared from San Diego to Washington. Now, the followup, in terms of taking that information and moving on it, is an area that we addressed, and we addressed it through additional training and the like.

In terms of the information to be shared, there were areas that related to our ability, technologically, with our databases, to pull together a variety of pieces of information, and continue to retrieve that information and share it, that we had to address. We have addressed that and are indeed in the process of utilizing that as a basis for having the capability of doing federated searches across a variety of databases.

So, in the immediate wake of Fort Hood, we looked at that and saw that this was a vulnerability and a weakness that we had to address. And we have been doing that.

I might also add, if I could, that we are seeking additional software capabilities in the 2012 budget to address this. But those are my thoughts on that issue.

Senator COLLINS. Well, some information was shared. I think you will agree that not all of the communications were shared. And the result was that the Washington JTTF did a very cursory review of—once it got the information from San Diego, which caused great consternation by San Diego.

But, let me ask you a more fundamental question about this. An important conclusion of our report was that this was not—this case, with Major Hassan, was not treated as a counterterrorism case, that the FBI's counterterrorism division at headquarters was not informed to try to resolve the conflicts between the two JTTFs. And the DOD was not fully informed, pursuant to the longstanding delimitations agreement. What has been done to address those issues?

Mr. MUELLER. Well, there are two things we found, in the wake of what happened down there that we need to address.

We had informal discussions with DOD, on an informal, basically ad hoc basis, with regard to individuals in the military who may present a counterterrorism issue here in the United States. That was inadequate. We have, now, a formal relationship, periodic meetings in which we go over every case that, in any way we come up with, affects the military. And also, the military exchanges information with us. So we have addressed that problem—that gap.

The other issue that you talked about, and that is the coordination by headquarters in the FBI: we have 56 field offices, 400 resident agencies, thousands of counterterrorism cases. And we have substantially built up the headquarter's—and I won't say "control"—coordination and support since September 11. And I believe it works effectively almost all the time. There are going to be instances where it does not get up to where it should be and decisions are made at a lower level on a particular case that should have been raised up. This, perhaps, was one of them.

But, the other point that I do want to make, with regard to what happened in this particular case between our JTTFs—and I can get into this maybe a little bit deeper when we're in closed session—but, in certain cases, the volume of information that has to be reviewed may be too broad for one particular field office to handle. We have changed our processes so there are redundant reviews to assure that if something is not picked up in the first instance in a field office, it will be picked up at headquarters in a redundant review to address that particular issue.

Senator COLLINS. Thank you. Thank you, Madam Chair.

Senator MIKULSKI. And, as I said to Senator Johnson, if you want an additional series of meetings, the FBI will. And it's also worthwhile going over. And it will tie in directly, particularly with cybersecurity. But, we'll talk about it in our next stop, here.

#### ADDITIONAL COMMITTEE QUESTIONS

If there are no further questions, the Senators may submit additional questions for the official hearing record. And we'd like the FBI's response in 30 days.

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

#### QUESTIONS SUBMITTED BY BARBARA A. MIKULSKI

##### MORTGAGE FRAUD—PREDATORY LENDING

*Question.* Predatory lenders continue destroying families and communities across the United States and undermining faith in our financial systems. The Federal Bureau of Investigation's (FBI) mortgage fraud workload has increased as more predatory lenders are exposed. Last year, the Congress allocated \$245 million for FBI to

hire new agents and forensic accountants dedicated to investigating mortgage fraud, bringing the total number working on this problem to more than 910 agents.

What can FBI do when it has full teams of agents, forensic accountants, analysts, and attorneys to work on the financial fraud case workload?

Answer. The addition of any investigative analysts and forensic accountants would assist the agents and attorneys in investigating and prosecuting the roughly 3,000 pending mortgage fraud cases and 2,400 corporate securities and commodities fraud cases.

The average length of a complex mortgage fraud investigation ranges from 2 to 5 years, and with the current funded level of agents, the average mortgage fraud caseload is approximately nine cases per agent. With a full team, the FBI will be able to increase the pace at which cases can be investigated and prosecuted, and reduce the caseload per agent.

The 3-year average impact per agent for mortgage fraud was \$6,436,213 during the period of fiscal year 2008–fiscal year 2010. The 3-year average impact per agent for corporate securities and commodities fraud was \$31,541,257 during the period of fiscal year 2008–fiscal year 2010. This calculation is based on the amount of restitution, recoveries, fines, and forfeitures generated from the mortgage fraud cases by agents assigned to investigate the cases.

*Question.* There has been some speculation lately as to why FBI is “targeting” smaller financial fraud cases rather than going after much bigger ones on Wall Street. Please explain if this is true and how the FBI prioritizes cases.

Answer. FBI does not “target” cases involving lone offenders, small dollar losses, or lower-level violations. Rather, we investigate and pursue financial fraud in all its forms, and we are keenly interested in investigating cases that involve large dollar losses, multiple fraud victims, criminal enterprises, or behavior that poses a heightened risk of undermining trust in financial markets. Of course, the pace of large, complex financial fraud investigations—which often take 2 years or more to thoroughly investigate—will not match the quicker pace of more straightforward fraud cases. But there should be no doubt that we are committed to using all resources at our disposal to pursue large, complex financial fraud wherever we find it.

By way of illustration, throughout the past year, FBI and its partners at all levels of law enforcement continued to uncover and assist in the prosecution of massive frauds and Ponzi schemes. At the end of fiscal year 2010, FBI had more than 2,300 active corporate and securities fraud investigations. During the same timeframe, we were involved in more than 3,000 ongoing mortgage fraud investigations. Here are a few examples of the types of cases we have been pursuing:

- In April 2010, Thomas J. Petters was sentenced to 50 years in prison for his role in operating a \$3.65 billion Ponzi scheme through his company, Petters Group Worldwide LLC.
- In June, Lee Farkas, former chairman of Taylor, Bean, and Whitaker, a large mortgage origination company, was charged with a \$1.9 billion fraud that contributed to the failure of Colonial Bank, one of the largest banks in the United States and the sixth-largest bank failure in the country.
- In July, Paul Greenwood, a managing partner at both WG Trading and Westridge Capital Management, pled guilty to his role in a \$700 million scheme that defrauded charitable and university foundations as well as pension and retirement plans.
- In October, Jeffrey Thompson, former president of Hume Bank, pled guilty to making false statements to the FDIC as part of a bank fraud scheme which caused such significant losses that the institution was pushed into insolvency. Thompson faces a sentence of up to 30 years in Federal prison, plus a fine up to \$1 million and an order of restitution.
- In February 2011, Michael McGrath, former president and owner of U.S. Mortgage Corporation, formerly one of the largest private residential mortgage companies in New Jersey, is scheduled to be sentenced for his role in perpetrating a corporate fraud scheme involving the double selling of mortgage loans to Fannie Mae with losses in excess of \$100 million. McGrath faces up to 20 years’ Federal imprisonment, as well as payment of restitution and forfeiture of assets.

These are just a few examples of the thousands of financial fraud investigations ongoing at FBI and conducted in conjunction with the administration’s Financial Fraud Enforcement Task Force.

*Question.* Will FBI be able to add agents to conduct these investigations, even as it loses criminal agents to counterterrorism work?

Answer. The \$44.8 million in new resources that the Congress provided in fiscal year 2009 to investigate mortgage fraud and other financial crimes has allowed FBI to add 81 agents to focus on this criminal activity. FBI is not able to realign agents

from other programs to work on mortgage fraud as it would risk widening investigatory gaps in other areas.

Note that since fiscal year 2007, FBI has not “lost” criminal agents to counterterrorism work.

*Question.* How can FBI better help State and local officials investigate predatory lenders?

*Answer.* FBI currently works closely with its State and local law enforcement partners on financial fraud cases in numerous ways, including through regional mortgage fraud task forces and working groups; through the coordinated efforts of the Financial Fraud Enforcement Task Force, which includes many State and local enforcement officials; and through the National Association of Attorneys General and the National District Attorneys Association. FBI will continue to use these and other avenues to work with its State and local partners in the future.

#### STOPPING HUMAN TRAFFICKING

*Question.* Human trafficking is both a United States and international crime as a violation of human rights, labor and public health standards. The State Department estimates that 800,000 individuals are trafficked across borders each year, with an estimated 2–4 million people trafficked within countries. At least 45,000 victims trafficked into the United States each year. The overwhelming majority are women and children—mail order brides, sex slaves, runaways, and child prostitutes. Organized crime cartels make \$9.5 billion annually from human trafficking across the world.

What role does FBI play in investigating human trafficking and slavery?

*Answer.* FBI is the DOJ’s primary investigative agency for human trafficking violations. As such, FBI participates in 74 human-trafficking working groups and task forces nationwide. The working groups and task forces are comprised of other Federal, State, and local law enforcement as well as a number of nongovernmental organizations. Additionally, FBI is a member of the Federal Enforcement Working Group (FEWG), which includes representation from the Department of Justice, Civil Rights Division; the Department of Homeland Security (DHS), Homeland Security Investigations directorate; the Department of Labor (DOL), Wage and Hour Division; and the DOL Office of the Inspector General. As a member of the FEWG, FBI is participating in a pilot Federal Anti-Trafficking Coordination Team (ACTeam) program. The objectives of the ACTeams are to proactively identify and assist human trafficking victims; develop victim-centered, multi-disciplinary human trafficking investigations; and produce high-impact human trafficking prosecutions resulting in the conviction of traffickers, the dismantling of trafficking organizations, and the forfeiture of proceeds and instrumentalities of trafficking offenses.

*Question.* What is FBI doing to help State and local law enforcement and victim service providers keep victims of human trafficking safe and hold abusers available?

*Answer.* The number of agents in FBI’s Human Trafficking program has increased fivefold since 2001, and the number of investigations has nearly tripled since 2004. A critical resource and component of FBI’s approach to Human Trafficking is the support to victims provided by the Office for Victim Assistance (funded by the Crime Victims Fund), including emergency housing, crisis intervention services, clothing, translator services, locating job training and educational services, processing applications for continued presence in the United States, and more.

More than two-thirds of FBI’s 122 field office victim specialists participate in human trafficking task forces. FBI leverages its threat-driven and intelligence-led approach to human trafficking investigations. Every intelligence analyst, staff operation specialist, and forensic accountant receives human trafficking instruction as part of their new employee training program.

In August of last year, FBI published a national Human Trafficking Intelligence Assessment that identifies trends in human trafficking and areas within the United States that are vulnerable to certain forms of human trafficking. FBI is also focused on directing investigative and outreach resources to combat threats to non-immigrant visa workers and other communities that are particularly vulnerable to forced labor.

In addition, FBI has built the Innocence Lost National Database, which assists in the identification of victims and the prosecution of those responsible for the sexual exploitation and trafficking of juveniles. This database is accessible to Federal, State, and local law enforcement officers and prosecutors who investigate child prostitution.

FBI is a full participant in the Anti-trafficking Coordination Teams, with partners in DHS, DOL, and the U.S. Attorney offices. These teams add to our existing relationships with Federal, State, local, tribal, and nongovernmental partners formed

through participation in more than 100 task forces and working groups focused on confronting the human trafficking threat.

*Question.* How can FBI better help State and local officials investigate the perpetrators of human trafficking?

Answer. Human trafficking investigations often require a tremendous amount of manpower, thus FBI works collaboratively with State and local law enforcement partners in investigating these crimes.

Often victims, due to fear of their traffickers, are initially afraid to admit they are victims of human trafficking. With the help of FBI's Victim Assistance Program, victims are provided a safe environment to speak and provide the details necessary to prove a human trafficking violation.

Another important aspect of investigating the perpetrators of human trafficking is knowing where to find the perpetrators. A number of FBI field offices provide human trafficking training to State and local law enforcement as well as to the non-governmental organizations. This training helps State and local law enforcement identify industries which are susceptible to human trafficking and to better understanding the human trafficking problem in their area of responsibility.

#### STATE AND LOCAL LAW ENFORCEMENT—FIGHTING TERRORISM

*Question.* Joint Terrorism Task Forces (JTTFs) are teams of Federal, State, and local police and intelligence agencies working together to identify and respond to terrorist threats at the local level. There are now more than 100 task forces led by FBI, with 4,400 participants. These teams have been front and center in recent failed bombing attempts on a military recruiting station in my own home State of Maryland, former President Bush's home in Texas, and a holiday tree lighting ceremony in Oregon. Their efforts have prevented what could have been deadly attacks on Americans.

How beneficial are the task forces in responding to terrorist threats? What unique role do they play in terrorism investigations?

Answer. JTTFs are highly beneficial and play an essential role in responding to terrorist threats and protecting the United States from attack:

- they enhance communication, coordination, and cooperation among the Federal, State, local, and tribal agencies by sharing information regarding suspected terrorist activities and/or subjects on a regular basis and providing access to other investigative databases to ensure timely and efficient vetting of leads;
- they provide a force multiplier in the fight against terrorism; and
- they enhance FBI's understanding of the threat level in the United States.

Currently, FBI leads 104 JTTFs:

- 1 in each of the 56 FBI field office headquarter cities; and
- 48 in various FBI resident agencies.

In addition to FBI, 688 State, local, and tribal agencies, and 49 other Federal agencies have representatives assigned to the JTTFs. FBI is the lead Federal agency with jurisdiction to investigate terrorism matters, and the JTTFs are one of FBI's key mechanisms to investigate terrorism matters and protect the United States from terrorist attack.

*Question.* Does FBI anticipate expanding task forces in the future if funds are available? Or is it recommended that funding go to another priority area? What additional resources would FBI need to expand the program?

Answer. As noted in an earlier response, JTTFs are extremely effective in investigating terrorism matters and protecting the United States from terrorist attacks. JTTFs enhance communication, coordination, and cooperation among Federal, State, local, and tribal agencies, and provide a force multiplier in the fight against terrorism. Additional resources would help FBI and other Federal, State, local, and tribal agencies increase participation in the JTTFs, and thus assist in combating terrorism. In order to expand JTTFs, funding for personnel (FBI and Task Force Officers), overtime, space, equipment, and other items would be necessary.

*Question.* With State and local law enforcement agencies reducing their numbers because of funding cuts, will FBI face a greater difficulty to fill gaps in State and local terrorism investigations? Is FBI set to receive or request any additional money to deal with additional demands from its State and local partners?

Answer. JTTF membership has declined over the past year. This decline could be attributed to current Federal, State, and local budgetary constraints that have created manpower issues for agencies and caused them to pull back personnel from JTTFs. Federal, State, and local agency full-time and part-time JTTF participation comes at a great manpower staffing cost to participating agencies, and it will likely become increasingly difficult for agency executives to detail personnel to JTTFs due to budgetary constraints. FBI will continue to support the ability of its State and

local law enforcement partners to participate in JTTFs, including paying for overtime of State and local task force officers with funding provided by the Assets Forfeiture Fund.

The overall decline in Federal, State, and local JTTF participation will impact interagency coordination, cooperation, and information sharing at all levels. Defeating terrorism cannot be achieved by a single organization. It requires collaboration with Federal, State, local, and tribal partners to identify suspicious activity and address it.

Given the persistent and growing threat posed by terrorists, JTTFs require an enhanced presence of other law enforcement and intelligence entities on task forces. JTTFs cover thousands of leads in response to calls regarding counterterrorism-related issues. These leads address potential threats to national security and require a significant amount of coordination and resources.

FBI does not reimburse its JTTF partner agencies for task force officer salaries. Reimbursement is solely limited to overtime for the State and local agencies. To mitigate the loss of additional task force officers, funding could be allocated to State, local, and Federal partners, either directly or through DOJ grants, to support their continued participation. FBI has not requested any additional funding in the fiscal year 2012 President's budget to meet additional demands from its State and local partners.

#### SENTINEL

*Question.* I have been concerned for a long time about the many delays and cost overruns in the development of Sentinel, FBI's new case management system. These important technological tools and computer upgrades are supposed to protect our citizens. FBI has taken recent steps to salvage Sentinel from multiple delays and rising costs. I want to know what was behind the delays and what the next steps are.

What caused the multiple delays in Sentinel, leading up to July 2010 when FBI issued a full stop work order, and how did FBI handle these problems?

*Answer.* As a reminder, at the time of the stop work order, two phases of the Sentinel case management application had been successfully deployed, supporting approximately 8,000 unique users on a monthly basis at that time. Further, the project is still within the \$451 million budget and is projected to remain so through the final development and deployment of Sentinel capabilities.

FBI issued a partial stop-work order in early 2010 and a subsequent full stop-work order in July 2010 as a result of a significant number of deficiencies in quality, usability, and maintainability of the code delivered. As a result, FBI executive management made a decision to delay release of the pilots scheduled for early 2010, which were instead completed in July and August 2010.

During the period between the partial stop-work order and the full stop-work order, FBI determined that the most appropriate step to mitigate unwarranted program costs and schedule overrun was to issue a full stop-work order with the contractor and have FBI assume direct responsibility for the development of the application.

FBI leadership determined that an Agile development methodology would allow FBI to complete all functionality and provide the best outcome for success within the \$451 million budget.

*Question.* In September 2010, the Director decided to take management of Sentinel completion in house. What factors led FBI to take over completion of Sentinel?

*Answer.* As a reminder, at the time of the stop-work order, two phases of the Sentinel case management application had been successfully deployed, supporting approximately 8,000 unique users on a monthly basis at that time. Further, the project is still within the \$451 million budget and is projected to remain so through the final development and deployment of Sentinel capabilities.

FBI issued a partial stop-work order in early 2010 and a subsequent full stop-work order in July 2010 as a result of a significant number of deficiencies in quality, usability, and maintainability of the code delivered. As a result, FBI executive management made a decision to delay release of the pilots scheduled for early 2010, which were instead completed in July and August 2010.

During the period between the partial stop-work order and the full stop-work order, FBI determined that the most appropriate step to mitigate unwarranted program costs and schedule overrun was to issue a full stop-work order with the contractor and have FBI assume direct responsibility for the development of the application.

FBI leadership determined that an Agile development methodology would allow FBI to complete all functionality and provide the best outcome for success within the \$451 million budget.

*Question.* Have any capabilities actually been deployed? Is anyone using them, and, if so, what is the user feedback?

*Answer.* Sentinel was originally deployed in 2007. Additional capabilities have been added to Sentinel since the original deployment. There are currently more than 10,000 unique users monthly for Sentinel. In a recent survey, Sentinel users provided favorable feedback on the system capabilities, rating it a 4 “agree” on a 1–5 Likert scale, where 1 was “strongly disagree” and 5 was “strongly agree”.

The deployed system capabilities include:

- Electronic communications form (FD–1057);
- Interview form (FD–302);
- Lead request (FD–1038);
- Import form (FD–1036);
- Workflow;
- Document search; and
- Setting leads.

*Question.* What is FBI doing to address the budget and schedule impact?

*Answer.* Sentinel should be fully deployed within the approved \$451 million budget. Bringing management of Sentinel in-house and utilizing the Agile development methodology have enabled the schedule to be shortened. FBI plans to complete deployment in 2011 and within budget.

In October 2010, FBI began a directly managed effort to complete the remaining requirements for the Sentinel program. The critical tenets of the program, using an Agile development process, required a smaller integrated team. To control costs and implementation of Sentinel, FBI’s Assistant Director, Information Technology Engineering Division/Chief Technology Officer has been directly leading the integrated team of Government employees and contractors.

On a biweekly basis, the team presents a demonstration of completed and integrated functionalities to an open audience, including DOJ, key FBI executives, Independent Verification and Validation (IV&V) team members, FBI IT Governance, FBI Knowledge Office, FBI Finance Division (FD), FBI Corporate Policy Office, FBI Resource Planning Office, and FBI Records Management Division. This audience provides feedback to the team during each demonstration.

*Change Management.*—Sprint planning meetings are held every other Monday following the previous Friday’s delivery demonstration. During the Sprint planning meetings, the Sentinel Agile team plans and prioritizes expectations for the upcoming demonstration (in 10 working days). This effectively controls the scope and prioritization of the work to be performed.

*Contract Structure.*—The remaining development and completion of Sentinel using the Agile methodology accelerates decisionmaking and improves team productivity. To support the shift of technical responsibility to FBI management, Lockheed Martin’s responsibility was transitioned to a cost-plus fixed fee for the remaining development. Operations and Maintenance of the current production version of Sentinel remains a cost-plus award fee structure.

*Contractor Oversight.*—Contractors are directly integrated with Government personnel. Government employees lead all areas of Sentinel development and provide immediate and continuous oversight. Contractors also submit monthly status reports to the Sentinel team that detail the most recent performance. The Sentinel team has an established Integrated Baseline Review and a Control Account process providing a certified Earned Value Management System.

*IV&V.*—An IV&V contract has been in place throughout Sentinel’s development to monitor Sentinel and Lockheed Martin’s efforts and to ensure an unbiased evaluation of both the products and processes associated with the technical, managerial, financial, and/or risk associated with the program. The Sentinel Agile team continues to conduct IV&V reviews; the results are provided to the Executive Assistant Director of the Information and Technology Branch.

*Risk Management.*—The Sentinel Agile team has continued the risk management process. It meets bi-weekly to re-evaluate and update the risk register.

*Additional Oversight.*—In addition to the controls implemented by the FBI Sentinel team, the leadership continues to be responsive to the following:

- Regular FBI executive briefings;
- Continuous DOJ Office of the Inspector General audits;
- Ongoing Government Accountability office audits;
- Monthly DOJ reviews;
- Regular DOJ investment review board reviews;
- Office of Management and Budget TechStat process;



- DOJ TechStat process;
- FBI Governance monthly program health checks;
- FBI Life-cycle management;
- Weekly program reviews by FBI Finance Division, Office of General Counsel, and Inspection Division;
- Dedicated liaison to the FBI's Resource Planning Office, Directorate of Intelligence, and Records Management Division.

*Question.* When will the project be completed? How much over budget will it be?

*Answer.* At the beginning of Sentinel Agile development, the planned estimate for completion was to remain within the \$451 million allocation, which includes operations and maintenance (O&M) and the life-cycle development costs. As of the latest invoice cycle, Sentinel development and the O&M of the operational Sentinel system are within the \$451 million approved funding. When Sentinel first went into operation in 2007, a 5-year O&M contract began and runs to May 2012. However, FBI projects that Sentinel will be fully deployed in 2011.

*Question.* FBI requests \$30 million in fiscal year 2012 for Sentinel. Is this more than the estimated development budget?

*Answer.* Sentinel Agile is expected to be delivered in 2011 within the \$451 million total Sentinel budget. This funding also provides O&M support through May 2012. The fiscal year 2012 budget request of \$30 million is to create a permanent base funding for O&M.

#### STOPPING INTERNET CHILD PREDATORS

*Question.* The Innocent Images Initiative targets sexual predators on the Internet, a sexual predator's weapon of choice to target children. Innocent Images' workload has increased dramatically, from 113 open cases in 1996 to 6,000 open cases in 2009—a 5,000 percent increase. FBI's budget request includes \$69 million for the Innocent Images program. In 2010, the Congress increased Innocent Images by \$14 million, but the fiscal year 2012 request is only \$2 million more.

If the Innocent Images caseload is increasing so exponentially, why hasn't FBI requested substantial additional resources in fiscal year 2012 to hire more agents and digital forensics experts to meet this need?

*Answer.* The Innocent Images program is a high priority to FBI. In fiscal year 2011, FBI dedicated 237 agents in the field to address the growing problem of sexual predators using the Internet to target children. These 237 agents worked on 5,999 innocent images cases, or an average of 26 cases per agent. While the caseload per agent demonstrates that additional resources would be helpful, the budget reflects our best efforts to align limited resources to a number of our critical mission areas. There are unfortunately areas that cannot be addressed with the constrained funding available.

*Question.* How is FBI addressing the growing threat of child predators on the Internet, given that the request provides a bare minimum in new resources to investigate child predators that prey on children online?

*Answer.* FBI has several initiatives that address the growing threat of child predators on the Internet, which are described below.

#### ONLINE UNDERCOVER OPERATIONS (UCOS)

FBI has two UCOS that focus on the growing threat of child predators on the Internet. The first is the Innocent Images National Initiative (IINI) program, which operates one Group I UCO at Calverton, Maryland, and 43 Group II Innocent Images On-line UCO initiatives targeting online child exploitation offenders across the United States and internationally. The second is the Internet Crimes Against Children (ICAC) program, which has 59 ICAC Task Forces also targeting on-line child exploitation offenders within the United States.

In order to facilitate a more unified relationship with the ICACs for this critical component for online child exploitation investigations, Cyber Division (CyD), IINI and ICAC have established joint training. IINI and ICAC are currently working together to develop additional undercover training for FBI Agents, Task Force Officers (TFOs), and ICAC personnel. In order to successfully identify, investigate, and prosecute IINI subjects and identify victims, agents and TFOs must be provided specialized and comprehensive training to operate on-line in a covert capacity. Development of a training program which addresses the needs of both FBI and the ICACs enhances an excellent working relationship in the field, which provides a more specialized and uniform training across the United States.

## LAW ENFORCEMENT PARTNERSHIPS

Each year, IINI has seen an increase in open cases, arrests, indictments and prosecutions, with more of a chance to overlap on those investigations with other law enforcement agencies. The Attorney General instituted a program to address these cases across all Federal, State, and local jurisdictions within the United States, named Project Safe Childhood (PSC). This initiative requires all agencies to work together toward the common goal of eradicating child exploitation, specifically via the Internet.

ICACs are comprised of Federal, State, and local police departments. Some ICACs are fully integrated with FBI Innocent Images Task Forces, and some ICAC Task Force members are members of FBI Innocent Images Task Forces. ICACs are managed by DOJ Office of Juvenile Justice and Delinquency Program (OJJDP).

*Safe Online Surfing (SOS) Program.*—FBI-SOS is a free Internet safety program designed to help students recognize potential dangers associated with using the Internet. The program was launched during the 2005–2006 school year and developed in cooperation with the FBI's Miami field division. The SOS program is administered by the Common Knowledge Scholarship Foundation (CKSF), which is part of the Fischler School of Education and Human Resources at Nova Southeastern University (NSU). In October 2009, FBI Cyber/Innocent Images National Initiative Unit (IINI) adopted the SOS program as a national initiative.

## IINI RESEARCH AND DEVELOPMENT TEAM

The IINI has established and assigned valuable resources to a Research & Development (R&D) component in order to increase the stock of knowledge of new and emerging technologies, culture and society, and the use of this knowledge to devise new applications on a systemic basis. Internet social networking and emergent high technology have fundamentally changed human behavior and criminal tradecraft, especially in crimes against children cases. To protect minors and to catch and hold offenders fully accountable for their crimes, law enforcement agencies and prosecutors must understand how people use technology to interact with each other. Law enforcement must also have the investigative preview and forensic tools necessary to succeed in an ever-changing technical and social environment. The R&D component for the IINI has been established to provide this support to FBI investigators conducting on-line child exploitation investigations.

## DIGITAL ANALYSIS AND RESEARCH CENTER

The IINI established its own digital forensic laboratory, which is dedicated exclusively to the examination and analysis of digital evidence in the most significant Internet-based online child sexual exploitation cases nationwide. This unit, known as the Digital Analysis and Research Center (DARC), provides quality technical and scientific investigative capabilities, detailed extraction and analysis, testimony, and support to the FBI's IINI program. This is accomplished through the acquisition, preservation, examination, processing, and presentation of stored digital information in computers and other electronic devices or media. Furthermore, DARC works closely with the IINI's R&D component to develop new technologies and procedures to assist forensic examiners and investigators in combating online child sexual exploitation.

## ENDANGERED CHILD ALERT PROGRAM (ECAP)

ECAP was initiated on February 21, 2004, as a new and aggressive approach to identify unknown subjects (i.e., offenders and producers) involved in the sexual abuse of children and the production of child pornography. These individuals either photographed or filmed themselves molesting children and were indicted as John Doe's due to their true identities being unknown. The locations of these individuals are also unknown; however, it is firmly believed they reside in the United States. Of particular significance in these cases is that for the first time, "John Doe" arrest warrants are based solely on images acquired through undercover child exploitation investigations. The Innocent Images Operations Unit has focused on 19 separate John Doe and Jane Doe investigations. To date, the national and international exposure of these individuals has led to the successful identification of 12 previously unknown child pornography subjects and the identification of more than 30 child abuse victims.

ECAP has utilized national and international media exposure of unknown adults featured in child pornography material and displays their images on the "Seeking Information" section of the FBI's Web site at [www.fbi.gov](http://www.fbi.gov). If the unknown subject is not identified from the Web site, their image may eventually be broadcast on the

television shows America's Most Wanted, the Oprah Winfrey program, the O'Reilly Factor, and a number of other media and social networking outlets such as AOL News, Facebook, and Twitter.

#### OPERATION RESCUE ME

Operation Rescue Me is an initiative to identify child exploitation victims who appear in unidentified child exploitation/pornography series circulated on the Internet. The primary purpose of this operation is to coordinate investigative efforts and provide the IIOU, and any other FBI office, a central location to document all investigative action taken to identify a child or children in a series. The central case initiative serves to eliminate redundant efforts and ensure that newly assigned investigators are integrated into the investigation in a cohesive manner.

*Question.* What is the status of the Innocent Images International Task Force (IIITF)? How many international officers have been trained? How many countries have joined?

*Answer.* In 2004, FBI initiated IIITF to promote and develop a coordinated international law enforcement response against Internet child sexual exploitation. Since its inception, the IIITF has and continues to play an instrumental role in the successful coordination of complex investigations against sophisticated, multi-national networks engaged in online child sexual exploitation. The borderless and constantly evolving nature of the Internet provides great challenges for the international law enforcement community, the majority of whose tools and practices were established long before the Internet age.

The IIITF has proved successful in providing a platform to overcome many such challenges and facilitate cooperation and coordination. The steadily expanding IIITF is currently comprised of 90 Task Force Officers (TFOs) from more than 40 different countries. Currently, TFOs undergo a 5-week training session in Calverton, Maryland, where they receive specialized technical training on a variety of relevant and current topics, such as legal principles, emerging trends and technologies, and investigative techniques.

The principal goal of the IIITF is to develop an operational network of specialized Internet child sexual exploitation investigators. The IIITF provides a communication and cooperation platform to share and exchange intelligence and facilitate the identification and furtherance of Internet child sexual exploitation investigations with an international scope.

#### STATE AND LOCAL LAW ENFORCEMENT—FIGHTING VIOLENT CRIME

*Question.* There are roughly 1 million gang members in 20,000 gangs in all 50 States and the District of Columbia. With gang membership rising and violent crime continuing to be a problem, local law enforcement needs a strong partnership with Federal Government. Currently, there are 163 Safe Streets Violent Gang Task Forces. These partnerships allow FBI agents and State and local law enforcement to work as teams to fight street crime. However, FBI has not had the resources to expand this program and requests no additional funding in fiscal year 2012.

*How are joint Federal-State task forces effective in helping local law enforcement fight violent crime?*

*Answer.* Once considered only an urban problem, street gangs are now a threat to all communities across the United States. FBI's partnerships with State, local, and other Federal law enforcement agencies in the form of Violent Gang and Violent Crime Safe Streets Task Forces (SSTFs) have been, and continue to be, at the forefront of the FBI's anti-gang efforts. Violent Gang and Violent Crime SSTFs provide a multi-jurisdictional task force approach, which ensures FBI initiates and coordinates investigative efforts with other affected local, State, and Federal law enforcement agencies. This concept ensures cooperation and communication among law enforcement agencies and increases productivity and prevents duplication of investigative and enforcement efforts in matters of concurrent jurisdiction. The SSTFs work to disrupt and dismantle the most violent street gangs and criminal enterprises through aggressive enforcement of Federal criminal statutes. Our ongoing partnership with State and local law enforcement decreases crime and increases the quality of life in the affected communities.

*Question.* With State and local law enforcement agencies forced to reduce their numbers because of funding cuts, does FBI anticipate a greater burden placed on it to fill gaps in policing? Will FBI have the capabilities to help?

*Answer.* As noted previously, the FBI has formed an effective partnership with State and local law enforcement agencies to address gang violence through FBI Safe Street Task Forces (SSTFs). FBI SSTFs target the most violent gangs and criminal enterprises negatively affecting our communities through criminal enterprise inves-

tigations. Investigations that do not have a Federal nexus or involve violations of Federal statutes are conducted by partnering State and local law enforcement agencies. As budget problems continue to affect State and local law enforcement agencies across the Nation, the demand for FBI SSTF resources has increased. A reduction in State and local resources may result in gangs expanding their drug markets and becoming more violent, which may require the FBI to open more gang investigations.

FBI will continue to partner with State and local law enforcement agencies through Violent Gang and Violent Crime Safe Streets Task Forces (SSTFs), which ensures coordination in investigative efforts. FBI will support State and local participation where it can, including paying for overtime of State and local task force officers with the limited funding made available through the Assets Forfeiture Fund.

*Question.* Why was the only increase in this area \$9 million to combat and investigate violent crimes in Indian country?

*Answer.* FBI is one of two primary Federal agencies mandated to investigate felony crimes in Indian country. FBI's responsibility in Indian country is significant and the volume of investigations continues to rise. Addressing crime in Indian country is also among DOJ's priorities. Many tribal police departments do not currently have the necessary certification, technology, training, expertise, deputation, or mechanism to refer cases to the United States Attorney's Office for prosecution.

Currently, there are 565 federally recognized Indian tribes in the United States, and FBI has investigative responsibility for approximately 200 Indian Reservations. Under the Major Crimes Act, General Crimes Act, Indian Gaming Regulatory Act, and traditional Federal investigations within Indian country, FBI must continually prioritize violations due to the overwhelming amount of violations which occur within Indian country. Due to the immediate response required to investigate death investigations, child sexual and physical assault, violent felony assault, many other crimes go under-addressed. Twenty-five percent of all violent crimes prosecuted by United States Attorneys nationally occur on Indian reservations.

The fiscal year 2012 request to the Congress includes 40 positions (24 agents, 16 support) and \$9 million (\$449,000 nonpersonnel) to bolster existing Safe Trails Task Forces and to provide additional investigative resources to address the significant violent crime threat in Indian country. This enhancement request represents a 33 percent growth in positions (22 percent growth in agents and 40 percent growth in nonpersonnel resources). While the \$9 million will not enable FBI to investigate all violent crime cases in Indian country, FBI believes this enhancement will increase the number of priority investigations in Indian country and also demonstrates reasonable growth. Further, these additional resources will support the Attorney General's Department-wide initiative on public safety in tribal communities.

#### SOUTHWEST BORDER VIOLENCE

*Question.* I continue to be concerned that DOJ lacks sufficient resources to combat violence related to drug and gun trafficking on the Southwest Border. These violent crimes are caused by large, sophisticated, and vicious criminal organizations—not by isolated, individual drug traffickers. The Justice Department's 2012 request includes \$2 billion to support investigations and prosecutions relating to border violence.

Along the Southwest Border, DEA goes after drug smugglers and ATF goes after illegal guns. What role does FBI play in the Justice Department's enforcement of the Southwest Border?

FBI continues to actively participate in DOJ's fight against the criminal threats that exist along the Southwest Border. FBI continues to maintain a robust contingent of squads in Southwest Border field offices that address drugs, gangs, violent crime, public corruption, money laundering, and human trafficking. As the violence has increased in Mexico, and the threat to the United States posed by the criminal enterprises operating along the Southwest Border has expanded and crossed FBI program lines, the FBI has taken steps to more adeptly and comprehensively address that threat.

Toward that end, FBI has established nine cross-programmatic hybrid squads in offices impacted by the criminal activity occurring along the Southwest Border. FBI has also deployed seven border liaison officers to Southwest Border field offices to coordinate with and offer training to Mexican law enforcement officers. In addition, FBI has partnered with Federal, State, and local law enforcement partners, as well as the U.S. intelligence community, to share intelligence and coordinate investigations and investigative resources. The FBI also has 17 agents permanently detailed to Mexico as part of its Legat and Resolution Six programs. The intelligence shared

between FBI field offices and the Legat, and vice versa, helps to drive Southwest Border-related investigations. These various components, coordinated by FBI headquarters (FBIHQ), provide DOJ with a cross-programmatic, comprehensive strategy to address the complex threat posed by criminal enterprises operating along the Southwest Border.

*Question.* How concerned should communities along the border—and throughout the United States as a whole—be about cartel-related violence? If FBI is witnessing a spillover in violence across the border, how would it categorize this spillover?

Answer. Other than isolated incidents, “cross-over” cartel violence from Mexico into the United States is minimal. The reason for this is twofold. First, the United States has not witnessed the same turf battles over supply and distribution routes that are occurring across the border. In fact, local crime reports submitted by DEA offices located along the Southwest Border show most categories of crime decreasing from 2009 to 2010.

Second, the cartels already enjoy enormous influence in the U.S. drug trade and control the vast majority of wholesale markets, as well as many retail markets, for drugs in the United States. To engage in violence on the U.S. side of the border would be detrimental to the cartels’ business because it would invite additional scrutiny at the border and increased law enforcement attention within the United States. However, the U.S. Government and communities along the border should remain vigilant against the threat of violent crime.

We do believe there is a cartel presence in the United States and we are vigilant about guarding against the possibility of that presence becoming more violent in the United States. We also recognize the ongoing safety concerns in those communities along the United States-Mexican border where rival cartels are vying for control of the drug and human smuggling routes into the United States. Although there currently appears to be a stable situation in the United States between rival cartels operating in close proximity in U.S. cities, we are closely monitoring the situation for any increases in violence or other illegal activities. For these reasons, we have dedicated unprecedented resources to the border and to Mexico—significantly increasing the number of agents and prosecutors working on Mexican cartel cases. No matter what the statistics today, the fact remains that we must remain vigilant to the impact of the violence in Mexico on the United States.

The FBI is not witnessing a spillover in violence across the border, but continues to monitor this situation.

*Question.* How is FBI working with the Mexican Government to dismantle violent drug cartels?

Answer. The FBI staffs Resolution Six (R-6) operations in Mexico and Columbia. R-6 was created to enhance inter-agency coordination of drug and gang investigations conducted in Mexico and Columbia. Priorities of R-6 personnel are to develop confidential human sources, support domestic cases for United States prosecutions, cultivate liaison contacts within Mexico, and support bilateral criminal enterprise investigation/initiatives. R-6 personnel are co-located with DEA and are responsible for coordinating drug and gang investigations with the DEA Country Office. FBI R-6 staffs positions in the following Mexican cities:

- Mexico City;
- Juarez;
- Tijuana;
- Monterrey;
- Hermosillo; and
- Guadalajara.

R-6 Mexico uses vetted teams of Mexican law enforcement officers to effect the collection of evidence and arrest targets in Mexico. R-6 works with SEMAR (Marines), SEDENA (Army), SSP (Federal Police), and SIEDO (Organized Crime Unit) as well.

#### RENDER SAFE MISSION

*Question.* FBI is now responsible for the Render Safe mission, which involves dismantling a radiological device on U.S. soil. The 2012 budget request includes \$89 million for FBI’s “Render Safe”. This provides for a multi-year purchase of two new specially configured aircraft to carry out the Render Safe mission. The FBI currently uses one leased plane to carry out its mission, and that lease will end in fiscal year 2013.

Why does FBI need two new planes when it currently conducts its mission with one?

Answer. The Render Safe mission requires a dedicated primary aircraft with a secure and redundant communication system, and a similar backup aircraft to cover

planned downtime and unexpected mechanical failure. The current lease does not provide a dedicated back up plane with required communications gear. The fiscal year 2011 spend plan currently awaiting congressional approval includes \$35.8 million for the acquisition of two planes to replace the current lease and maintain the Render Safe capability. This funding is made up of Expired User Fee collections (\$17 million) and prior year recoveries (\$18.8 million).

*Question.* What is the cost of the current lease and how often has the current plane been used?

*Answer.* The annual lease cost is \$14.5 million. The plane is only used for Render Safe activities—over the past year the plane has been used for a number of deployment exercises.

*Question.* What are the final overall costs for these new planes, including the special equipment and dedicated personnel?

*Answer.* The overall costs for acquisition and outfitting is approximately \$74 million over 2 years. The personnel costs for the Render Safe mission total approximately \$4 million annually.

*Question.* Why is it important that FBI purchase these planes rather than renew the current lease?

*Answer.* Not having dedicated aircraft with redundant communication capabilities jeopardizes the mission success and increases the risk that the Render Safe team will not be able to deploy in a timely manner or properly communicate a highly technical and coordinated solution prior to landing at the identified location.

Further, there are Office of management and Budget (OMB) regulatory limits that prohibit leasing for more than 90 percent of the fair market value of an asset, and we are approaching this regulatory limit.

*Question.* How would FBI carry out your Render Safe mission without these aircraft?

*Answer.* Without these aircraft, FBI would have to continue to enter into a series of short-term aircraft leases.

Not having dedicated aircraft with redundant communication capabilities jeopardizes the mission success and increases the risk that the Render Safe team will not be able to deploy in a timely manner or properly communicate a highly technical and coordinated solution prior to landing at the identified location. Further, there are OMB regulatory limits that prohibit leasing for more than 90 percent of the fair market value of an asset, and we are approaching this regulatory limit.

#### MISCONDUCT OF FBI EMPLOYEES

*Question.* In January 2011, I was deeply disappointed to hear a CNN report detailing serious misconduct by FBI employees on and off duty. Incidents involved employees drinking or sleeping on duty, improper use of Government databases, watching pornography in the office, and using a sex tape for blackmail. These sensitive, internal reports were leaked to CNN. I consider FBI's response to this story has been tepid, at best.

What is FBI doing to make sure its employees are held to the highest standards?

*Answer.* FBI is committed to the highest standards of professional conduct. Our ability to accomplish the critically important national security and law enforcement work assigned to FBI makes it absolutely imperative that we have the respect and trust of the American public we serve. For that reason, FBI has a strict code of conduct and demands ethical behavior and professional excellence from all of our employees. When an FBI employee engages in misconduct, FBI's Office of Professional Responsibility (OPR) imposes an appropriate disciplinary sanction, from a letter of censure to a period of suspension or, in the worst cases, termination. The FBI OPR, the Office of the General Counsel, and the Office of Integrity and Compliance (OIC) also provide regular training to all employees—including all new agents, IAs, Legats, and professional staff—to ensure they know the laws, policies, procedures and rules under which we operate.

*Question.* What steps has FBI taken to punish these types of employee misconduct?

*Answer.* As noted in the CNN report, when the FBI OPR determines that an employee has engaged in misconduct, it imposes an appropriate disciplinary sanction, from a letter of censure to a period of suspension or, in the worst cases, termination.

*Question.* Does FBI have safeguards in place to ensure that—once these types of incidents happen—they won't happen again?

*Answer.* Yes. Executive Management receives weekly and monthly reports from the Assistant Director of OPR discussing the most recently decided cases, including what actions have been taken in the individual cases, as well as what actions have been taken at an institutional level to avoid recurrences. Moreover, OPR, the Office

of the General Counsel, OIC and others provide regular training to ensure our employees understand the code of conduct under which they operate, as well as the laws, policies, procedures and rules with which they must comply. Finally, OPR publishes quarterly all employee emails to educate the workforce on acceptable standards of conduct.

#### FBI ACADEMY

*Question.* The FBI Academy in Quantico, Virginia, is operating at full capacity. Of the Academy's three dorms, two date back to 1972, one dates back to 1988 and none are not up to industry standards. The 2011 request had \$74 million to expand the FBI Academy's training facilities, build a new dorm and renovate existing dorms, but this was not included in the fiscal year 2011 continuing resolution. The 2012 request includes only \$2 million for Academy improvements.

What are the specific infrastructure challenges at the FBI Academy? What infrastructure setbacks will FBI face under the funding level provided for FBI construction account in the fiscal year 2011 continuing resolution?

*Answer.* The primary challenges are the age and capacity of the infrastructure support systems, such as electrical, heating ventilation and air conditioning (HVAC), sewer, and water. Some of the oldest infrastructure components (firing ranges) were installed in the 1950s. The main "academy" complex was constructed in 1972 and its infrastructure has gone 38 years without any appreciable upgrades or expansion. The academy's core infrastructure was originally designed to support approximately 500,000 square feet of space, but FBI's Quantico complex now consists of more than 2.1 million square feet. Due to the age of the facilities, scheduled and unplanned repairs regularly eliminate 8 percent of bed and classroom space.

The second infrastructure challenge at the FBI academy has to do with the classroom and dormitory capacity of the facility given increasing demands on the organization. With the extensive growth of FBI's mission and workforce since 9/11, the Academy has been forced to use temporary classroom structures at Quantico or to lease private sector space, with students being housed in local area hotels. These stop-gap arrangements are an inefficient use of student time on campus, and negatively impact the quality of education and training that FBI students receive, while consuming significant annual resources that would be better directed to maintaining and expanding Academy facilities.

FBI will be unable to make significant repairs or improvements to the original 1972 academy complex if limited to the funding level provided for the FBI construction account in fiscal year 2011. Key infrastructure systems will continue to be at risk of failure due to the age of their components and the Academy's classroom and dormitory demands will continue to be met through offsite leases and local area hotels for the foreseeable future.

*Question.* Can FBI really make substantive improvements to the Academy with the \$2 million requested in 2012? On what will that \$2 million be spent?

*Answer.* FBI has identified more than \$250 million in repair projects and infrastructure improvements needed to bring the Academy facilities up to code and industry standards. Based on the condition of the existing buildings, the current base funding level of \$2 million is insufficient for making substantive improvements to them; however, it will assist in funding day-to-day activities.

*Question.* How will the FBI's training requirements for the Academy continue to expand?

*Answer.* In addition to the increased number of students requiring specialized training at the academy, the length of the programs for new agents and intelligence analysts (IAs) has also been extended. Existing curriculums were restructured to focus on areas such as Foreign Counterintelligence, Cyber and Counterterrorism, among others. Additional courses devoted to legal requirements, analytical, and technological tools and tradecraft have also been added. Joint training between new agents and IAs has also been expanded. This has significantly increased the total training weeks per year—by more than 90 percent since 1995—creating scheduling conflicts amongst the competing student groups at the Academy. There are also new requirements for specialized training; for example, with increased emphasis on Human Sources, additional interview rooms are required for practical exercises.

From 2005 to 2008, there has been a 200 percent increase in the number of FBI regional training events (19,851 to 39,894). FBI would be better served by hosting more of these regional training events at the FBI academy campus given that courses require access to FBI classified networks and space, which are generally unavailable in non-FBI facilities.

*Question.* What are the top three improvements FBI leadership wants to see at the Academy?

Answer. Complete renovation, including interior and infrastructure upgrades for FBI academy dormitories, and upgrading critical life, health, and safety infrastructure to meet current industry standards and codes.

Complete renovation and interior infrastructure upgrades for the FBI academy dining facilities, to include an expansion that provides adequate space for the current level of students trained on campus.

Complete renovation and interior infrastructure upgrades for all original Academy classroom buildings, to include upgrading critical life, health, and safety infrastructure and modernizing classroom spaces to better utilize current technology and instruction practices and expand capacity.

#### NATIONAL SECURITY LETTERS (NSLS)

*Question.* NSLs are useful counterterrorism tools that allow the FBI to conduct searches without getting court orders, and let agents analyze telephone, computer and bank records without warrants. The USA PATRIOT Act made NSLs easier to obtain, but also requires the inspector general to monitor the use of NSLs and report back to the Congress. The inspector general released two reports on NSLs that estimated more than 6,000 NSL violations from 2004–2006. That's 8 percent of all NSLs issued. Violations include 11 "blanket NSLs" without proper approval in 2006, and unauthorized collection of more than 4,000 billing records and phone numbers.

What is FBI doing to improve NSL training for its employees? Is NSL-specific training mandatory for all employees involved with NSLs?

Answer. NSL training is mandatory for all FBI employees involved in NSLs. Following the March 2007 Office of Inspector General Report entitled, "A Review of the Federal Bureau of Investigation's Use of National Security Letters", FBI updated its NSL training module. The new NSL training module incorporates the essentials of creating and issuing NSLs, reviewing return information, and using the information for investigations. Also, the new training modules are now interactive and contain two new exams that employees must pass (with at least an 80 percent score) to complete the training. The training modules and examination questions reflect the topics of recent interest concerning NSLs and were designed to help ensure compliance with the NSL statutes, Attorney General Guidelines, and the Domestic Investigations and Operations Guide. For example, the modules now include training on the new Attorney General Procedures on NSLs, the rules surrounding the use of a non-disclosure provision in an NSL, and the need to justify the non-disclosure provision in an NSL, including when and under what circumstances a non-disclosure provision may be included in an NSL.

Yes, NSL-specific training is mandatory for all employees involved with NSLs.

*Question.* The Commerce, Justice, Science, and Related Agencies Subcommittee recognized a problem with NSL management and provided \$10 million in fiscal year 2010 to establish the Office of Integrity and Compliance for oversight of NSLs. Does that Office need more staff to carry out its oversight role?

Answer. Funding for the Office of Integrity and Compliance was appropriated through the fiscal year 2007–2008 Global War on Terror (GWOT) supplemental, and since its establishment FBI has continued to increase the responsibilities of the office. As these responsibilities increase, the need for funding will also increase.

*Question.* Does FBI have the right computer systems and other technical support to improve the way it issues and tracks NSLs?

Answer. Yes. In January 2008, FBI deployed the NSL subsystem in the FISA Management System to address reporting and other issues in the NSL process. The subsystem prompts the drafter of an NSL to enter information about the subject, the predication for the NSL, the type of NSL being requested, the recipients of the NSL, and the target of the NSL. After the employee creates an NSL and the accompanying memorandum (called an Electronic Communication [EC]), the subsystem routes both documents for legal review by FBI attorneys, and to FBI officials including the field office Special Agent in Charge (SAC) or designated FBIHQ official, who must review and approve both documents before the NSL can be issued. After all required approvals have been obtained, the subsystem generates the NSL and EC for signature by the SAC or a designated FBIHQ approving official. The subsystem thereafter automatically uploads the NSL and EC into the FBI's Automated Case System. This subsystem collects the information needed for tracking NSLs.

#### TERRORIST WATCHLIST

*Question.* The Terrorist Watchlist, maintained by FBI, is the intelligence community's main list of terrorist suspects. More than 1.1 million known or suspected "terrorist identities" are on the list, and 20,000 names are added each month. A May 2009 inspector general report found that the terrorist watchlist had unacceptable er-



rors, noting that FBI delayed reporting names to the watchlist by up to 4 months. FBI also failed to remove names once it determined that they do not pose a threat, while other information was simply inaccurate or outdated.

What steps has FBI taken to meet the inspector general's concerns?

Answer. In its May 2009 report, OIG made 16 recommendations to the FBI to improve its watchlisting processes. OIG has closed 11 of those recommendations based on the extensive changes and improvements FBI has made to virtually every aspect of this process including:

- policies;
- training;
- realignment of FBIHQ personnel to better meet the needs of the watchlisting program's objectives; and
- the establishment of metrics to ensure that FBI complies with its revised policies.

The remaining five recommendations have been resolved based on FBI's commitment to fulfilling the required actions. FBI is actively working to complete the necessary steps to ensure closure of the remaining recommendations.

*Question.* What is FBI doing to cut the time it takes to add someone to the watchlist?

Answer. On December 7, 2009, FBI issued a comprehensive watchlisting policy. Each field office's managers, Watchlist Coordinator, and Alternate Watchlist Coordinator were emailed an electronic version of the document. The timeline for watchlisting is defined in the policy as 10 business days for all submissions which is measured from the date the case is opened in FBI's automated case management system until the date the nomination form (FD-930) is received by email at FBIHQ. The timeline for FBIHQ is 5 business days for nominations and 10 business days for modification and removals. This is measured from the date the email containing a valid nomination is received via email at FBIHQ, until the date FBIHQ emails the completed nomination to the National Counterterrorism Center. In addition, the FBIHQ unit responsible for this process has established a "metrics team" to review and track the timeliness of submissions by the field offices. Metrics reports are prepared and disseminated to all field office managers for appropriate actions.

*Question.* How is FBI improving training for its staff to increase accuracy in adding names to the list and removing names from the list?

Answer. The Terrorist Screening Center (TSC) has developed and implemented a standardized internal Nominations and Data Integrity Unit (NDIU) analyst training program which includes classroom instruction for new NDIU analysts and an on-the-job training (OJT) program. The OJT program includes a week of practical exercises focusing on complex processes and analytical nuances of nominations to and removals from the various subsets of the Terrorist Screening Database (TSDB). The classroom instruction is comprised of the fundamental knowledge NDIU analysts need to process nominations to the TSDB in accordance with the criteria set forth by the July 2010 Watchlisting Guidance and exercises which expose analysts to practical application of the knowledge. The OJT program pairs a new NDIU analyst with a senior NDIU analyst, who will mentor the new analyst through the processing of nominations accurately and systematically. The OJT program ensures the new analyst firmly grasps the watchlisting criteria and the full utility of each internal and external system used to process nominations to and removals from the TSDB. Additionally, new analysts are given a week of practical exercises which further develop their ability to apply watchlisting criteria, use internal and external systems, and recognize the complex nuances and indicators of nominations to and removals from the TSDB.

Additionally, the TSC has been tasked with reviewing every identity record in the TSDB on a regular basis. This constant review ensures that each TSDB identity record is regularly reviewed in order to maintain a thorough, accurate and current TSDB. Each identity record is evaluated on minimum substantive derogatory criteria, minimum biographic information criteria and biometric criteria. This record-by-record review project is a continuous process that ensures that every identity record in the TSDB has been reviewed and updated as needed.

*Question.* What are the major obstacles in shortening the time it takes to put someone on the no-fly list?

Answer. Once TSC receives a nomination to watchlist an individual, the nomination will generally be adjudicated and processed within 24 hours. Additionally, there is an expedited nomination process available to the watchlisting community which allows for the immediate watchlisting of a suspected terrorist in exigent circumstances. If TSC receives an expedited nomination, that nomination will be added to the Terrorist Watchlist as soon as possible. For example, on May 3, 2010, FBI requested that Faisal Shahzad, the suspected Times Square bomber, be expedited

to the No Fly List. In less than 30 minutes Shahzad was listed as a No Fly in the TSDB and less than 1 hour later all relevant U.S. Government watchlisting and screening agencies were informed of his updated watchlisting status. This effort eventually led to his identification and apprehension later that evening as he attempted to board an international flight.

Additionally, in an effort to improve the accuracy of information provided to the screening community and decrease the time required to watchlist an individual, TSC has worked with our U.S. Government partners to institute information technology (IT) enhancements that significantly reduced the time required to transfer terrorist watchlist information. NCTC and TSC worked together to implement changes to their infrastructure and software that allows new nominations to be passed from NCTC to TSC within 2 minutes so that it is immediately available for processing instead of having to wait until the next working day. TSC instituted a similar enhancement with DHS and Department of State that provides updated terrorist information to CBP's TECS and Department of State's CLASS systems within 2 minutes instead of the next working day. DHS intends to extend the rapid updating to their other screening systems through the use of their Watchlist Service. These enhancements have greatly improved the timeliness of new and updated terrorist information to ensure front-line screening agencies have the most current and accurate information available.

*Question.* Has FBI given its managers in field offices more responsibility to review nominations before they are sent to FBIHQ?

*Answer.* The opening of a case does require managerial approval and all managers are aware that when they approve a counterterrorism case to be opened, the subject(s) of that case will be submitted for watchlisting.

*Question.* Has FBI been working with the Director for National Intelligence to make sure this problem is fixed across all intelligence agencies?

*Answer.* Yes. In an effort to ensure all U.S. intelligence agencies are nominating terrorists to the TSDB consistently and efficiently, Watchlisting Guidance was developed by an interagency working group that included representation from the Department of Justice, DHS, Central Intelligence Agency, National Security Agency, Department of Defense, Department of State, Department of the Treasury, and the Office of the Director of National Intelligence. The Watchlisting Guidance provides nominating agencies clear and articulable guidance on the standards and procedures to be followed when nominating persons to the Terrorist Watchlist.

Furthermore, in collaboration with NCTC and the intelligence community, TSC has assisted in the development of a Terrorist Watchlisting course for the intelligence community to be used as a single source of instruction for watchlisting matters. The training focuses on an explanation of the overall watchlisting process; identifies the roles of the each intelligence community member; describes the various intelligence community screening systems supported by the TSC's TSDB; explains the minimum watchlisting criteria; and articulates the intelligence benefits of positive watchlisting encounters.

*Question.* Kidnapping for ransom is a common occurrence in Mexico. Over the past 10 years, kidnappings of and violence against United States citizens in Mexico has increased.

Often, the kidnapping of United States citizens in Mexico involves ransom requests made to family members in the United States.

I understand that FBI is frequently called upon to assist Mexican law enforcement authorities in the investigation of violent acts against and kidnappings of United States citizens in Mexico.

Would you support the development by FBI of a vetted unit with trusted Mexican counterparts who have the expertise to conduct investigations of the kidnappings of United States citizens?

*Answer.* FBI has been working with the Government of Mexico to establish specialized Kidnapping Investigation Units (KIUs) in 9 of the 32 Mexican states. The FBI has provided training in the United States as well as equipment to each unit. As kidnapping is a state crime under Mexico law, each of these units is operated by its respective state. FBI legal attachés work with these units in the kidnapping investigations of United States citizens. Although it would help improve investigations these units are not "SIUs" and are not fully vetted as an SIU would be since the Government of Mexico is currently doing the vetting and would have to agree to letting FBI conduct it instead. In addition, these units do not exclusively investigate kidnappings of U.S. citizens; rather they investigate all kidnappings in their respective states. Since kidnappings of United States citizens occur across Mexico, FBI must rely on Mexican state and federal officials to conduct the investigations according to their laws.

FBI will also be working with the Federal Police and Federal Ministerial Police to develop their kidnapping investigative capabilities and structure.

QUESTIONS SUBMITTED BY SENATOR KAY BAILEY HUTCHISON

LACK OF SUPPORT FOR SOUTHWEST BORDER EFFORTS

*Question.* Department of Justice (DOJ) components are often overlooked by the administration when crafting Southwest Border budgets and legislation.

Director Mueller, I am concerned that only \$130 million of the Federal Bureau of Investigation's (FBI) \$8.1 billion total request is dedicated to Southwest Border activities. I understand the administration rejected your request for more resources in last year's Southwest Border supplemental. I also understand that FBI was directed to request no new enhancements in the fiscal year 2012 request—yet the DOJ was burdened with more than \$1 billion of unrequested programs or new enhancements.

*New or Unrequested DOJ Programs.*—COPS Hiring for \$600 million; Medical Malpractice Grants for \$250 million; Violence Against Law Enforcement Officers (VALOR); Ensuring Fairness and Justice, Domestic Radicalization; Gang and Youth Violence Prevention Program; Byrne Criminal Justice Innovation; Race to the Top; and Problem-Solving Justice, Flexible Indian Tribal Grant Program).

Could you discuss the resources originally requested by for the Southwest Border supplemental that were denied by the administration?

*Answer.* The information requested is pre-decisional. However, the resources appropriated in the fiscal year 2010 border security supplemental have been crucial in allowing FBI to expand its presence along the Southwest Border and to expand investigative capabilities.

*Question.* Last, please elaborate on any new enhancements or increases that you might have preferred to be included in this fiscal year 2012 request.

*Answer.* Regarding the Southwest Border, the most critical element in fiscal year 2012 is sustainment of the 78 positions (44 agents) received in the fiscal year 2010 border security supplemental, which was requested in the fiscal year 2012 President's budget.

IMMIGRATION AND CUSTOMS ENFORCEMENT (ICE) AGENT SHOOTING—PROCESS AND RESOURCES

*Question.* This past February 15, United States ICE agent Jaime Zapata was murdered during an attack in Northern Mexico. FBI was designated by the Attorney General as the lead U.S. law enforcement component of a multi-agency task force charged with conducting the investigation into this attack.

What can you tell us about the investigative efforts of this task force since this tragic incident in Mexico?

*Answer.* Upon notification of the attack against the ICE agents, FBI immediately organized a multi-agency task force located in Washington, DC with a multi-U.S. Federal agency Command Post (CP) at the United States Embassy in Mexico. The task force and CP communicate daily regarding all facets of the investigation. Additionally, numerous FBI field offices have organized multi-agency efforts to assist in the investigation (San Antonio, Miami, Dallas, Houston, Phoenix, and Las Vegas to name a few). Through their Mexican liaison contacts, CP members have gathered significant information and evidence regarding the perpetrators and accomplices of the ICE attack. Two of the alleged perpetrators have been transported to the United States; those two and two others (a total of four) have been indicted on multiple charges. The United States Government has presented the Government of Mexico with the necessary documentation to transport two other alleged perpetrators, including the leader of 1 of the 2 teams that attacked agents Zapata and Avila. As of now, 5 of the 8 individuals identified as perpetrators are in custody, either in Mexico or the United States.

*Question.* Are Mexican law enforcement authorities cooperating and/or assisting in this investigation?

*Answer.* Mexican law enforcement officials are conducting a parallel investigation into this incident. The Mexican Government and its agencies have an "open door" for all United States requests for access to evidence, interviews, and support to our Embassy personnel in conducting this investigation. Members of the Embassy staff meet regularly with Mexican counterparts to ensure necessary information is shared.

*Question.* Are discussions taking place to have the perpetrators extradited to the United States for prosecution of this crime?

Answer. Yes, such discussions are taking place. DOJ's prosecution team, consisting of two prosecutors from the U.S. Attorney's office in the District of Columbia and two prosecutors from DOJ Criminal Division, has been working virtually around the clock both here in Washington and on the ground in Mexico since the tragic murder of Agent Zapata. United States prosecutors are in close contact with the Mexican office of the Attorney General (PGR) to discuss progress in the case and DOJ officials, at the highest levels, have reached out to the Mexican Attorney General and other PGR officials to discuss the need to have the perpetrators extradited to the United States for prosecution. Our goal is to bring all of those involved in the murder of Agent Zapata to justice in the United States.

*Question.* Could you talk about the process that took place to investigate the attack and what agencies were involved?

Answer. Upon notification of the attack against the ICE agents, FBI immediately organized a multi-agency task force located in Washington, DC with a multi-U.S. Federal agency Command Post (CP) at the United States Embassy in Mexico. At least 77 persons from 10 different U.S. Federal agencies were represented in the working group. FBI Legat, ATF Attaché, ICE Attaché, and the Regional Security Officer (RSO), traveled from Mexico City to the area of the attack with a small team of their agents to coordinate investigative efforts with the Mexican Federal Police and the Mexican Attorney General's Office, the Task Force and CP communicate daily regarding all facets of the investigation. Additionally, numerous FBI field offices have organized multi-agency efforts to assist in the investigation (Dallas, Houston, Las Vegas, Miami, Phoenix, and San Antonio, to name a few). Through their Mexican liaison contacts, CP members have gathered significant information and evidence regarding the perpetrators and accomplices of the ICE attack. Two of the alleged perpetrators have been transported to the United States; those two and two others (a total of four) have been indicted on multiple charges. The United States Government has presented the Government of Mexico with the necessary documentation to transport two other alleged perpetrators, including the leader of 1 of the 2 teams that attacked agents Zapata and Avila. As of now, 5 of the 8 individuals identified as perpetrators are in custody, either in Mexico or the United States.

*Question.* Last, can you tell us about the FBI legal attaché (LEGAT) program and how the office in Mexico City has played a role in this investigation?

Answer. The LEGAT program is the forward element of the FBI's international law enforcement effort, and often provides the first response to crimes against the United States that have an international nexus. The LEGAT program provides for a prompt and continuous exchange of information with foreign law enforcement and supports FBI's efforts to meet its investigative responsibilities. The LEGAT office in Mexico City has played a critical role in this investigation, coordinating investigative efforts and ensuring that authorities in the United States and Mexico have all of the information required to pursue justice in this matter. The LEGAT office has been working directly with U.S. Embassy officials, including the Ambassador (and Chargé d'affaires) and Deputy Chief of Mission (DCM) to provide the information necessary for discussion of the case at the highest levels of both governments.

#### 9/11 TRIAL COSTS TO THE FBI

*Question.* On Monday, Attorney General Holder announced that the 9/11 conspirators held at the Guantánamo Bay detention facility would be tried by military commissions, retreating from President Obama's previous position of pursuing civilian trials for these terrorists. Holding the trials of the 9/11 conspirators in New York City would have not only posed a serious public safety risk, but it also would be a monumental strain on already scarce law enforcement resources. The Department of Justice and the city of New York conservatively estimated it would cost taxpayers approximately \$300 million.

Would having these terrorist trials in New York affect FBI field offices in this region?

Answer. If the trials were held in New York, FBI would assign personnel from the New York office and other FBI divisions as necessary, and would coordinate with the appropriate Federal, State, and local authorities in regards to trial logistics and security.

*Question.* Would agents from other field offices be shifted to the New York? If so, how would this affect their normal duties?

Answer. If the trials were held in New York, FBI would assign personnel from the New York Office and other FBI divisions as necessary. Because the 9/11 co-conspirators will be tried by military commissions at Guantánamo Bay, Cuba, however, FBI need not plan to reassign agents to address trials in New York City.

*Question.* What impacts would this affect FBI's overall mission?

Answer. Since the 9/11 co-conspirators will be tried by military commissions at Guantánamo Bay, Cuba, FBI's overall mission will not be impacted.

#### FORT HOOD SHOOTINGS

*Question.* The Senate Homeland Security and Government Affairs Committee issued a report on the events surrounding the shootings at Fort Hood that took place in November 2009. The report criticizes FBI, citing that FBI field offices failed to recognize warning signs that Nidal Malik Hasan was a threat. The report also concluded that FBI had sufficient information to detect that he was a “ticking time bomb” who had been radicalized to violent Islamist extremism, but failed to understand and act on it. FBI has been provided significant funding since 9/11 to bolster its intelligence program which includes the hiring and professionalizing its intelligence analyst workforce. According to the report, FBI failed to use its analysts in this situation.

What is your response to this report and what has the FBI done in response to the Fort Hood shootings?

Answer. During the internal FBI review undertaken immediately after the attack at Fort Hood, FBI identified several of the areas of concern outlined in the report and, as noted in the report, has implemented changes to its systems and processes to address them. FBI will review each of the report's recommendations and adopt them, as appropriate.

While concluding that FBI's transformation to an intelligence-driven organization remains a work in progress, the report recognizes FBI's substantial progress and many successes, led by JTTFs, in disrupting terrorist plots by homegrown extremists.

In addition, at the request of FBI Director Mueller, Judge William H. Webster is conducting an independent, outside review of the FBI's actions with respect to the attacks at Fort Hood. Judge Webster and his team are evaluating the corrective actions taken to determine whether they are sufficient and whether there are other policy or procedural steps FBI should consider to improve its ability to detect and prevent such threats in the future.

*Question.* What changes have you made to ensure this tragedy does not happen again?

Answer. Immediately after the tragedy, FBI Director Robert Mueller ordered a preliminary review of the FBI's actions, as well any relevant policies and procedures that may have guided the FBI's actions before the shooting. In addition, the Director asked for recommendations as to what changes should be made as a result of that review.

On December 8, 2009, Director Mueller asked Judge William H. Webster to conduct a more comprehensive, independent review of FBI policies, practices, and actions. That review is currently underway. The goal of these reviews is the same, to look at both the actions of individuals involved and the systems in place at the time of the tragic events at Fort Hood and to ensure that investigators have the tools they need to effectively carry out their responsibilities in today's evolving threat environment. The paramount concern in this process is to make sure that the systems and policies that are in place support public safety and national security.

In addition, as a result of the internal review, FBI identified four areas for immediate adjustment and improvement.

#### *Protocols With the Department of Defense (DOD)*

Although information-sharing has dramatically improved since September 2001, there is still room for improvement in certain areas, especially given the changing nature of the terrorist threat, and the need to constantly recalibrate approaches and responses. Working with DOD, FBI has formalized a process for centrally notifying DOD of FBI investigations involving military personnel. This should streamline information-sharing and coordination between FBI and all components of DOD, where appropriate, and as permitted by law. Improved processes for exchanging information will help ensure that FBI task force officers, agents, and analysts have all available information to further their investigations.

#### *Additional Levels of Review*

FBI determined that intelligence collected in connection with certain threats—particularly those that affect multiple equities inside and outside the FBI—should have a supplemental layer of review at the FBIHQ level. This redundancy in the review process will limit the risk of human error by bringing a broader perspective to the review. In this way, FBI should have a better institutional understanding of such threats.

*Technological Improvements*

During the course of the internal review, FBI identified IT improvements that should be made to its systems. Those improvements, which are being engineered, should strengthen FBI agents' and analysts' ability to sift through information by automatically showing certain connections that are critical to uncovering threats.

*Training for Members of JTTFs*

FBI increased training for members of JTTFs to better ensure JTTF members know how to maximize access to all available information and to best utilize existing tools to identify and link critical information. Specifically, JTTF Task Force Officer (TFO) training consists of three components:

- orientation and operations training;
- database training; and
- computer-based training.

Training addressing legal restrictions that govern the retention and dissemination of information was also expanded and strengthened.

The JTTF TFO Orientation & Operations Course (JTOOC) was established prior to Fort Hood and has continued to evolve as training is evaluated to ensure the best possible instruction is provided to TFOs. The JTOOC is now a 5-day course designed to develop a basic familiarization with counterterrorism investigations for all TFOs assigned to JTTFs. JTOOC classes are designed around a notional counterterrorism case to facilitate discussion and participant interaction.

In fiscal year 2010, in response to the initial Fort Hood findings, the FBI Counterterrorism Division (CTD) mandated that JTTF members receive hands-on training on key FBI databases and systems. Database training is now required for all JTTF members including special agents, TFOs, intelligence analysts, and other personnel assigned to JTTFs who have access to systems and conduct investigative work.

FBI provides computer-based training to its employees via the FBI Virtual Academy system. CTD has identified 12 specific Virtual Academy training modules as the baseline level of training for JTTF personnel. All personnel assigned to a JTTF or working counterterrorism matters are required to complete these baseline training modules.

## EFFECTS OF FISCAL YEAR 2010 LEVELS ON THE FBI

*Question.* Although this hearing is about the fiscal year 2012 budget request, this subcommittee is also currently negotiating the fiscal year 2011 budget. Specifically, FBI will be unable to backfill 1,100 positions and would be facing a deficit of more than \$200 million if left to operate at fiscal year 2010 funding levels.

Is this true, and how will this affect this country's national security?

*Answer.* The fiscal year 2011 enacted appropriation included an increase that enables the FBI to backfill these positions, and since current services requirements were provided, there is not a \$200 million shortfall.

*Question.* Can agents be furloughed or is there a prioritization of personnel in all of the enforcement agencies?

*Answer.* FBI agents can be furloughed, taking into account the safety of human life or protection of property when making decisions about furloughing staff. However, FBI does not anticipate furloughing any staff in fiscal year 2011.

*Question.* How does this affect the fiscal year 2012 budget that we see before us today?

*Answer.* Because the fiscal year 2012 President's budget request was developed using the fiscal year 2011 current rate as the starting point, the fiscal year 2011 enacted budget has little impact on the fiscal year 2012 request. The fiscal year 2012 budget request includes mandatory increases and annualizations needed to maintain current investigative and litigating efforts.

## HYBRID SQUADS

*Question.* Hybrid squads integrate FBI personnel with different types of expertise to address different types of threats and provide the best framework to disrupt the infrastructure of the Mexican drug cartels. The squad's composition provides different backgrounds and functional expertise, ranging from violent gangs, public corruption, and violent crimes. An amount of \$15.9 million is requested for fiscal year 2012 to annualize and sustain the FBI's hybrid squads, which received \$17 million in the fiscal year 2010 Southwest Border supplemental to create six of these teams.

Have the teams created in the supplemental been deployed?

*Answer.* Yes, FBI currently has nine fully deployed hybrid squads along the Southwest Border. They are located in the following field offices:

- San Diego;

- Albuquerque, New Mexico (Las Cruces Resident Agency [RA]);
- El Paso;
- San Antonio, (Del Rio RA and McAllen RAs);
- Dallas;
- Phoenix, Arizona;
- Tucson, Arizona; and
- San Juan, Puerto Rico.

*Question.* Can you discuss the composition and concept of hybrid squads and where they are deployed?

*Answer.* Mexican Criminal Enterprises (MCEs) are involved in significant criminal activity that threatens United States national security interests, including, but not limited to:

- violent crime;
- kidnapping; drug trafficking;
- alien smuggling;
- public corruption;
- assaults on Federal officers;
- murder; and
- human trafficking.

Each hybrid squad consists of, at a minimum, one supervisory special agent; five special agents; one intelligence analyst (IA); and one staff operations specialist (SOS) who are subject matter experts in the MCEs and the threats they pose in their area of responsibility (AOR). In addition, hybrid squads will identify State and local resources investigating violent crimes in its AOR in order to leverage their expertise and intelligence base in support of its operational strategies.

Hybrid squads were established to address the cross-programmatic threat posed to the United States by MCEs operating on the Southwest Border and to allow for the implementation of a cross-programmatic, multi-agency approach to the investigation of significant crimes perpetrated by MCEs, including:

- murder;
- kidnapping;
- extortion;
- home invasions;
- drug and weapon trafficking;
- money laundering;
- alien smuggling (particularly Special Interest Aliens [SIA]);
- Assault of or Killing a Federal Officer; and
- other violent crimes being perpetrated by the MCEs in order to impact the cross-border criminal violence created by those MCEs in their AOR.

Hybrid squads actively contribute to the flow of intelligence by coordinating with local Field Intelligence Groups with the Southwest Border Watch FBIHQ component.

The hybrid squads have enhanced FBI resources dedicated to combating the violent crime threat posed by MCEs, and have expanded the FBI's intelligence collection efforts against MCEs. Hybrid squads have become an integral part of the FBI's overall strategy designed to penetrate, disrupt, and ultimately dismantle the MCEs that pose the greatest threat to U.S. national security.

They are located in the following field offices:

- San Diego;
- Albuquerque, New Mexico (Las Cruces Resident Agency [RA]);
- El Paso;
- San Antonio, (Del Rio RA and McAllen RAs);
- Dallas;
- Phoenix, Arizona;
- Tucson, Arizona; and
- San Juan, Puerto Rico.

#### INNOCENCE LOST

*Question.* Innocent Lost targets child prostitution and sex trafficking, and is a partnership between FBI, the National Center for Missing and Exploited Children, and the Justice Department's Child Exploitation and Obscenity Section. This is one of the FBI's most important missions. The request for this program is \$19 million.

Can you tell us about the partnership with the National Center for Missing and Exploited Children, and the impact the Innocence Lost program has had in just 8 years of existence?

*Answer.* The National Center for Missing and Exploited Children (NCMEC) supports the Innocence Lost National Initiative (ILNI) through training and analytic

resources. This partnership has resulted in a course, "Protecting Victims of Child Prostitution," which provides Federal/State/local law enforcement officers and prosecutors, as well as victim specialists, with a basic introduction to the child prostitution threat and how to work with child victims. To date, 1,300 individuals have received this training. The NCMEC also uses its intake system to maintain a repository on children who are suspected to be at risk of exploitation through prostitution. To date, the NCMEC has received more than 4,200 intake reports, with 940 pertaining to children under 14 years of age.

As of May 17, 2011, the ILNI had 572 pending cases, 599 informations/indictments, and 724 convictions. Furthermore, subjects of these investigations are regularly sentenced to terms of 25 years or more, while six have received life sentences. Since its inception, 1,628 children have been recovered and removed from the cycle of abuse.

*Question.* What are your plans for this vital initiative in the future?

*Answer.* FBI places a high priority on assisting child victims of sexual exploitation and plans to continue addressing this problem through ILNI. The ILNI targets criminal organizations engaged in the commercial sexual exploitation of children, such as child prostitution. FBI currently has 42 task forces and working groups addressing this threat. Investigations have identified national criminal organizations responsible for the sex trafficking of hundreds of children, some as young as 9 years old.

FBI currently has 26 formalized task forces and 16 ad-hoc working groups across the Nation addressing the threat. These task forces and working groups consist of approximately 240 State and local law enforcement participants.

FBI has developed a national database, the Innocence Lost Database (ILD), containing more than 22,000 records pertaining to offenders, associates and child victims. To date, 3,400 of these records pertain to child victims. This database serves as a national repository for intelligence and is available to Federal/State/local law enforcement 24/7 via Law Enforcement Online (LEO), which is a controlled-access communications and information sharing data repository. Future plans include a robust enhancement to the database to include a webcrawler to compare intelligence to social networking sites, as well as facial recognition to assist in identifying child victims.

*Question.* Is \$19 million an adequate request for this initiative?

*Answer.* The \$19 million request is sufficient to maintain current services.

#### INNOCENT IMAGES

*Question.* NCMEC reported to us that they are working with FBI in an effort to identify and rescue the children being victimized in child pornography. NCMEC also reported that it reviewed 13 million images and videos last year alone.

FBI also assigns an agent and four analysts from the Cyber Division/Innocent Images to work with NCMEC on Internet crimes against children, particularly child pornography. It seems clear that the problem of child pornography has exploded with the advent of the Internet. I know that your Innocent Images Initiative has been successful. The request is \$69 million for Innocent Images.

Is this an appropriate request?

*Answer.* The Innocent Images threat is large and FBI will prioritize its caseload to effectively meet investigative requirements within the \$69 million level.

*Question.* What more can we do to combat this insidious problem?

*Answer.* The Innocent Images National Initiative (IINI) program has collaborated with State, local, Federal, and international law enforcement partners, as well as private industry, to address this problem. Although the IINI program has been quite successful at combating the online threat of online child sexual exploitation, IINI recognizes that it cannot arrest its way out of this societal dilemma. Therefore, IINI has launched a national outreach program for elementary and middle schools to make children and parents aware of online dangers and the safety measures needed to prevent children from being sexually exploited. The program is called FBI Safe Online Surfing (SOS). Through May 2011, FBI has been able to reach approximately 140,000 students (from all 50 States) with this outreach initiative.

#### RELATIONSHIP BETWEEN INTELLECTUAL PROPERTY (IP) THEFT AND CRIME/TERRORISM

*Question.* A 2009 RAND study, as well as other analysis, concludes that there was clear evidence that terror groups, as well as organized criminal enterprises, engage in various forms of IP theft because it is a low-risk, high-profit enterprise.

Are you aware of any specific Government-wide systematic review of the ties between and among terror groups and/or organized crime and IP theft?



Answer. FBI, as a partner in the National Intellectual Property Rights Coordination Center (IPR Center), recently conducted a threat assessment of IPR violations to the United States. The resulting document, entitled “Intellectual Property Violations: A Baseline Global Assessment of the Threats to United States’ Interests at Home and Abroad”, is a comprehensive analysis of the global threat to United States interests from criminal IPR violations including, the nature of the threat, the magnitude, the types of offenders committing these offenses, and its source. In analyzing the types of offenders, the assessment considered the role of criminal organizations including criminal enterprises, traditional organized crime groups, terrorist organizations and gangs. Among other things, the assessment identified the types of goods that are most often counterfeited or pirated by these types of offenders, the role they play in committing IP crime (e.g. manufacturing, distribution, retail), and where they are generally located.

The contributors to this report conducted interviews with IPR experts in the United States, China, and India, including experts in government, industry, and academia. Researchers analyze relevant United States Intelligence Community (USIC) reporting information from Federal law enforcement investigations, industry generated reports, and other open source research.

In addition, in §402(b) the Prioritizing Resources and Organization for Intellectual Property Act of 2008 (PRO IP Act), Public Law 110–403, the Congress directed the Department, subject to the availability of appropriations, to develop a long-range plan to identify and address the links between organized crime and IP. Although this portion of the PRO IP Act remains unfunded, the Department has taken a number of steps to implement the goals of this provision. For example, consistent with its long-term commitment to fighting organized crime in all forms, the Department has incorporated IP into its International Organized Crime Strategy; the Attorney General’s Organized Crime Council (AGOCC) has prioritized IP enforcement, adopting as part of its 2010 Action Plan a specific goal to enhance law enforcement coordination in this area; and the Department’s IP Task Force has designated the investigation and prosecution of IP crimes perpetrated by organized crime groups a law enforcement priority. More detailed information on these efforts are included in the Department’s fiscal year 2009 and fiscal year 2010 PRO IP Act Reports. See <http://www.cybercrime.gov/proipreport2010.pdf> and <http://www.justice.gov/criminal/cybercrime/proipreport2009.pdf>.

*Question.* If not, are you aware of any plans within the Department of Justice or any other Department or agency to conduct such a review?

Answer. FBI, as a partner in the National Intellectual Property Rights Coordination Center (IPR Center), produced the “Intellectual Property Violations: A Baseline Global Assessment of the Threats to the United States’ Interests at Home and Abroad” as a comprehensive analysis of the global threat to the United States interests from criminal IPR violations.

#### IMPACT OF A GOVERNMENT SHUTDOWN ON FBI

*Question.* Director Mueller, I hope the Government does not shut down, but this is a reality at FBI that should be discussed, specifically the national security and public safety implications.

Can you tell us what happens at FBI in the event of shutdown?

Answer. FBI must be able to respond to contingencies during a lapse of appropriations that are reasonably likely to compromise the safety of human life or protection of property in some significant degree. Accordingly, in the April 2011 contingency plan all FBI agents and support personnel in the field were considered “excepted” from furlough. This includes the 56 domestic field offices, 400 resident agencies, 61 Legal Attaché (LEGAT) offices, and 14 LEGAT sub-offices.

At FBIHQ, a total of 59 percent of staff were considered excepted in the April 2011 contingency plan, including 90 percent of the agents, 88 percent of intelligence analysts, and approximately 49 percent of other support personnel. These positions provide direction and investigative support to all field operations and excepted FBIHQ functions.

*Question.* Do you believe that a Government shutdown could have an impact on FBI’s counterterrorism mission? Would it have an impact ongoing investigations?

Answer. While a total of 89.3 percent of FBI personnel were excepted and not subject to furlough in the April 2011 contingency plan, a Government shutdown could have a negative impact on FBI’s counterterrorism mission as critical support functions provided by the remaining furloughed employees would not be available.

*Question.* Are any agents or intelligence analysts furloughed? If so, where are they located and how is this determined?

Answer. In the April 2011 contingency plan, 10 percent of agents and 12 percent of intelligence analysts at FBIHQ would be furloughed. The decision to furlough takes into account the safety of human life or protection of property. However, FBI does not anticipate furloughing any staff in fiscal year 2011.

*Question.* FBI has agents and personnel stationed overseas. How would a shut-down affect them?

Answer. In the April 2011 contingency plan, all FBI agents and support personnel stationed overseas are considered excepted from furlough. However, overseas personnel would be operating without the support of those FBIHQ employees not excepted from furlough.

#### OTMs—OTHER THAN MEXICANS

*Question.* As we discussed earlier this week, I read an alarming column in Texas Monthly. It stated that the head of the Texas Department of Public Safety testified before the Texas Senate Finance Committee, conveying statistics that law enforcement officials in the Rio Grande Valley had apprehended 287 illegal aliens categorized as “OTMs” or “Other Than Mexicans”. The OTMs came from countries that are home to active al Qaeda cells or Taliban activity—Yemen, Iran, and Pakistan.

The article also cited a General Accounting Office statistic that law enforcement catches less than 6.5 percent of the criminal activity coming across the border, and it was extrapolated that these 287 OTMs captured represents only 6.5 percent of the threat crossing the border.

Is it possible that some of these OTMs are potential terrorists or could have terrorist ties? Do you believe terrorists are attempting to enter the United States through the Southwest Border and can you discuss your understanding of this situation?

Answer. FBI remains concerned that terrorists seek to exploit the Southwest Border as a means of gaining access to the United States. Two recent arrests near the United States-Mexico border indicate that some Special Interest Aliens (SIAs) advocate violent Islamic extremism or have some connections to overseas terrorist organizations.

United States border authorities in January 2011 arrested Tunisian national and formerly Montreal, Canada-based imam, Said Jaziri, after he allegedly paid a Tijuana-based smuggling group to take him across the United States-Mexican border in the trunk of a vehicle. Prior to his deportation by Canadian authorities in 2007, Jaziri publicly advocated for the imposition of Sharia law in Canada and called for the death of the Danish newspaper cartoonist who drew pictures of the Prophet Muhammad.<sup>1 2</sup>

In April 2011, Ahmed Muhammed Dhakane, an ethnic Somali was sentenced to 10 years in prison for failing to acknowledge ties to an East African extremist group and lying on an asylum application. Dhakane was arrested on immigration charges in Brownsville, across the Rio Grande from Matamoros, Mexico in March 2008. It was discovered he provided false information on his entry into the United States and controlled a large-scale human smuggling enterprise.<sup>3</sup>

FBI believes that the illicit flow of SIAs across the United States-Mexico border into the United States offers al Qaeda and affiliate organizations a potential opportunity for smuggling a terrorist operative or supporter into the United States. Many of the human smuggling networks that operate between Latin America and the United States are connected with smugglers from other parts of the world and these networks are willing to smuggle undocumented persons of any nationality, provided that the individual is able to pay the smuggling fee. FBI and its law enforcement and intelligence partners continue to investigate aliens and human smuggling networks with possible connections to terrorist organizations who may be seeking access to the United States via the Southwest Border.

<sup>1</sup>Los Angeles Times, “Controversial Muslim cleric is arrested while sneaking into the U.S.”, 27 January 2011.

<sup>2</sup>UK Daily Mail, “Controversial Muslim cleric caught being smuggled into the U.S. over Mexico border”, 28 January 2011.

<sup>3</sup>Associated Press, “Somali sentenced for lying about terrorism links”, 28 April 2011.

[Monday, February 21, 2011]

## OTHER THAN MEXICANS

(posted by Patricia Kilday Hart at 7:10 p.m.)

Department of Public Safety Director Steve McCraw testified before Senate Finance today, sharing his concern that crime in Dallas, Houston, Austin and San Antonio is very much connected to Mexican drug cartels, operating through the potent prison gangs Texas Syndicate and Texas Mafia.

For most, that's not particularly "new" news. But McCraw also shared some statistics that gave his audience great pause: Last year, law enforcement agencies operating in the Rio Grande Valley apprehended what they refer to as 287 OTMs—illegal immigrants from countries with active al Qaeda cells or Taliban activity. Places like Yemen, Iran, Pakistan, etc. Even more startling was a Federal Government Accountability Office statistic that law enforcement's net catches only about 6.5 percent of the criminal activity coming across the border. In the hearing, Senator Dan Patrick suggested that we could extrapolate that the 287 potential "terrorists" represents only 6.5 percent of the total threat.

McCraw gave the Finance Committee solid reasons to believe that investment in border security operations reaps dividends. Last year, thanks to an additional State-funded DPS presence on the border, drug seizures increased 124 percent and cash seizures jumped by 137 percent.

Neither the Senate or House proposed bills cut too deeply into DPS border operations, but my prediction is that this is one area of the budget that won't be trimmed.

*Question.* Does the FBI get involved when these individual are captured? What do you believe can be done to prevent this situation?

*Answer.* The Department of Homeland Security's (DHS) Customs and Border Protection (CBP) and Immigration and Customs Enforcement (ICE) are the primary Federal agencies that are involved in the interdiction and removal of aliens entering the United States illegally. That said, if CBP or ICE determine that a captured illegal alien warrants further scrutiny, those individuals are first interviewed by their investigative elements. If they believe a nexus to terrorism exists, FBI is called in for further investigation.

FBI defers to DHS to provide information on preventive measures.

I also understand there have been a number of Somalians attempting to illegally enter the country through the Southwest Border, and that there are some serious issues because there is no official government in Somalia to deport them to.

*Question.* What is the process once a Somalian or individual captured from a country without a recognized government is in our custody?

*Answer.* In this instance, FBI would not be involved as this is an immigration issue. DHS' Customs and Border Protection (CBP) and Immigration and Customs Enforcement (ICE) would be the lead agencies for this matter. DHS will determine the appropriate means for cases involving such an alien. In some cases, DHS may choose to place the alien in immigration judge proceedings conducted by DOJ's Executive Office for Immigration Review.

## LACK OF SUPPORT FOR SOUTHWEST BORDER EFFORTS

*Question.* DOJ components are often overlooked by the administration when crafting Southwest Border budgets and legislation.

Director Mueller, I am concerned that only \$130 million of FBI's \$8.1 billion total request is dedicated to Southwest Border activities. I understand FBI requested more resources in last year's Southwest Border supplemental. I also understand that FBI was directed to request no new enhancements in the fiscal year 2012 request—yet DOJ was burdened with more than \$1 billion of unrequested programs or new enhancements.

(New or unrequested programs—COPS Hiring for \$600 million; Medical Malpractice Grants for \$250 million; Juvenile Justice Race to the Top; Community Based Violence Prevention Grants; Violence Against Law Enforcement Officer grants).

Could you discuss what FBI is doing to address violence and corruption along the Southwest Border and what resources you still need?

*Violence*

*Answer.* In addition to the standard deployment of resources to gang squads, drug/High Intensity Drug Trafficking Areas (HIDTA) squads, violent crime squads,

and task forces in field offices along the Southwest Border, FBI has the following resources/initiatives to address Southwest Border violent criminal activity:

*Hybrid Squads.*—Each hybrid squad consists of at least one supervisory special agent, five special agents, one Intelligence Analyst, and five professional staff positions. Hybrid squads address the cross-programmatic threat posed to the United States by Mexican Criminal Enterprises (MCEs) operating on the Southwest Border and allows for the implementation of a cross-programmatic, multi-agency approach to the investigation of significant crimes perpetrated by MCEs, including:

- murder;
- kidnapping;
- extortion;
- home invasions;
- drug and weapon trafficking;
- money laundering;
- alien smuggling (particularly SIA);
- Assault or killing a Federal officer; and
- other violent crimes being perpetrated by the MCEs in order to impact the cross-border criminal violence created by those MCEs in their AOR.

—Regarding the Southwest Border, the most critical element in fiscal year 2012 is sustainment of the 78 positions (44 agents) received in the fiscal year 2010 border security supplemental, which was requested in the fiscal year 2012 President's budget.

—Southwest Border Rapid Deployment Team to respond to crises such as the recent shootings of ICE and CBP agents.

—Intelligence Collection and Exploitation Unit:

- Partners with other Federal agencies (ICE, CBP, National Security Agency [NSA]) for intelligence sharing at FBIHQ in Washington, DC;
- Participates in the El Paso Intelligence Center (EPIC) in the field.

*Southwest Regional Intelligence Group.*—Serves as the clearinghouse of all FBI activities involving Mexico and is housed at EPIC. It was established to remedy any intelligence gaps along the Southwest Border.

*OCDETF Co-located Strike Forces.*—Strike Forces serve as the DOJ's primary prosecutor-led, multi-agency task forces aimed at aggressively targeting the highest-level drug-trafficking organizations. FBI has 118 personnel (87 agents and 11 intelligence analysts) assigned to the OCDETF Strike Forces. Approximately two-thirds are on Strikeforces that address Southwest Border-related issues. There are tactical partnerships between FBI's Hostage Rescue Team and CBP's Border Patrol Tactical Unit.

*FBI Border Liaison Officers.*—Border Liaison Officers work to establish relationships and exchange information with Mexican law enforcement with the goal of easily sharing vital intelligence.

*Training for Mexican Law Enforcement.*—Mexican American Law Enforcement Training; Latin American Law Enforcement Executive Development Seminars; FBI anti-kidnapping training.

—New partnerships with local law enforcement.

—Cartel Murder Initiative—Dallas, Texas FBI Field Division—Dallas, Texas Police Department.

In addition, the FBI's MS-13 National Gang Task Force has instituted the Central American Fingerprint Exchange (CAFE) initiative, as well as the Transnational Anti-Gang initiative (TAG), which coordinates the sharing of gang intelligence between FBI and its law enforcement partners in El Salvador, Guatemala, Honduras, and the United States.

CAFE was developed to collect and store existing biometric data/fingerprint records from El Salvador, Guatemala, Belize, Honduras, as well as Chiapas, Mexico. These records are being integrated into the general database of FBI's Criminal Justice Information Services Division, and will be accessible to all Federal, State, local, agencies in the United States through the Integrated Automated Fingerprint Identification System (IAFIS). CAFE will enable participating countries to conduct fingerprint identification and analysis by providing system hardware and training.

TAG was created to assist in combating the growing threat posed by transnational gangs and drug cartels in Latin America. The objective of TAG is to aggressively investigate, disrupt, and dismantle gangs whose activities rise to the level of criminal enterprises. TAG combines the expertise, resources, and jurisdiction of participating agencies involved in investigating and countering transnational criminal gang activity (specifically MS-13 and 18th Street), in the United States, El Salvador, Honduras, Guatemala, and Mexico. Through information sharing and open communication with the Policia Nacional Civil (PNC) of El Salvador, the TAG is in

a position to acquire and disseminate valuable information previously unavailable to FBI field offices. Utilizing the support of the host countries and participating law enforcement agencies, the TAG employs a comprehensive approach to address the threat which MS-13 and 18th Street present to the United States and to Central America.

*Public Corruption (PC)*

As of February 23, 2011, there were 127 agents dedicated to PC investigations along the Southwest Border. These agents coordinate efforts with Federal, State, and local law enforcement partners, including 13 FBI-led Border Corruption Task Forces (BCTFs) and 1 Border Corruption Working Group (BCWG) along the Southwest Border and 1 National Border Corruption Task Force at FBIHQ in Washington, DC.

---

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

*Question.* The recent Homeland Security and Governmental Affairs Committee report on Fort Hood found a failure of the Federal Bureau of Investigation (FBI) to adequately share critical information at the Joint Terrorism Task Forces (JTTFs). Namely, the JTTF in San Diego failed to share all the information it had about an Army Major's relevant communications with a suspected terrorist with the Washington JTTF, FBI headquarters (FBIHQ), and the Department of Defense (DOD). While it sent a memo to the Washington JTTF (as Major Hasan was stationed at Walter Reed Hospital at the time), and copied FBI Counterterrorism Division, FBI only considered it to be a "discretionary lead". The Washington JTTF spent 4 hours on the last day of the 90-day due date to review the request and respond, and while the San Diego JTTF believed the analysis to be "slim", at no time did FBIHQ interject or coordinate intelligence analysis or the investigation.

Similar to the situation that existed prior to the 9/11 attacks, the failure to share critical information resulted in deadly tragedy. The 9/11 Commission report found that:

"The FBI did not have the capability to link the collective knowledge of agents in the field to national priorities. The acting director of the FBI did not learn of his Bureau's hunt for two possible al Qaeda operatives in the United States or about his Bureau's arrest of an Islamic extremist taking flight training until September 11. The Director of Central Intelligence knew about the FBI's Moussaoui investigation weeks before word of it made its way even to the FBI's own Assistant Director for Counterterrorism." (p. 352).

I am afraid that, since 9/11, the message that information sharing is critical has dissipated, and the Fort Hood incident indicates that FBI's field offices still do not adequately communicate with FBIHQ, much less other agencies.

What has been done since Fort Hood and 9/11 to ensure that field offices are sharing information with a central headquarters office that coordinates counterterrorism intelligence, analysis, and investigations?

Answer. Since 9/11, FBI has made steady progress in the realm of information sharing, moving ahead simultaneously in three ways:

- Creating processes that make information sharing quicker, easier, and more effective;
- Creating a culture that values and encourages information sharing; and
- Creating organizational structures to advocate for information sharing and provide oversight to information sharing practice.

The most important progress has come with the creation and maturation of the Field Intelligence Groups (FIGs). The FIGs are composed of intelligence analysts, special agents, and other specialty staff such as language analysts and surveillance personnel, each of whom plays a role in the collection, analysis, production, and dissemination of intelligence. Specifically regarding information sharing, the FIGs disseminate information obtained by the field office that might be of value to other law enforcement or intelligence community partners.

Generally, information is shared in the form of Intelligence Information Reports (IIRs), which are sent not only to others in FBI, but also to FBI's partners in the U.S. intelligence community, to DOD and the Department of Homeland Security (DHS). Most IIRs contain "tearlines" so that the gist of the information is also shared with State and local law enforcement, as well as with our foreign partners. A recently developed product is our Situational Information Report (SIR). SIRs are the primary means by which field offices share timely and detailed unclassified in-

formation on matters relevant to entities within their domain, including State, local, and tribal partners.

When FIGs were first established, IIRs that they drafted were all sent to FBIHQ for review and editing before being disseminated outside FBI. Starting this year, IIRs have been disseminated directly by FIGs, reflecting the higher level of professionalism created by several years of training, oversight, and experience. This direct dissemination means that information sharing is both faster and more extensive.

On December 31, 2010, FBI created six Regional Intelligence Groups (RIGs) to facilitate information sharing among FIGs and to carry out analysis of developments that extend beyond the purview of a single field office. RIGs support the field offices in their efforts to identify risks and threats, and to develop an understanding of how these risks and threats impact the region. As emerging threats and trends that transcend field office boundaries emerge, the RIGs will facilitate awareness of regional field office collection postures to identify opportunities for shared source exploitation. All products produced by FIGs and RIGs are also shared with the appropriate FBIHQ mission program managers.

Moreover, information sharing with Federal, State, and local law enforcement partners in JTTFs and Federal-level centers like the National Counterterrorism Center (NCTC) and Terrorist Screening Center (TSC) have been instrumental in focusing investigations on terrorist organizations and operations. FBI has mandated that JTTF members receive hands-on training on key FBI databases and systems. Database training is now required for all JTTF members including special agents, Task Force Officers, intelligence analysts and other personnel assigned to JTTFs who have access to systems and conduct investigative work. Use of community outreach, as well as law enforcement and private sector partnerships, in programs such as Tripwire, which identifies groups or individuals whose suspicious behavior may be a precursor to an act of terrorism, have resulted in significant tips and leads for FBI that have in turn led to timely intercept of terrorist activities. FBI has created a shareable database known as eGuardian that contains information regarding threats or suspicious incidents that appear to have a nexus with terrorism.

In 2010, DOD decided to adopt eGuardian for its own use. Also in 2010, FBI and DOD entered into a Memorandum of Understanding, that requires FBI Counterterrorism Division and field offices to notify "a DOD representative in" the national JTTF when an assessment or investigation is initiated regarding a military or DOD-affiliated individual. These efforts will greatly facilitate the exchange of suspicious activity reports between FBI and the DOD.

Finally, FBI has been a supporter of State and local Fusion Centers, which have become another avenue for information sharing between the Federal Government and State, local, tribal, and private sector entities. FBI encourages its field offices to maintain a close working relationship with the FIGs and the Fusion Centers in their area of responsibility.

A particularly noteworthy recent development was the decision in February 2011 to appoint an additional Deputy Assistant Director (DAD) within the Directorate of Intelligence to manage a program of "intelligence integration". The point is to move beyond merely sharing information and toward collaborative work on understanding the significance of the information that is shared. FBIHQ Counterterrorism Division continues to serve as the coordinator for counterterrorism investigations, while the new DAD for Intelligence Integration is working to ensure that these investigations receive support from intelligence analysis that brings together and integrates intelligence and information from every possible source.

*Question.* Some of the recent terrorist plots remind us that the key to disrupting an attack is often the action of an alert citizen who, in the course of his or her everyday business, notices and reports a suspicious activity.

Previously, Senator Lieberman and I authored a provision, which became law, that we refer to as the "See Something, Say Something" law. The provision was a response to a lawsuit against citizens who were sued after reporting suspicious activity aboard a US Airways flight that was about to depart Minneapolis in 2006. It provides protection from lawsuits when individuals report suspicious activity in good faith regarding potential threats to the transportation sector.

We introduced a bill this Congress that would expand this protection beyond the transportation sector, encompassing good faith reports of suspicious activity that may indicate that an individual is engaging in or preparing to engage in terrorist acts in general. NYPD Commissioner Kelly endorsed this legislation, saying it makes "eminent good sense . . . and I certainly would recommend that it be expanded."

Do you think that if this bill were to be enacted into law it would increase the likelihood that more terrorist plots would be disrupted thanks to the actions of vigilant citizens?

Answer. While it would appear that such a law, if enacted, would increase the likelihood that more terrorist plots would be disrupted, the Department does not have any data to support or refute this assertion.

*Question.* Late last year, the Inspector General of the Department of Justice issued a report finding widespread cheating by employees of FBI on the standard examination to test knowledge of the Domestic Investigations and Operations Guide (DIOG). We exchanged regarding this unfortunate finding.

The examination is designed to ensure that FBI employees understand all the investigative authorities—and the limits and civil liberties restrictions to those authorities—in investigating individuals in this country. This is all the more important with the extended authorities that FBI has post-9/11, especially with regards to domestic intelligence gathering. But there were many egregious cases of cheating, including those involving high-level Special Agents in Charge, and cybercrimes investigators using their computer skills to hack into code to reveal answers.

It is fully recognized that Director Mueller has endeavored to maintain the core principle of integrity within FBI and has strived to transform FBI into an agile agency that is well-suited to defend against crimes and other terrorism threats.

A December letter concerning this incident indicates that FBI will be releasing the next edition of the DIOG, and that FBI employees will be tested on their knowledge of the new DIOG. Please provide a status update on that effort.

Answer. FBI's Corporate Policy Office, in coordination with the Training Division, Office of the General Counsel and Office of Integrity and Compliance, is preparing an updated online overview course, along with updated FAQs, training aids, and summary charts that highlight key tenants of the DIOG and the changes from the original version. All operational personnel will be required to complete the new training course when the updated DIOG is published in July 2011.

*Question.* It was recently reported that Umar Patek was arrested in Pakistan earlier this year based on a Central Intelligence Agency (CIA) tip and is in the process of being turned over to the Indonesian intelligence authorities by Pakistani intelligence. Umar Patek is a senior commander of al Qaeda's Southeast Asian affiliate, Jemaah Islamiyah, and was the field coordinator for the 2002 Bali nightclub bombings and the last at-large member of the Hambali network that collaborated with Khalid Sheik Mohammed on a planned "second wave" of attacks on America after September 11, 2001.

Although Patek's purpose for being in Pakistan has not been disclosed, it would not be uncommon for leaders of al Qaeda's regional affiliates to meet with al Qaeda's senior leadership to discuss funding, recruiting, and current and future operations. It has also been reported that he was in Yemen before his trip to Pakistan. This is a person with intimate knowledge of al Qaeda's leadership, networks, and possibly future or current plots targeting America and other locations.

Please provide an update on the U.S. Government's involvement with this apprehension and if there is an effort to get him into our custody so that U.S. interrogators can directly determine if he is aware of threats to the Homeland.

Also, please explain if we had captured Umar Patek ourselves overseas, or any major al Qaeda leader, where would the terrorist be detained and interrogated?

Answer. FBI defers questions on this matter to CIA.

#### SUBCOMMITTEE RECESS

Senator MIKULSKI. We're going to just recess now, and reconvene in SH-219, for classified testimony on the national security budget of the FBI. And we'll look forward to seeing all members there. Don't stop for phone calls. We'll see you there.

[Whereupon, at 11:15 a.m., Thursday, April 7, the subcommittee was recessed, to reconvene in closed session in SH-219.]





**COMMERCE, JUSTICE, SCIENCE, AND RE-  
LATED AGENCIES APPROPRIATIONS FOR  
FISCAL YEAR 2012**

MONDAY, APRIL 11, 2011

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

The subcommittee met at 4:05 p.m., in room SD-192, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Brown, Hutchison, and Cochran.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

STATEMENT OF HON. CHARLES F. BOLDEN, JR., ADMINISTRATOR

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. The Subcommittee on Commerce, Justice, Science, and Related Agencies will come to order today.

We take the testimony of the current Administrator and former astronaut, the Honorable Major General Charles F. Bolden, Jr., to review the National Aeronautics and Space Administration (NASA) fiscal year 2012 budget request and to also talk about how this might be also in light of what we just have gone through.

Administrator Bolden, we're glad to see you. We want to thank you for coming on a Monday at 4 o'clock. Our hearing normally occurs on Thursday mornings. We couldn't do this when we thought we could. But, Senator Kay Bailey Hutchison and I did not want to delay the hearing, because it would have taken us after the Easter/Passover recess, and we wanted to be able to really get cracking on our fiscal year 2012 appropriations. So, we thank you for doing this. And we look forward to your testimony.

Well, I'm glad to see you and we're glad to be here. And so, both of us—all of us—were declared essential.

I know that what we just lived through last week was a cliffhanger. It rattled many people. It certainly rattled us. We felt that it would have been a disaster, had we had a shutdown, to, really, the economy and the reputation of the United States of America. We have now been called upon to accept \$78 billion worth of cuts from the President's 2011 request, \$39 billion below the 2010 level. That was the mark that was given us.

Now, all of our staffs have worked through the night. And I'd like to thank Senator Hutchison's staff for really hanging in there and working with us.

(131)

And I might add, Administrator Bolden, that Congressman Wolf and Congressman Fattah, we all worked pretty tirelessly to meet our obligation to be able to report out a bill—not only in this subcommittee—tonight at midnight. So, you'll hear about a lot of things. And we want to hear from you about where we think you are.

We're very proud of NASA. This is the 50th anniversary of President Kennedy's call to send a person to the Moon and return them safely. From our human spaceflight and our visit to the Moon, our ambitions to even go further, we're so proud of what we've done in human spaceflight, and we look forward to supporting human spaceflight initiatives.

When we look ahead, when we look at space science, the wonders of the Hubble Space Telescope, to others in the area of Earth science, planetary science, Helio science, protecting our power grid are all important.

We know that what NASA does is part of really creating the new ideas for the innovation economy. Today, at a speech to the Maryland Space Roundtable, I said every time NASA lifts off, it takes the American economy with us, because it is about innovation and it is about jobs.

Last year, the Congress gave NASA a new path forward. Ranking Member Hutchison and I worked with Senator Bill Nelson on a new authorization bill. And I'd like to compliment the gentlelady from Texas in what she and Chairman Nelson were able to achieve. We believe that is the framework that we could achieve. It meets the President's priorities, but understands the priorities of the space coalition here in the Senate for a very balanced space program.

We need investments in science and aeronautics, but we also must remember, we want human spaceflight, we want human spaceflight to be sustainable, being able to go to the International Space Station (ISS) until 2020 and also broadening our human reach beyond low-Earth orbit (LEO) with the Orion capsule and a heavy-lift rocket. We have lots of ambitions, and now we're trying to see if we have the wallet to match it. I will work tirelessly to implement a balanced space program.

Last year, we agreed to \$19 billion. Well, it's not going to come out quite that way. And so, for this year, we're anticipating, in appropriations, if we stick to the President's request, \$18.7 million. We know that the science request is at \$5 billion. And we also need to make sure important projects like that don't get out from under us, like the James Webb Space Telescope (JWST). And I'll focus more on that in the questions.

I'm also concerned about aeronautics research. I'm afraid we're falling away and falling behind in that area. Our European counterparts are making very heavy investments in aeronautics research, and I hope—they would like to dominate civilian aeronautics. Well, I just don't think it is fun to go to the Paris Air Show to hear about what Paris is doing. I want to go to the—when America goes, it's because we're really doing the best of the best.

We know that the budget requests \$2.8 billion for a new rocket in the Orion capsule for the human spaceflight program. And we have to take a good look at that.

We're also very impressed at what is going on, however, in Commercial Orbital Transportation Services (COTS), particularly as it relates to cargo. We think that's going to be a very big success story, that we'll be able to take cargo, through unmanned spacecraft, to the space station while we observe, watch, and see where we go in human spaceflight. We will also maintain our accountability and our oversight.

But, we want to get to you, rather than my opening statement.

I'm going to turn to the ranking member, someone who we've really—we've worked on space now three terms, haven't we?

Senator HUTCHISON. Yes.

Senator MIKULSKI. And I am so glad that we're colleagues here on this matter.

I'm going to turn to Senator Hutchison.

OPENING STATEMENT OF SENATOR KAY BAILEY HUTCHISON

Senator HUTCHISON. Well, I want to thank you, Madam Chairman, because you have indeed been a partner in trying to make the very best efforts for NASA in all of its missions.

And I particularly want to thank the chairman's staff director, Gabrielle Batkin, for working with my staff so closely to assure that NASA does have a balanced plan, going forward, that will achieve the results that we all want.

I thank you for coming. And, as the chairman mentioned, we are at some very major anniversaries and some very major crossroads.

We're about to see the end of our Nation's ability to launch our own astronauts into space. The space shuttles have served our country well for 30 years and have made it possible to construct an amazing science platform in space, the ISS. While NASA should be making plans to fully utilize the station using our own launch capabilities, I don't think that is happening. We could be working with our international partners, with our universities, and with companies that could capitalize on our unique national lab in space. In fact, it was the Commerce Committee, in our authorization, that created our part of the space station as a national lab in order to be able to attract private and university/academic funding for research. And that is just beginning to bear fruit.

But, now I see the administration placing our investment in the space station and its capabilities at risk, as well as our future exploration capabilities. Once the shuttles are retired, we will be reduced to buying seats on Russian vehicles for the foreseeable future. The Russians have been our long-time partners with the space station, but we should not expect them to shoulder their space program and ours, when we should be able to do it ourselves.

NASA has the Orion capsule, which it has invested significant time and resources in, to carry our astronauts. And yet, to this day, NASA is refusing to allow it to move forward. The President personally revived Orion last year, and the Congress followed, reinstating it as a vehicle that will take us to an asteroid or even back to the Moon.

I heard from your associate administrators, last month in the Commerce Committee, that they understand that the authorization law directs the building of a capsule and a heavy-lift vehicle. They know that Orion fits the bill as the multipurpose crew vehicle

(MPCV) and that it will take very little to modify the contracts, as allowed for in the authorization law. In fact, even the scope of the contract would need little alteration.

Like the President, I have no problem continuing to call the capsule we are developing Orion, yet we see no movement from NASA to continue the program at all. This budget proposes only \$1 billion for Orion in fiscal year 2012, while the authorized level for the same year calls for \$1.4 billion; and the plan for ongoing work, prior to NASA's cancellation attempts, would have had it at \$2 billion. This budget deliberately hamstring the ability for Orion to reach an operability date in 2016.

The fiscal year 2012 vision for human spaceflight offered as a variant of the authorization is the creation of new prime contractors and providing them with development funds. It is NASA's hope that providing venture capital will—that they then will be able to usher in a new era in space exploration. But, there is little proof that what is being promised can be reality.

The COTS program is finally beginning to show promise, but it is significantly behind schedule. Last year, NASA proposed a 60 percent increase in funds to assure that the program would be successful. But, because it has been slower to produce results, the STS-135 flight has now become critical for the near-term viability of the space station. The NASA authorization bill leaves primary crew vehicle delivery to the space station open to commercial entities, with Orion as a backup. However, given the track record so far for cargo and NASA's underfunded budget proposal for existing programs, the Nation could find itself with neither crew option available when our latest renegotiated contract with the Russians ends.

#### PREPARED STATEMENT

What we have done is allowed for a mix of Government and commercial to cover all of our country's needs. NASA needs to find a proper and justified balance without placing our human space program at risk. While I know that commercial companies could eventually become successful, I do not feel that the information available justifies such a large investment of Federal dollars this year for commercial vehicles. I also believe that the same scrutiny that has been placed upon our other manned vehicle should be applied to commercial crew to ensure that viability and safety of our astronauts are ensured.

So, Mr. Administrator, I will put the rest of my statement in the record. But, I am hoping that we can establish a partnership, going forward, that adheres to the authorization law, that is a balance, that does provide the funds for the commercial vehicle, but not at the expense of Orion and all of the capabilities to use what we've already spent billions to do productively, going forward.

[The statement follows:]

#### PREPARED STATEMENT OF SENATOR KAY BAILEY HUTCHISON

Mr. Administrator, thank you for coming to discuss National Aeronautics Administration (NASA) fiscal year 2012 budget. We are meeting on the eve of the 50th anniversary of the first human launched into space and the 30th anniversary of the very first shuttle launch. Space faring countries have accomplished many amazing things, and I hope that we can work together to help accomplish many more.

These are unusual times to be discussing the future of NASA when the budget for the current year is only just now being settled.

#### HUMAN SPACE FLIGHT

We are about to see the end of our Nation's ability to launch our own astronauts into space. The space shuttles have served our country well for the past 30 years and have made it possible to construct an amazing science platform in space, the international space station.

While NASA should be making plans to be fully utilizing the station using our own launch capabilities, that is not happening. We could be working with our international partners, with our universities, and with companies that could capitalize on our unique national lab in space.

Instead, this administration places our investment in the space station and its capabilities, as well as our future exploration capabilities at serious risk.

Once the shuttles are retired, we will be reduced to buying seats on Russian vehicles for the foreseeable future. The Russians have been our long time partners with the space station, but we should not expect them to shoulder their space program and ours when we should be able to do it ourselves.

NASA has the Orion capsule, in which it has invested significant time and resources to carry our astronauts, yet to this day, NASA refuses to allow it to move forward. The President personally revived Orion last year, and the Congress followed, reinstating it as the vehicle that will take us to an asteroid, or even back to the Moon.

I heard from your associate administrators last month that they understand the authorization law directs the building of a capsule and a heavy lift vehicle. They know that Orion fits the bill as the MPCV, and that it will take very little to modify the contracts, as allowed for in the authorization law. In fact, even the scope of the contract would need little alteration. Like the President, I have no problem continuing to call the capsule we are developing Orion, yet we see no movement from NASA to continue this program at all.

This budget proposes only \$1 billion for Orion in fiscal year 2012, while the authorized level for the same year calls for \$1.4 billion and the plan for ongoing work prior to NASA's misguided cancellation attempt, would have had it at \$2 billion. This budget deliberately hamstringing the ability for Orion to reach an operability date in 2016.

#### COMMERCIAL

The fiscal year 2012 vision for human space flight, offered as a variant of the authorization, is the creation of new prime contractors and providing them with development funds. It is NASA's hope that by providing venture capital, they will usher in a new era in space exploration with little proof that what is being promised can be reality.

The Commercial Orbital Transportation Services program is finally beginning to show promise, but it is significantly behind schedule. Last year NASA proposed a 60 percent increase in funds to assure that the program would be successful. Because this program has been slower to produce results than expected, the STS-135 flight has now become absolutely critical for the near-term viability of the space station.

The NASA authorization leaves primary crew delivery to the space station open to commercial entities with Orion as a backup. However, given the track record so far for cargo and NASA's underfunded budget proposal existing programs, the Nation could find itself with neither crewed option available when our latest renegotiated contract with the Russians ends.

What we have done is allowed for a mix of government and commercial to cover all of our country's needs. NASA needs to find a proper, and justified, balance without placing our human space program at risk.

While I know the commercial companies could eventually become successful, I do not feel that the information available justifies such a large investment of Federal dollars this year for commercial crew vehicles. I also believe that the same scrutiny that has been placed upon our other manned vehicles should be applied to commercial crew to ensure that viability and safety of our astronauts are ensured.

#### CLOSE

Instead of embracing the hard fought compromises that would lead to a robust and balanced space agency, we see a reliance on a new and novel way of doing space flight, and hoping it may work out in the end.

That is not responsible, nor is there any proof that it will ultimately be successful without substantial funding for development and guaranteed business from NASA.

We have just come from a year where battle lines were drawn because of a flawed budget proposal. I do not want to return to the issues of the past, but the proposal before us today continues to perpetuate a false hope. This hope places our entire human space flight program at risk while a talented workforce is being let go as NASA further delays what it can, and should be doing.

Mr. Administrator, you have a voice in shaping NASA, and it will set the tone for shaping the future for generations. I can only hope that you will use that voice to rise to the occasion.

You have great supporters of NASA on this subcommittee. Do not allow agendas that are counter to what is the law squander your opportunity to keep NASA at the forefront of exploration.

You have been given the tools to move forward expeditiously. All that needs to be done now is to move forward.

Thank you.

Senator HUTCHISON. Thank you, Madam Chairman. And I yield back to you.

Senator MIKULSKI. Yes.

I'd like to acknowledge the presence of Senator Sherrod Brown, from Ohio, a new but very active member of the subcommittee.

Senator, do you want to say something, or you want to wait for your—

Senator BROWN. I'll say only 30 seconds' worth.

#### STATEMENT OF SENATOR SHERROD BROWN

First of all, thank you for welcoming me to this subcommittee on—in all of the jurisdictions, including the NASA jurisdiction that's particularly important to me.

I appreciate General Bolden's coming to Cleveland, to Glenn Space Center a number of times, and speaking at the City Club and laying out a NASA vision.

I also am concerned, as I know we all are, at what the NASA budget may look like in the months ahead with H.R. 1, with the new Orion budget, introduced in the House last week, and with the tax-cut fervor that seems to be sweeping some parts of the House and Senate—what that's going to mean on funding one of the most important parts of the Federal Government; that is, the innovation, the research, the missions, the advantage in aeronautics that we have had as a country for decades in making sure that we can continue to be the leading edge there. But, if we're going to cut taxes and continue to cut taxes on the wealthiest people in this country, and continue to underfund the important parts of Government, we're going to lose that scientific edge. And I know General Bolden is helping to lead the charge on making sure that we don't lose it. And I appreciate his work on that.

Thank you, Madam Chair.

Senator MIKULSKI. Administrator Bolden.

#### SUMMARY STATEMENT OF CHARLES F. BOLDEN, JR.

General BOLDEN. Chairman Mikulski and Ranking Member Hutchison, good afternoon and thank you for the opportunity to discuss with you NASA's fiscal year 2012 budget request. I thank you very much for being here, Senator Brown, always good to see you.

Senator BROWN. You, too.

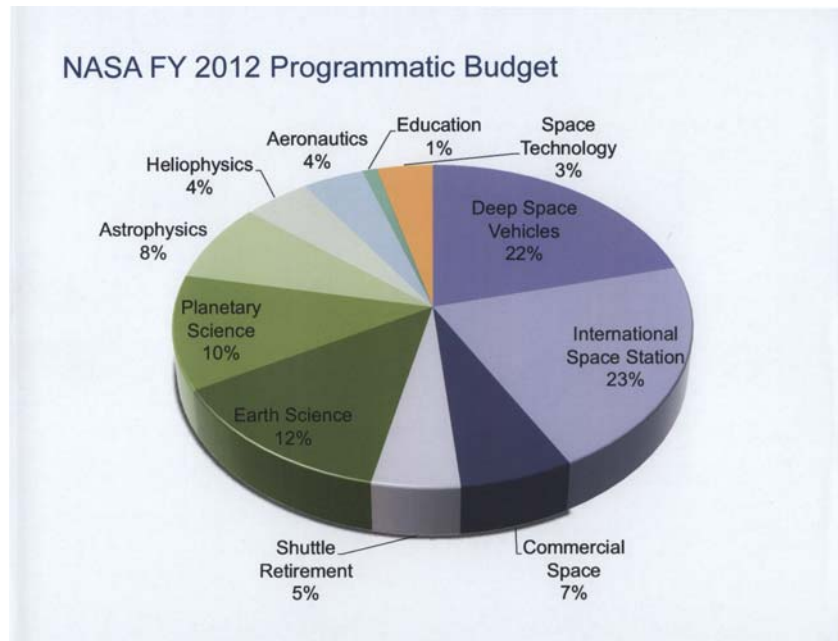
General BOLDEN. Senator Mikulski, as chair of this subcommittee, you've continued to provide critical leadership and oversight of our Nation's space program. And I would like to recognize Senator Hutchison, a longtime member of the subcommittee, in her new leadership role as ranking member of this subcommittee. I want to thank both of you and the members of this subcommittee for the long-standing support that you have given to NASA. We have a common passion for science, aeronautics, and space exploration and the benefits they bring our Nation. I look forward to our continuing to work together in the same collegial fashion as we have in the past.

It's my privilege today to discuss the President's fiscal year 2012 budget request of \$18.7 billion for NASA. Recognizing the President's commitment to fiscal restraint, I am pleased that we are proposing to hold funding at the level appropriated for fiscal year 2010.

This fiscal year 2012 budget request continues the agency's focus on a reinvigorated path of innovation and technological discovery leading to an array of challenging destinations and missions that engage the public.

Madam Chair, you and each member of the subcommittee should have two charts before you, to which I call your attention.

Chart 1, the pie chart, shows at very high level the scope of NASA's proposed fiscal year 2012 budget, which represents a balanced and integrated program. The NASA Authorization Act of 2010 has given the agency a clear direction. NASA is moving forward to implement the details of that act with this fiscal year 2012 budget.



As you can see in chart 2, the President's fiscal year 2012 budget request for NASA funds all major elements of the NASA Authorization Act while supporting a diverse portfolio of key programs.  
[The information follows:]



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—PRESIDENT'S FISCAL YEAR 2012 BUDGET REQUEST DETAIL—FULL COST VIEW

(Budget authority, in million of dollars)

	Actual fiscal year 2010	Continuing resolution fiscal year 2011	Authorization act fiscal year 2011	Fiscal year 2012	Fiscal year 2013	Fiscal year 2014	Fiscal year 2015	Fiscal year 2016
Science:								
Earth Science .....	1,439.3	.....	1,801.8	1,797.4	1,821.7	1,818.5	1,858.2	1,915.4
Planetary Science .....	1,364.4	.....	1,485.7	1,540.7	1,429.3	1,394.7	1,344.2	1,256.8
Astrophysics .....	647.3	.....	1,076.3	682.7	758.1	775.5	779.8	810.9
James Webb Space Telescope .....	438.7	.....	.....	373.7	375.0	375.0	375.0	375.0
Helioastronomy .....	608.0	.....	641.9	622.3	632.7	653.0	659.7	658.7
Total, Science .....	4,497.6	4,469.0	5,005.6	5,016.8	5,016.8	5,016.8	5,016.8	5,016.8
Aeronautics .....	497.0	501.0	579.6	569.4	569.4	569.4	569.4	569.4
Space technology .....	275.2	327.2	512.0	1,024.2	1,024.2	1,024.2	1,024.2	1,024.2
Exploration:								
Human Exploration Capabilities .....	3,287.5	.....	2,751.0	2,810.2	2,810.2	2,810.2	2,810.2	2,810.2
Commercial Spaceflight .....	39.1	.....	612.0	850.0	850.0	850.0	850.0	850.0
Exploration Research and Development .....	299.2	.....	343.0	288.5	288.5	288.5	288.5	288.5
Total, Exploration .....	3,625.8	3,594.3	3,706.0	3,948.7	3,948.7	3,948.7	3,948.7	3,948.7
Space Operations:								
Space Shuttle .....	3,101.4	.....	1,609.7	664.9	79.7	0.8	0.8	0.9
International Space Station .....	2,312.7	.....	2,779.8	2,841.5	2,960.4	3,005.4	3,098.0	3,174.8
Space and Flight Support .....	721.7	.....	1,119.0	840.6	1,306.8	1,340.7	1,248.1	1,171.2
Total, Space Operations .....	6,141.8	6,146.8	5,508.5	4,346.9	4,346.9	4,346.9	4,346.9	4,346.9
Education .....	180.1	182.5	145.8	138.4	138.4	138.4	138.4	138.4
Cross-Agency Support:								
Center Management and Operations .....	2,161.2	.....	.....	2,402.9	2,402.9	2,402.9	2,402.9	2,402.9
Agency Management and Operations .....	766.2	.....	.....	789.1	789.1	789.1	789.1	789.1
Institutional Investments .....	27.2	.....	.....	.....	.....	.....	.....	.....
Congressionally Directed Items .....	63.0	.....	.....	.....	.....	.....	.....	.....

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—PRESIDENT'S FISCAL YEAR 2012 BUDGET REQUEST DETAIL—FULL COST VIEW—Continued  
 [Budget authority, in million of dollars]

	Actual fiscal year 2010	Continuing resolution fiscal year 2011	Authorization act fiscal year 2011	Fiscal year 2012	Fiscal year 2013	Fiscal year 2014	Fiscal year 2015	Fiscal year 2016
Total, Cross-Agency Support .....	3,017.6	3,018.8	3,111.4	3,192.0	3,192.0	3,192.0	3,192.0	3,192.0
Construction and Environmental Compliance and Restoration:								
Construction of Facilities .....	389.4	.....	.....	397.9	384.0	359.5	362.9	360.0
Environmental Compliance and Restoration .....	63.4	.....	.....	52.5	66.4	90.9	87.5	90.4
Total, Construction and Environmental Compliance and Restoration .....	452.8	448.3	394.3	450.4	450.4	450.4	450.4	450.4
Inspector General .....	36.4	36.4	37.0	37.5	37.5	37.5	37.5	37.5
Total, NASA fiscal year 2011 .....	18,724.3	18,724.3	19,000.0	18,724.3	18,724.3	18,724.3	18,724.3	18,724.3

General BOLDEN. Because these are tough fiscal times, we have had to make some tough and some difficult choices. Reductions have been necessary in some areas so that we can invest in the future while living within our means. This budget request maintains a strong commitment to human spaceflight, science, aeronautics, and the development of new technologies, and education programs that will help us win the future. It carries out programs of innovation to support long-term job growth in a dynamic economy that will help us out-innovate, out-educate, and out-build all others in the world.

Along with our fiscal year 2012 budget request, we published our 2011 Strategic Plan. If you don't have it or the staffs don't have it, if you'll let us know, we'll make certain that we get a copy to everybody.

NASA's core mission remains fundamentally the same as it has been since our inception in 1958. It supports our vision, as shown in the strategic plan, "To reach new heights and reveal the unknown, so that what we do and learn will benefit all humankind."

On March 9, we completed the STS-133 mission, one of the final three shuttle flights to the ISS. *Discovery* delivered a robotic crewmember, Robonaut 2, or R2 as we like to call him—it—and supplies that will support the station's scientific research and technology demonstrations. That was a joke, by the way. I didn't—okay.

We are currently preparing the Space Shuttle *Endeavor* for the STS-134 mission, to be launched on April 29, which will deliver the alphaspectrometer, or AMS. The AMS experiment will use the unique environment of space to advance knowledge of the universe and lead to the understanding of the universe's origin. This will be the 36th shuttle mission to the station, and the final flight for *Endeavor*.

With the impending completion of the shuttle manifest with STS-135, it's my plan to announce my decisions regarding the recipients of shuttle orbiters tomorrow, April 12, 2011, the 30th anniversary of the first space shuttle flight.

Our space program continues to venture in ways that will have long-term benefits. There are many more milestones in the near term. Our priorities in human spaceflight in the fiscal year 2012 budget request are to maintain safe access for American astronauts to LEO as we fully utilize the ISS; to facilitate safe, reliable, and cost-effective U.S.-provided commercial access to LEO for American astronauts and their supplies as soon as possible; to begin to lay the groundwork for expanding human presence into deep space, the Moon, asteroids, and eventually Mars, through development of a powerful, evolvable heavy lift rocket and MPCV; and to pursue technology development to carry humans farther into the solar system.

These initiatives will enable America to retain its position as a leader in space exploration for generations to come. At the same time, in our other endeavors, our priorities are to extend our reach with scientific observatories, to learn more about our home planet and the solar system, and peer beyond it to the origins of the universe.

This budget request funds 56 NASA science missions currently in operation, and 28 more in various stages of development. Just

as one example, on March 17 of this year, after traveling more than 6 years and 4.9 billion miles, NASA's MESSENGER (MErcury Surface, Space, ENvironment, GEOchemistry and Ranging) spacecraft successfully entered orbit around Mercury. The MESSENGER spacecraft will give us our first look at the planet from orbit, help us understand the forces that shaped it, and provide a fundamental understanding of the terrestrial planets and their evolution. In addition, we will pursue groundbreaking research into the next generation of aviation technologies and carry out dynamic education programs that help develop the next generation of science, technology, engineering, and mathematics professionals.

That's a lot, but NASA thrives on doing big things. We have vastly increased human knowledge, and our discoveries and technologies have improved life here on Earth. In spite of the difficulties that we've encountered with the very critical JWST, we've made changes in our management, increased our oversight from my office, and continued to work with the program to develop a revised baseline by the end of April that will include options addressing light funding scenarios. The official plan will be submitted as part of our fiscal year 2013 budget.

I want to commend the NASA workforce, both civil service and contractors across the Nation, for their dedication to our missions during this time of transition and change. These workers are our greatest asset and they make us all proud. They fully understand the risk of our exploration and welcome the challenge. They will be the ones making tomorrow happen.

These are exciting and dynamic times for us at NASA. The challenges ahead are significant, but so are the opportunities. We have to achieve big things that will create a measurable impact on our economy, our world, and our way of life.

#### PREPARED STATEMENT

I thank you again for the opportunity to appear before this subcommittee, and I look forward to taking your questions.

Senator MIKULSKI. Thank you, Administrator Bolden. And I know you have given us a far more ample and detailed statement.

General BOLDEN. Yes, ma'am.

Senator MIKULSKI. I'm going to ask unanimous consent that, along with your oral testimony, that this detailed statement be included in the record.

[The statement follows:]

#### PREPARED STATEMENT OF CHARLES F. BOLDEN, JR.

Madam Chair and members of the subcommittee, today it is my privilege to discuss the President's fiscal year 2012 budget request of \$18.7 billion for the National Aeronautics and Space Administration (NASA). This request continues NASA's focus on a reinvigorated path of innovation and technological discovery leading to an array of challenging destinations and missions that increases our knowledge, develops technologies to improve life and expand our presence in space for knowledge and commerce, and engages the public. With the President's signing of the NASA Authorization Act of 2010 (Public Law 111-267) on October 11, 2010, NASA has a clear direction and is moving forward. NASA appreciates the significant efforts that advanced this important bipartisan legislation, particularly efforts by the leadership and members of this subcommittee. This is a time of opportunity for NASA to shape a promising future for the Nation's space program.

Because these are tough fiscal times, tough choices had to be made. But the proposed fiscal year 2012 budget funds all major elements of the authorization act, sup-

porting a diverse portfolio of programs, while making difficult choices to fund key priorities and reduce other areas in order to invest in the future. A chart summarizing the President's fiscal year 2012 budget request for NASA is enclosed as Enclosure 1.

We have an incredible portfolio of human space flight, science, aeronautics, and technology development. Within the human space flight arena, our foremost priority is our current human spaceflight endeavor—the International Space Station (ISS)—and the safety and viability of the astronauts aboard it. The request also maintains a strong commitment to human spaceflight beyond low-Earth orbit (LEO). It establishes critical priorities and invests in the technologies and excellent science, aeronautics research, and education programs that will help us win the future. The request supports an aggressive launch rate over the next 2 years with about 40 U.S. and international missions to the ISS, for science, and to support other agencies.

At its core, NASA's mission remains fundamentally the same as it always has been and supports our new vision: "To reach for new heights and reveal the unknown so that what we do and learn will benefit all humankind." This statement is from the new multi-year 2011 NASA Strategic Plan accompanying the fiscal year 2012 budget request, which all of NASA's Mission Directorates, Mission Support Offices and Centers helped to develop, and encapsulates in broad terms the very reason for NASA's existence and everything that the American public expects from its space program.

On March 1, we outlined for the subcommittee our plan to establish new Exploration program offices to carry out our future work on the Multi-Purpose Crew Vehicle, Space Launch System, and Commercial Crew.

On March 9, we completed the Space Shuttle *Discovery's* STS-133 mission, 1 of the final 3 shuttle flights to the ISS. *Discovery* delivered a robotic crewmember, Robonaut-2 (R2), and supplies that will support the station's scientific research and technology demonstrations. And we are currently preparing the Space Shuttle *Endeavour* for the STS-134 mission to be launched on April 29, which will deliver the Alpha Magnetic Spectrometer, or AMS, and space parts including two S-band communications antennas, a high-pressure gas tank, additional spare parts for Dextre, and micrometeoroid debris shield to the station.

Our human spaceflight priorities in the fiscal year 2012 budget request are to:

- Safely fly the last space shuttle flights this year and maintain safe access for humans to LEO orbit as we fully utilize the ISS;
- Facilitate safe, reliable, and cost-effective U.S.-provided commercial access to LEO first for cargo and then for crew as quickly as possible;
- Begin to lay the groundwork for expanding human presence into deep space—the Moon, asteroids, eventually Mars—through development of a powerful heavy-lift rocket and multipurpose crew capsule; and
- Pursue technology development that is needed to carry humans farther into the solar system. Taken together, these human spaceflight initiatives will enable America to retain its position as a leader in space exploration for generations to come.

At the same time, we will extend our reach with robotic spacecraft and scientific observatories to expand our knowledge of the universe beyond our own planet. We will continue the vital work to expand our abilities to observe our planet Earth and make that data available for decisionmakers. We will also continue our groundbreaking research into the next generation of aviation technologies. Finally, we will make the most of all of NASA's technological breakthroughs to improve life here at home.

With the fiscal year 2012 budget, NASA will carry out research, technology, and innovation programs that support long-term job growth and economic competitiveness and build upon our Nation's position as a technology leader. We will educate the next generation of technology leaders through vital programs in science, technology, engineering, and mathematics education. And we will build the future through investments in American industry, creating high-tech jobs across the country and an innovation engine for the U.S. economy.

This year we honor the legacy of President John F. Kennedy, who, 50 years ago, set the United States on a path that resulted in a national effort to produce an unprecedented achievement. Now, we step forward along a similar path, engaged in a wide range of activities in human spaceflight, science, and aeronautics—a path characterized by engagement of an expanded commercial space sector and technology development to mature the capabilities required by increasingly challenging missions designed to make discoveries and reach new destinations.

NASA's Science Mission Directorate (SMD) continues to rewrite textbooks and make headlines around the world. Across disciplines and geographic regions worldwide, NASA aims to achieve a deep scientific understanding of Earth, other planets

and solar system bodies, our star system in its entirety, and the universe beyond. The agency is laying the foundation for the robotic and human expeditions of the future while meeting today's needs for scientific information to address national concerns about global change, space weather, and education.

—The Mars Science Laboratory will launch later this year and arrive at Mars in August 2012. It will be the largest rover ever to reach the Red Planet and will search for evidence of both past and present life.

—The Nuclear Spectroscopic Telescope Array (NuSTAR) mission will launch in early 2012 and become the first focusing hard x-ray telescope to orbit Earth.

—Research and analysis programs will use data from an array of sources, including spacecraft, sounding rockets, balloons, and payloads on the ISS. We will continue to evaluate the vast amounts of data we receive from dozens of ongoing missions supported by this budget.

—A continued focus on Earth science sees us continuing development of the Orbiting Carbon Observatory-2 (OCO-2) for launch in 2013 and other initiatives to collect data and conduct research on a broad spectrum of changes in the Earth system including climate, weather, and natural hazards.

—The budget reflects the scientific priorities for astrophysics as expressed in the recent Decadal Survey of the National Academy of Sciences. The budget supports small-, medium-, and large-scale activities recommended by the Decadal Survey.

—The Radiation Belt Storm Probe mission will launch next year, and development of other smaller missions and instruments to study the Sun will get underway here on the ground.

With the appointment of a new Chief Scientist, NASA will pursue an integrated, strategic approach to its scientific work across Mission Directorates and programs.

As we continue our work to consolidate the Exploration Systems Mission Directorates (ESMD) and Space Operations Mission Directorates, both groups will support our current human spaceflight programs and continue work on technologies to expand our future capabilities.

—We will fly out the space shuttle in 2011, including STS-135 if funds are available, and then proceed with the disposition of most space shuttle assets after the retirement of the fleet. The shuttle program accomplished many outstanding things for this Nation, and in 2012 we look forward to moving our retired Orbiters to new homes across the country to inspire the next generation of explorers.

—Completing assembly of the U.S. segment of the ISS will be the crowning achievement of the space shuttle's nearly 30-year history. The ISS will serve as a fully functional and permanently crewed research laboratory and technology testbed, providing a critical stepping stone for exploration and future international cooperation, as well as an invaluable National Laboratory for non-NASA and nongovernmental users. During fiscal year 2011, NASA will award a cooperative agreement to an independent nonprofit organization (NPO) with responsibility to further develop this effort. The NPO will oversee all ISS research involving organizations other than NASA, and transfer current NASA biological and physical research to the NPO in future years.

—In 2012, we will make progress in developing a new Space Launch System (SLS), a heavy-lift rocket that will be the first step on our eventual journeys to destinations beyond LEO.

—We will continue work on a MPCV that will build on the human safety features, designs, and systems of the Orion Crew Exploration Vehicle. As with the SLS, acquisition strategy decisions will be finalized by this summer.

—NASA will continue to expand commercial access to space and work with our partners to achieve milestones in the Commercial Orbital Transportation Services (COTS) program, the Commercial Resupply Services (CRS) effort, and an expanded Commercial Crew Development (CCDev) program. As we direct resources toward developing these capabilities, we not only create multiple means for accessing LEO, but we also facilitate commercial uses of space, help lower costs, and spark an engine for long-term job growth. While the request is above the authorized level for 2012, NASA believes the amount is critical, combined with significant corporate investments, to ensure that we will have one or more companies that can transport American astronauts to the ISS. With retirement of the space shuttle in 2011, this is a top agency priority.

—Most importantly, NASA recognizes that these programmatic changes will continue to personally affect thousands of NASA civil servants and contractors who have worked countless hours, often under difficult circumstances, to make our human spaceflight, science, and aeronautics programs and projects successful. I commend the investment that these dedicated Americans have made and will

continue to make in our Nation's space and aeronautics programs. These are tremendously exciting and dynamic times for the U.S. space program. NASA will strive to utilize our workforce in a manner that will ensure that the Nation maintains NASA's greatest asset—the skilled civil servants and contractors—while working to increase the efficiency and cost-effectiveness in all of its operations.

—The 21st Century Space Launch Complex program will focus on upgrades to the Florida launch range, expanding capabilities to support SLS, MPCV, commercial cargo/launch services providers, and transforming KSC into a modern facility that benefits all range users. The program will replan its activities based on available fiscal year 2011 funding to align with 2010 NASA Authorization's focus areas, including cross organizational coordination between 21st CSLC, Launch Services, and Commercial Crew activities.

NASA's Aeronautics Research Mission Directorate (ARMD) continues to improve the safety, efficiency, and environmental friendliness of air travel.

—Our work continues to address the challenge of meeting the growing technology and capacity needs of the Next Generation air travel system, or "NextGen", in coordination with the FAA and other stakeholders in airspace efficiency.

—NASA's work on green aviation technologies that improve fuel efficiency and reduce noise continues apace.

—We also continue to work with industry to develop the concepts and technologies for the aircraft of tomorrow. The agency's fundamental and integrated systems research and testing will continue to generate improvements and economic impacts felt by the general flying public as well as the aeronautics community.

The establishment last year of the Office of the Chief Technologist (OCT) enabled NASA to begin moving toward the technological breakthroughs needed to meet our Nation's space exploration goals, while building our Nation's global economic competitiveness through the creation of new products and services, new business and industries, and high-quality, sustainable jobs. By investing in high-payoff, transformative technology that industry cannot tackle today, NASA matures the technology required for our future missions in science and exploration while improving the capabilities and lowering the cost of other Government agencies and commercial activities.

—NASA recently developed draft space technology roadmaps, which define pathways to advance the Nation's capabilities in space and establish a foundation for the agency's future investments in technology and innovation. NASA is working collaboratively with the National Research Council (NRC) to refine these roadmaps. The final product, expected in the first quarter of fiscal year 2012, will establish a mechanism for prioritizing NASA's technology investments, and will support the initial Space Technology Policy Congress requested in the NASA Authorization Act of 2010.

—Through the Space Technology program, OCT will sponsor a portfolio of both competitive and strategically guided technology investments, bringing the agency a wide range of mission-focused and transformative technologies that will enable revolutionary approaches to achieving NASA's current and future missions.

—In fiscal year 2012, a significant portion of the Exploration Technology Development Program is moved from ESMD to space technology. These efforts focus on developing the long-range, exploration-specific technologies to enable NASA's deep space human exploration future. The integration of exploration technology activities with space technology eliminates the potential for overlap had NASA's space technology investments been split among two accounts. ESMD will continue to set the prioritized requirements for all exploration technology development efforts and will serve as the primary customer of these mission-specific technology development activities.

—OCT continues to manage SBIR and STTR, and integrates technology transfer efforts to ensure that NASA technologies are infused into commercial applications, develops technology partnerships, and facilitates emerging commercial space activities

Recognizing that our work must continuously inspire not only the public at large but also students at all levels, NASA's Education programs this year focus on widening the pipeline of students pursuing coursework in STEM. As President Obama has said, "Our future depends on reaffirming America's role as the world's engine of scientific discovery and technological innovation. And that leadership tomorrow depends on how we educate our students today, especially in math, science, technology, and engineering."

—The fiscal year 2012 request for NASA's Office of Education capitalizes on the excitement of NASA's mission through innovative approaches that inspire educator and student interest and proficiency in STEM disciplines. NASA's edu-

cation program in fiscal year 2012 and beyond will focus and strengthen the agency's tradition of investing in the Nation's education programs and supporting the country's educators who play a key role in inspiring, encouraging, and nurturing the young minds of today, who will manage and lead the Nation's laboratories and research centers of tomorrow.

—Among NASA's Education activities will be a continued Summer of Innovation, building on the successful model piloted with four States this past year.

All of these activities place NASA in the forefront of a bright future for America, where we challenge ourselves and create a global space enterprise with positive ramifications across the world. The fiscal year 2012 budget request provides the resources for NASA to innovate and make discoveries on many fronts, and we look forward to implementing it. See Enclosure 2 for a more detail summary of each activity.

#### CONCLUSION

As we enter the second half-century of human spaceflight, the Nation can look back upon NASA's accomplishments with pride, but we can also look forward with anticipation to many more achievements to come. The NASA Authorization Act of 2010 (Public Law 111–267) has provided us with clear direction that enables the agency to conduct important research on the ISS, develop new launch vehicles and crew transportation capabilities to go beyond the bounds of LEO, utilize a dazzling array of spacecraft to study the depths of the cosmos while taking the measure of our home planet, improve aviation systems and safety, develop new technologies that will have applications to both space exploration and life on Earth, and inspire the teachers and students of our country. In developing and executing the challenging missions that only NASA can do, we contribute new knowledge and technologies that enhance the Nation's ability to compete on the global stage and help to secure a more prosperous future.

These are tough fiscal times, calling for tough choices. The President's fiscal year 2012 budget request makes those choices and helps advance all of these bold aims, and we look forward to working with the subcommittee on its implementation.

Madam Chair, thank you for your support and that of this subcommittee. I would be pleased to respond to any questions you or the other members of the subcommittee may have.

#### FISCAL YEAR 2012 BUDGET REQUEST—DETAILED SUMMARY

##### SCIENCE

The President's fiscal year 2012 request for NASA includes \$5,016.8 million for Science. NASA continues to expand humanity's understanding of our Earth, our Sun, the solar system, and the universe with 56 science missions in operation and 28 more in various stages of development. The Science budget funds these missions as well as the research of more than 3,000 scientists, engineers, technologists, and their students across the Nation. NASA is guided in setting its priorities for strategic science missions by the recommendations of the NRC decadal surveys. The agency selects competed missions and research proposals based on open competition and peer review. NASA's science efforts continue to advance a robust and scientifically productive program while making difficult choices commensurate with the Government-wide priority to constrain the Federal budget.

The fiscal year 2012 budget request includes \$1,797.4 million for Earth science. NASA's constellation of Earth-observing satellites provides much of the global environmental observations used for climate research in the United States and abroad.

In early fiscal year 2012, NASA plans to launch the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP), continuing selected climate data records and becoming an integral part of the Nation's operational meteorological satellite system for weather prediction. We also plan to select new Venture Class science instruments and small missions in fiscal year 2012. The Glory mission to be launched later this week will release its first global set of calibrated and validated aerosol measurements in fiscal year 2012. In addition, we will produce the first fusion data products integrating Glory data with measurements from the rest of the A-Train (a formation of Earth-monitoring satellites that employ multiple scientific instruments to observe the same path of Earth's atmosphere and surface at a broad swath of wavelengths).

The Aquarius instrument on the Argentine Satélite de Aplicaciones Científicas (SAC)-D mission (launching later this year) will deliver the first global ocean salinity measurements to the science community in fiscal year 2012. OCO-2, Landsat Data Continuity Mission, and the Global Precipitation Measurement missions will



be in integration and testing in fiscal year 2012. The first two NRC Decadal Survey missions, Soil Moisture Active/Passive and the Ice, Cloud, and land Elevation Satellite-2 (ICESat-2), will both enter into development during fiscal year 2012. This budget request also funds robust Research and Analysis, Applied Science, and Technology programs. In this climate of fiscal austerity there are some important capabilities that will not be developed in order to keep others on track in more constrained future years. Development of the second two Tier 1 Decadal Survey missions, the Deformation, Ecosystem Structure, and Dynamics of Ice (DESDynI), and the Climate Absolute Radiance and Refractivity Observatory (CLARREO), has been deferred resulting in launch dates no earlier than 2020. NASA will continue pre-formulation work on the DESDynI and review international partner options. However, the fiscal year 2012 request enables the Gravity Recovery and Climate Experiment Follow-on (GRACE-FO), the Pre-Aerosols-Clouds-Ecosystems (PACE), and the Tier 2 missions Surface Water and Ocean Topography (SWOT), and Active Sensing of CO<sub>2</sub> Emissions Over Nights, Days, and Seasons (ASCENDS) to go forward as planned.

The Science budget request includes \$1,540.7 million for planetary science in fiscal year 2012. NASA and its partners consider the period from October 2010 to August 2012 (the length of a Martian year) to be the “Year of the Solar System.”

The Juno mission will launch in August 2011 and arrive at Jupiter in 2016. The Gravity Recovery and Interior Laboratory (GRAIL) mission, following launch in September 2011, will enter lunar orbit and help determine the structure of the lunar interior from crust to core; the mission will advance our understanding of the thermal evolution of the Moon by the end of its prime mission in fiscal year 2012. A newly installed Web cam is giving the public an opportunity to watch technicians assemble and test NASA’s MSL “Curiosity,” one of the most technologically advanced interplanetary missions ever designed. More than 1 million people have watched assembly and testing of Curiosity via a live Web cam since it went online in October. Curiosity will launch in early fiscal year 2012 and arrive at Mars in August 2012; it will be two times as large and three times as heavy as the Spirit and Opportunity rovers, and will focus on investigating whether conditions on Mars have been favorable for microbial life and for preserving clues in the rocks about possible past life. The MErcury Surface, Space ENvironment, GEOchemistry and Ranging (MESSENGER) spacecraft will arrive at Mercury later this month and will complete its first year in Mercury orbit in March 2012. MESSENGER’s instruments will map nearly the entire planet in color, image the surface in high resolution and measure the composition of the surface, atmosphere and nature of the magnetic field and magnetosphere. During its nearly decade-long mission, the Dawn mission will study the asteroid Vesta and dwarf planet Ceres—celestial bodies believed to have accreted early in the history of the solar system. Dawn will enter into orbit around Vesta this summer and will depart in 2012 for its encounter with Ceres in 2015. NASA and the European Space Agency (ESA) have selected the five science instruments for the 2016 ExoMars Trace Gas Orbiter mission. The budget also supports robust Research and Analysis and Technology programs. NASA is expecting the results from the next National Academy of Sciences Decadal Survey for Planetary Science later this month. NASA will use this survey to prioritize ongoing programs and future mission opportunities.

The fiscal year 2012 budget request includes \$682.7 million for Astrophysics (not including an additional \$375 million for the James Webb Space Telescope (JWST) which is detailed below). This is a golden age of space-based Astrophysics, with 14 observatories in operation. Astrophysics research, technology investments, and missions aim to understand how the universe works, how galaxies, stars and planets originated and developed over cosmic time, and whether Earth-like planets and life exist elsewhere in the cosmos.

The fiscal year 2012 budget request reflects the scientific priorities of the new National Academy of Science Decadal Survey entitled, “New Worlds, New Horizons in Astronomy and Astrophysics”. The budget includes additional funding for the Explorer mission selection planned for 2012, sustains a vigorous flight rate of future astrophysics Explorer missions and missions of opportunity, and increases investments in recommended research and technology initiatives. Funding is also provided for pre-formulation investments in recommended large missions beyond JWST, while work on the Space Interferometry Mission (SIM) and Joint Dark Energy Mission (JDEM) has been brought to a close, consistent with the recommended Decadal Survey program. SOFIA will complete its open-door flight testing and conduct the first competed science observations in fiscal year 2012. The NuSTAR mission will launch in early 2012. The NASA Astrophysics budget also supports continuing operations of Hubble, Chandra, and several other astrophysics observatories in space. The budget increases funding for the core Astrophysics research program, including

sounding rocket and balloon suborbital payloads, theory, and laboratory astrophysics.

The fiscal year 2012 budget request includes \$375 million for the JWST. JWST is now budgeted as a separate theme, reflecting changes implemented in fiscal year 2011 to improve management oversight and control over this critical project, as recommended by the Independent Comprehensive Review Panel's (ICRP) report in November 2010. The project, previously managed within the Astrophysics Division, is now managed by a separate program office at NASA headquarters. Management of this JWST organization at headquarters now reports directly to the NASA Associate Administrator and the Associate Administrator for Science. The Goddard Space Flight Center has implemented analogous changes, with JWST project management now reporting directly to the Center Director. JWST was the top-priority large mission recommended in the previous NRC Decadal Survey and is considered a foundational element of the science strategy in the new Decadal Survey for Astronomy and Astrophysics. During 2010, JWST completed its most significant mission milestone to date, the Mission Critical Design Review. Cost growth and schedule issues identified following this milestone led to the formation of the ICRP. The ICRP report concluded that the problems causing cost growth and schedule delays on the JWST project are associated with cost estimation and program management, not technical performance. The \$375 million funding in 2012 gives the program a stable footing to continue progress while the agency develops a revised program plan that includes a realistic assessment of schedule and life-cycle cost. The revised schedule and life-cycle cost will be reflected in the 2013 budget request.

The fiscal year 2012 budget request includes \$622.3 million for heliophysics. NASA's heliophysics satellites provide not only a steady stream of scientific data for NASA's research program, but also supply a significant fraction of critical space weather data used by other Government agencies for support of commercial and national security activities in space. Those agencies use the data to protect operating satellites, communications, aviation and navigation systems, as well as electrical power transmission grids. The spacecraft also provides images of the Sun with 10 times greater resolution than high-definition television in a broad range of ultraviolet wavelengths. On February 6, 2011, the two STEREO spacecraft reached 180 degrees separation; when combined with SDO, these spacecraft will enable constant imaging of the full solar sphere for the next 8 years, as the solar cycle peaks and begins to decline again. These three spacecraft working together and in combination with NASA's other solar observatories will give us unprecedented insight into the Sun and its dangerous solar storms that could threaten both satellites and humans in space as well as electric power systems on Earth. NASA has begun development of a mission, called Solar Probe Plus, that will visit and study the Sun from within its corona—a distance only 8.5 solar radii above its surface.

The fiscal year 2012 budget will enable completion of the Radiation Belt Storm Probes mission for launch in fiscal year 2012 as well as the completion of development of the Interface Region Imaging Spectrograph (IRIS) Explorer mission. In fiscal year 2012, the Magnetospheric Multiscale (MMS) mission will enter its assembly and integration phase, the Solar Orbiter Collaboration with ESA will undergo Mission Confirmation Review, and the Solar Probe Plus mission will enter into the preliminary design phase. NASA has increased funding for the next Explorer mission selection planned for 2012 to enable selection of up to two full missions, as well as instruments that may fly on non-Explorer spacecraft. The budget also supports robust Research and Analysis and Sounding Rocket operations programs. The National Academy of Sciences has begun work on the next Decadal Survey for heliophysics and we anticipate its release in the spring of 2012.

#### AERONAUTICS RESEARCH

The fiscal year 2012 budget request for Aeronautics is \$569.4 million. As an industry, aviation contributes \$1.3 trillion to the Nation's economy and employs more than 1 million people. Airlines in the United States transport more than 1 million people daily, but during peak travel times the air traffic and airport systems in the United States are stretched to capacity. Environmental concerns, such as aircraft noise and emissions, limit increased operations and the expansion of airports and runways. In response to these challenges, the Nation is pursuing the realization of the Next Generation Air Transportation System (NextGen). NextGen will accommodate more aircraft operating within the same airspace, including aircraft with widely varying performance characteristics. The President recently challenged the Nation to increase its competitiveness in advanced technologies. NASA meets this challenge with aeronautics research to create the safer, more fuel-efficient, quieter, and

environmentally responsible aircraft and air traffic management procedures needed to make NextGen a reality.

- The Aviation Safety Program conducts research to ensure that current and new aircraft and operational procedures maintain the high level of safety which the American public has come to count on, even as aviation systems become more complex. Last year, the program published guidelines on automation, displays, and alerting technologies for future aircraft cockpit designs based on data collected from real flight crews during simulations of high-air-traffic-density operations. Further increases in air traffic will require even higher levels of automation without sacrificing safety. NASA is addressing this need by developing new methods to verify and validate complex aircraft and air traffic control systems and further developing human performance models to be applied in the design of automated systems. The program is also developing data mining methods that will enable the discovery of safety issues through automated analysis of the vast amounts of data generated during flight operations. These methods will enable a new, proactive approach to aircraft maintenance and design to avoid the occurrence of safety issues, rather than a reactive approach after a safety-related incident occurs.
- Reductions in environmental impact will be achieved not only through new aircraft, engines, and fuels, but also through improved air traffic management procedures. The Airspace Systems Program is developing these procedures in order to provide the flexibility needed to add capacity to the system as air travel demands increase. Last year, we partnered with the Federal Aviation Administration (FAA), Boeing, Sensis, United Airlines, and Continental Airlines to complete joint simulations of new Efficient Descent Advisor (EDA) procedures, and in fiscal year 2012, the program will deliver documentation of the results to the FAA. EDA procedures are a key component of the FAA's 3D-Path Arrival Management program and NextGen and can save hundreds of pounds of fuel and carbon dioxide emissions per participating flight, while reducing noise over surrounding communities. In fiscal year 2012, we will also accelerate field trials of new procedures enabled by Automatic Dependent Surveillance-Broadcast (ADS-B) technology. This effort will demonstrate near-term and mid-term ADS-B application benefits and provide airlines with data to support their strategic decisions related to the significant investments they need to make to equip their aircraft with ADS-B capability.
- The Fundamental Aeronautics Program seeks to continually improve technology that can be infused into today's state-of-the-art aircraft, while enabling game-changing new concepts, such as Hybrid Wing Body (HWB) airframes, tilt-rotor aircraft, low-boom supersonic aircraft, and sustained hypersonic flight. In fiscal year 2012, the program will accelerate research on a number of key enabling technologies identified through four conceptual design studies completed last year in collaboration with industry and academia. The program will also expand the measurement of emissions generated when using nonpetroleum alternative aircraft fuels. In fiscal year 2012, we will develop instrumentation and operating procedures in preparation for a flight test campaign using the NASA DC-8 aircraft operating at relevant altitudes and cruise speeds. This will provide the first-ever data to improve our understanding of alternative fuel impact on contrail formation, an important factor in aviation climate impact.
- The Integrated Systems Research Program evaluates and selects the most promising "environmentally friendly" engine and airframe concepts emerging from the fundamental research programs for further development, integration, and evaluation in relevant environments. Last year, we completed the last of 80 flights to explore the stability and control characteristics of the sub-scale X-48B HWB aircraft. In fiscal year 2012, we will conduct the first-ever testing of a Hybrid Wing Body noncircular fuselage section fabricated using a new low-weight, damage-tolerant concept for composite aircraft structures. Beginning this year, the program is also addressing the growing requirement to integrate unmanned aircraft systems (UAS) into the national airspace system. Current FAA regulations are built upon the condition of a pilot being on-board the aircraft. The program will therefore generate data for FAA use in rule-making through development, testing, and evaluation of UAS technologies in operationally relevant scenarios.
- U.S. leadership in aerospace depends on ready access to technologically advanced, efficient, and affordable aeronautics test capabilities. NASA's Aeronautics Test Program makes strategic investments to ensure the availability of these ground test facilities and flight test assets to researchers in Government, industry, and academia. In addition to this strategic management activity, the program will continue with the development of new test instrumentation and

test technologies. The program is modifying a Gulfstream III business jet in order to flight test a new approach to reducing drag on an aircraft by adding carefully engineered surface roughness to the wings. This new flight-test capability will enable us to test this drag reduction concept for the first time at the altitudes and speeds at which commercial aircraft typically cruise.

NASA cannot do all of these good things alone. Our partnerships with industry, academia, and other Federal agencies are critical to our ability to expand the boundaries of aeronautical knowledge for the benefit of the Nation. These partnerships foster a collaborative research environment in which ideas and knowledge are exchanged across all communities and help ensure the future competitiveness of the Nation's aviation industry. They also directly connect students with NASA researchers and our industrial partners and help to inspire students to choose a career in the aerospace industry.

#### SPACE TECHNOLOGY

The fiscal year 2012 budget request includes \$1,024.2 million for space technology, consistent with the NASA Authorization Act of 2010 and the administration's priorities on Federal investments in research, technology and innovation across the Nation. Within the fiscal year 2012 request, NASA has integrated management responsibility for two technology development programs reflected in the NASA Authorization Act within the Office of the Chief Technologist. In fiscal year 2012, Space Technology includes funding for long-standing Small Business Innovation Research and Small Business Technology Transfer programs (SBIR and STTR), as well as technology transfer and commercialization efforts, the crosscutting space technology programs formulated in fiscal year 2011, and the exploration technology programs that are being transferred into this account. All of the space technology programs have deep roots in technology development approaches NASA has pursued in previous years.

NASA technology development activities under space technology will transform the Nation's capabilities for exploring space. Through this effort, NASA advances crosscutting and exploration-specific technology, performs technology transfer and technology commercialization activities, develops technology partnerships with other Government agencies, and coordinates the agency's overall technology investment portfolio. The Office of the Chief Technologist (OCT) manages space technology.

Space Technology is the central NASA contribution to the President's revitalized research, technology, and innovation agenda for the Nation. NASA's space technology portfolio responds with investments that reach all corners of the Nation—wherever there are innovative ideas and technical challenges to be solved. Advanced technologies are required to enable NASA's future science, aeronautics, and exploration missions. As demonstrated over many years, these same advanced technologies find their way into products and services available every day to the public. NASA's space technology is an innovation engine, investing in the innovative, high-payoff ideas, and technologies of tomorrow that industry cannot tackle today. This unique work attracts bright minds into educational and career paths in STEM disciplines and enhances the Nation's technological leadership position in the world. Through these technological investments, NASA and our Nation will remain at the cutting-edge.

In fiscal year 2010 and the first quarter of fiscal year 2011, NASA focused on planning, formulating, and implementing the space technology project elements. The agency received 1,400 responses to six Space Technology Requests For Information (RFIs) released during fiscal year 2010. These inputs were invaluable in finalizing future space technology solicitations and demonstrate a strong interest in, and need for, significant NASA investment in space research and technology. NASA released solicitations for the ongoing flight opportunities and SBIR/STTR programs. In December 2010, NASA released the inaugural Space Technology Graduate Fellowships call. In March 2011, consistent with provisions of the NASA Authorization Act, the agency released three additional high-priority solicitations spanning space technology's strategic investment areas. NASA also recently developed a draft set of 14 space technology roadmaps, which define pathways to advance the Nation's capabilities in space and establish a mechanism for prioritization of NASA's technology investments. Consistent with the NASA Authorization Act of 2010, NASA's space technology roadmaps are being evaluated and improved through a community-engaged review process managed by the NRC that will produce a range of pathways and recommended priorities that advance the Nation's space capabilities. An interim NRC report is expected in fiscal year 2011, and the final report is expected in the first quarter of fiscal year 2012.

NASA's Partnership Development and Strategic Integration activities develop key space technology partnerships and guide NASA's space technology investment decisions. OCT provides a primary entry point to industry and Government agencies for technology transfer and commercialization, interagency coordination and joint activities, intellectual property management, and partnership opportunities. OCT is also responsible for development of an agency technology portfolio and coordination of the agency technology investments through center and mission directorate technology councils and through the space technology roadmaps to ensure that space technology investments serve NASA's missions as well as the interests of other Government agencies and the Nation's aerospace industry.

The agency's space technology investments include the Small Business Innovation Research and the Small Business Technology Transfer programs (SBIR and STTR). Small businesses have generated 64 percent of net new jobs over the past 15 years. NASA invests at least 2.5 percent of its extramural research and development in the SBIR program. The STTR program makes awards to small businesses for contracts for cooperative research and development with nonprofit research institutions, such as universities. For STTR, NASA's investment exceeds 0.3 percent of its extramural research and development. For fiscal year 2012, higher maximum awards for SBIRs are allowed, with Phase I awards that can reach \$150,000 and, for Phase II, up to \$1 million. Also in fiscal year 2012, NASA is considering approaches to align the SBIR and STTR topics with space technology roadmaps and the National Aeronautics Research and Development Plan, while coordinating with centers and maintaining a mission directorate steering council to continue to improve our rate of mission infusion. The fiscal year 2012 request includes \$284 million for the SBIR/STTR program and related technology transfer and commercialization activities, funded in fiscal year 2010 and earlier through NASA's Innovative Partnership Program.

Crosscutting Space Technology Development (CSTD) activities invest in broadly applicable technologies through early stage conceptual studies, ground-based and laboratory testing, relevant-environment flight demonstrations, and technology test beds, including the ISS. The NASA Mission Directorates, other Government agencies, and industry are the ultimate customers for Crosscutting Space Technology Development products. Within this element, there are three investment areas:

- Early stage innovation;
- Game-changing technology; and
- Crosscutting capability demonstrations.

Early Stage Innovation funds space technology research grants and fellowships to accelerate space technology development through innovative projects with high risk/high payoff. It also funds the NASA Innovative Advanced Concepts (NIAC) effort, which studies the viability and feasibility of space architecture, system, or mission concepts. It includes the Center Innovation Fund to stimulate and encourage creativity and innovation within the NASA Centers, and provides the prizes for the Centennial Challenges competitions that seek innovative solutions to technical problems in aerospace technology. Through ground-based and laboratory testing, game changing technology proves the fundamental physical principles of those technologies that can provide transformative capabilities for scientific discovery, and human and robotic exploration. Specifically for small satellites, the Franklin subsystem technology development activity matures subsystem technology in laboratory environments. Crosscutting capability demonstrations proves the most promising technological solutions in the relevant environment of space. Technology demonstration missions prove larger-scale system technologies in the space environment, whereas the Edison small satellite missions demonstrate the utility of these innovative space platforms for NASA's future missions. Flight opportunities utilizes the capabilities of the commercial reusable suborbital space transportation and parabolic flight services industries to test technologies. Seventy percent of the CSTD funds will be awarded competitively, with solicitations open to the broad aerospace community to ensure engagement with the best sources of new and innovative technology. Industry, academia and the NASA Centers will participate in the development of CSTD products.

In fiscal year 2012, CSTD will engage hundreds of graduate students and researchers through grants and fellowships, initiate dozens of ground and flight technology demonstrations, initiate multiple technology studies, and formulate its first demonstration missions. The fiscal year 2012 request includes \$430 million for crosscutting space technology development activities. By focusing on broadly applicable, high-payoff, transformative technology that industry cannot tackle today, NASA's crosscutting space technology development activities mature the technology required for NASA's future missions in science and exploration while proving the capabilities and lowering the cost of other government agencies and commercial space activities. These investments are critical for the agency's future, our Nation's

future in space, and our Nation's technological leadership position in the world. By attacking these technological challenges immediately, NASA can build the capabilities required for its future missions and serve as a catalyst in America's economic recovery while increasing the Nation's global technological leadership position. As noted by NRC in numerous reports, NASA needs to make maturing visionary, far-reaching concepts and technologies a high priority if we are to have advanced concepts available in the future.

The fiscal year 2012 request transfers management authority for \$310 million (from a total of \$437 million) of exploration technology development activities to OCT. The fiscal year 2012 requested Exploration Technology Development (ETD) level is equivalent to the budget for these activities in fiscal year 2012 in the authorization act. For traceability, the transferred activities have been consolidated in a specific budget line within space technology—ETD. NASA plans to capitalize on technical synergies in the project elements from crosscutting space technology development and exploration technology development by managing these programs in an integrated manner. Technologies within ETD enable NASA to conduct future human missions beyond LEO with new capabilities that have greater affordability. Technologies for future human exploration missions are matured through ground-based and laboratory testing, relevant environment flight demonstrations, and technology test beds, including the ISS. These technologies may then be designed into future NASA human exploration missions with acceptable levels of risk. ESMD will continue to set the prioritized requirements for ETD efforts and will serve as the primary customer for these mission-focused ETD products. In addition to ongoing-guided Exploration-specific technology development activities, in fiscal year 2012, NASA will use 30 percent of the funds within this account to fund competitive awards, drawing proposals from industry, academia, and the NASA Centers for innovative exploration-specific technologies and demonstration missions.

#### EXPLORATION

The fiscal year 2012 budget request for exploration is \$3,948.7 million. In fiscal year 2012 and beyond, NASA's exploration programs will continue to support the U.S. economy by enabling safe, reliable, and cost effective U.S.-provided commercial access to LEO for crew and cargo as soon as possible. Included in this budget request is funding for three new, robust categories or "themes" that will expand the capabilities of future space explorers far beyond those we have today:

- Human Exploration Capabilities;
- Commercial Spaceflight; and
- Exploration Research and Development.

These systems and capabilities include launch and crew vehicles for missions beyond LEO—the Moon, asteroids, and eventually Mars, affordable commercial crew access to the ISS, and technologies and countermeasures to keep astronauts healthy and productive during deep space missions, and to reduce the launch mass and cost of deep space missions.

The fiscal year 2012 budget request includes \$2,810.2 million for Human Exploration Capability (HEC). HEC is the successor to the constellation systems theme; programs and projects under HEC will develop the launch vehicles and spacecraft that will provide the initial capability for crewed exploration missions beyond LEO. In particular, HEC's SLS program will develop the heavy-lift vehicle that will launch the crew vehicle, other modules, and cargo for these missions. The MPCV program will develop the vehicle that will carry the crew to orbit, provide emergency abort capability, sustain the crew while in space, and provide safe re-entry from deep-space return velocities. NASA is currently developing plans for implementing the SLS and MPCV programs, including efforts to transition the design and developmental activities of the Constellation program. A major element of the transition involves shifting design and developmental efforts away from a closely coupled system (Ares I and Orion) to a more general launch vehicle (SLS) and crew vehicle (MPCV).

Consistent with direction in the NASA Authorization Act of 2010, the agency has developed a reference vehicle design for the SLS that is derived from Ares and space shuttle hardware. The current concept vehicles would utilize a liquid oxygen/liquid hydrogen core with five RS-25 Space Shuttle Main Engine (SSME)-derived engines, five-segment solid rocket boosters, and a J-2X-based upper stage rocket for the SLS. This would allow for use of existing shuttle and Ares hardware assets in the near term, with the opportunity for upgrades and/or competition downstream for eventual upgrades in designs needed for affordable production. For the MPCV, NASA has chosen the beyond-LEO design of the Orion Crew Exploration Vehicle as the reference vehicle design for the MPCV. The Orion development effort has already benefited from significant investments and progress to date, and the Orion requirements

closely match MPCV requirements as defined in the authorization act, which include utilizing the MPCV for beyond-LEO crew transportation and as backup for ISS crew transportation.

NASA will evaluate the reference vehicle designs this spring and incorporate results of industry studies that the agency solicited earlier this fiscal year. In particular, one of the greatest challenges for NASA is to reduce the development and operating costs for human spaceflight missions to sustain a long-term U.S. human spaceflight program. We must plan and implement an exploration enterprise with costs that are credible, sustainable, and affordable for the long term under constrained budget environments. As such, our development efforts will be dependent on sufficiently stable funding over the long term, coupled with a successful effort on the part of NASA and the eventual industry team to reduce costs and to establish stable, tightly managed requirements.

NASA plans to approach affordability comprehensively in pursuit of exploration beyond LEO to increase the probability that key elements are developed and missions can occur within a realistic budget profile. For all development activities, we will emphasize innovative acquisition and program management approaches, including risk management, to reduce recurring and operations costs. In doing so, plans for bringing the MPCV and SLS vehicles online with lower costs will be as credible and realistic as possible, and significant efforts will be made to ensure cost risks will be well understood. Overall, NASA's designs and acquisition strategies for the MPCV and SLS programs will not be solidified until all of the pertinent knowledge on cost and safety is obtained to ensure an affordable and executable solution. NASA expects to finalize acquisition strategies this summer, and will obtain independent, external assessments of cost and schedule for SLS and MPCV design options during the spring or summer timeframe. We will share this information with the Congress—including members of this subcommittee—as soon as we are able to do so.

The fiscal year 2012 budget request includes \$850 million for the commercial spaceflight theme in exploration. This effort will provide incentives for commercial providers to develop and operate safe, reliable, and affordable commercial systems to transport crew and cargo to and from the ISS and LEO. This approach will provide assured access to the ISS, strengthen America's space industry, and provide a catalyst for future business ventures to capitalize on affordable access to space. A vibrant commercial space industry will add well-paying, high-tech jobs to the U.S. economy, and will reduce America's reliance on foreign systems.

In 2010, NASA further expanded its successful Commercial Crew Development (CCDev) program by initiating CCDev2 in October 2010. In doing so, we solicited proposals to further advance commercial crew transportation system concepts and mature the design and development of system elements, such as launch vehicles and spacecraft. Depending on available funding in fiscal year 2011, we expect to select a series of CCDev2 proposals for award early this year. Once finalized, the resulting CCDev2 agreements should result in significant maturation of commercial crew transportation system capabilities, with consideration given to NASA's draft human certification requirements and standards or the industry equivalent to those requirements and standards.

Beginning in fiscal year 2012, NASA proposes to take the accomplishments and lessons learned from the successes of the first two rounds of CCDev and incorporate them into a new initiative called CCDev3. This initiative will facilitate the development of a U.S. commercial crew space transportation capability with the goal of achieving safe, reliable and cost effective access to and from LEO and the ISS. Once the commercial crew transportation capability is matured and available to customers, NASA plans to purchase transportation services to meet its ISS crew rotation and emergency return obligations.

For CCDev3, NASA plans to award competitive, pre-negotiated, milestone-based agreements that support the development, testing, and demonstration of multiple commercial crew systems. The acquisition strategy for CCDev3 is still in development, but it will feature pay-for-performance milestones, a fixed Government investment, the use of negotiated service goals instead of detailed design requirements, and a requirement for private capital investment.

In calendar year 2011 work on NASA's Commercial Orbital Transportation Services (COTS) program will continue under the commercial spaceflight theme, using previous-year funding. Both of NASA's funded COTS partners continue to make progress in developing their cargo transportation systems, based in part on NASA's financial and technical assistance. In particular, on December 8, 2010, Space Exploration Technologies (SpaceX) successfully launched its Falcon 9 vehicle, and demonstrated separation of the Dragon spacecraft and completion of two full orbits, orbital maneuvering and control, re-entry, parachute descent, and spacecraft recovery

after splashdown in the Pacific Ocean. For its part in COTS, NASA's second funded partner, Orbital Sciences Corporation, recently began integration and testing of its Cygnus Service Module and Taurus II launch vehicle. Both companies are expected to complete their remaining COTS demonstration flights in late 2011 or early 2012.

The fiscal year 2012 budget request for ESMD includes \$288.5 million for ERD. The ERD theme will expand fundamental knowledge that is key to human space exploration, and will develop advanced exploration systems that will enable humans to explore space in a more sustainable and affordable way. ERD will be comprised of the Human Research Program (HRP) and the Advanced Exploration Systems (AES) program, which will provide the knowledge and advanced human spaceflight capabilities required to implement the U.S. Space Exploration Policy.

In fiscal year 2012, HRP and its associated projects will continue to develop technologies, countermeasures, diagnostics, and design tools to keep crews safe and productive on long-duration space missions. As astronauts journey beyond LEO, they will be exposed to microgravity, radiation, and isolation for long periods of time. Keeping crews healthy and productive during long missions will require new technologies and capabilities. Therefore, continued research is required to study how the space environment, close quarters, heavy workloads, and prolonged time away from home contribute to stress, and then develop technologies that can prevent or mitigate these effects. More specifically, in fiscal year 2012, HRP will support approximately 15–20 biomedical flight experiments on the ISS and deliver the next-generation space biomedical ultrasound device to enhance the station's human research facility capability. Other activities will include development of a training program for ultrasound diagnosis of fractures and the evaluation of blood analysis technology for astronaut health monitoring. Additionally, HRP projects will deliver an enhanced design tool for vehicle radiation shielding assessments and release the second version of an acute radiation risk model. In the area of behavioral health and performance, researchers will complete a sleep-wake actigraphy report on the ISS crew. In order to support its research requirements, HRP will release two NASA Research Announcements addressing space radiation health risks and human physiological changes associated with spaceflight.

AES will continue projects from the exploration technology development program that are close to application and closely tied to human safety in space. In fiscal year 2012, AES will assume responsibility for developing and demonstrating innovative prototype systems to provide basic needs such as oxygen, water, food, and shelter that can operate dependably for at least a year. AES will demonstrate these systems in ground test beds, Earth-based field and underwater tests, and ISS flight experiments. In fiscal year 2012, AES will use a ground test bed to demonstrate the reliability of life support system components, and a portable life support system for an advanced space suit will be tested in a vacuum chamber. Ground-based analog field tests and underwater tests will validate a prototype Deep Space Habitat, where the crew will live during transit on long missions, and a space exploration vehicle that will allow the crew to closely approach an asteroid, explore its surface, and conduct surface exploration outside the vehicle. AES plans to use innovative approaches for the rapid development of system concepts, such as small, focused teams of NASA engineers and technologists working with industry partners to gain hands-on experience. AES will pilot these processes to improve the affordability of future exploration programs.

#### SPACE OPERATIONS

The fiscal year 2012 budget request includes \$4,346.9 million for space operations, funding the space shuttle program retirement, the ISS program, and the space and flight support program.

The fiscal year 2012 budget request for the space shuttle program is \$664.9 million. In 2011, the shuttle is slated to fly out its remaining missions. On February 24, *Discovery* launched on mission STS-133, carrying supplies to ISS, as well as the permanent Multi-purpose Module (PMM), a Multi-Purpose Logistics Module (MPLM) transformed to remain on orbit, expanding the station's storage volume. In April 2011, *Endeavour*, STS-134, will carry the Alpha Magnetic Spectrometer (AMS) and attach it to the ISS' truss structure. The final shuttle mission, STS-135, is targeted for late June of this year, if funding is available. During the mission, *Atlantis* will deliver critical supplies to the ISS and recover and return to Earth an ammonia coolant pump module that failed on the station last year.

Following the completion of the remaining missions in 2011, the space shuttle program will focus on transition, retirement, and disposition of program assets and workforce. Approximately 1.2 million line items of personal property (e.g., equipment) are associated with the space shuttle program, with about 500,000 of these



line items associated with the space shuttle propulsion system elements (the reusable solid rocket motor, the solid rocket booster, the external tank, and space shuttle main engines). As part of this effort, NASA will assess space shuttle property (including main propulsion system elements) applicability to the SLS.

On April 12, 2011, we will celebrate the 50th anniversary of human spaceflight, and the 30th anniversary of the first flight of space shuttle *Columbia* on STS-1. NASA recognizes the role the space shuttle vehicles and personnel have played in the history of space activity, and looks forward to transitioning key workforce, technology, facilities, and operational experience to a new generation of human spaceflight exploration activities.

The fiscal year 2012 budget request includes funding for Space Program Operations Contract (SPOC) pension liability. The United Space Alliance (USA) notified NASA of its desire to terminate all defined pension benefit plans as of December 31, 2010. USA has consistently incorporated and billed the maximum allowable costs into their indirect rates, but the recent deterioration of the equities and credit markets has caused their plan to be underfunded by an estimated \$500–\$600 million. SPOC, which accounts for almost all of USA's business base, is a cost-type contract covered by the Cost Accounting Standards (CAS). These standards stipulate that any costs of terminating plans are a contractual obligation of the Government (if deemed allowable, allocable, and reasonable). NASA and USA entered into an agreement under which USA froze their pension plans as of December 31, 2010 and deferred any decision about terminating their plan until after December 31, 2011, allowing NASA to address this issue, if it arises, with fiscal year 2012 funds, if appropriated. USA and NASA have instituted a working group to discuss pension termination options and have met with the Pension Benefit Guaranty Corporation to discuss potential options. If funding remains after the pension plan termination, it will be used to defray space shuttle closeout costs that would otherwise require fiscal year 2013 funding. If there is a shortfall, it will reduce available space shuttle funds for closeout and some activity could move later than planned. We will keep the Congress informed as this issue evolves.

The fiscal year 2012 budget request for the ISS program is \$2,841.5 million, of which \$1,656 million is for operations, research, and utilization, and \$1,186 million for crew and cargo transportation. The ISS has transitioned from the construction era to that of operations and research, with a six-person permanent crew, three major science labs, an operational lifetime through at least 2020, and a growing complement of cargo vehicles, including the European Automated Transfer Vehicle and the Japanese H-II Transfer Vehicle. The fiscal year 2012 budget request reflects the importance of this unparalleled research asset to America's human spaceflight program.

In addition to conducting research in support of future human missions into deep space, astronauts aboard the ISS will carry out experiments anticipated to have terrestrial applications in areas such as biotechnology, bioengineering, medicine, and therapeutic treatment as part of the National Laboratory function of the station. In support of this effort, NASA has recently released a Cooperative Agreement Notice for an independent nonprofit organization to manage the multidisciplinary research carried out by NASA's National Laboratory partners. This organization will:

- act as a single entry point for non-NASA users to interface efficiently with the ISS;
- assist researchers in developing experiments, meeting safety and integration rules, and act as an ombudsman on behalf of researchers;
- perform outreach to researchers and disseminate the results of ISS research activities; and
- provide easily accessed communication materials with details about laboratory facilities, available research hardware, resource constraints, and more.

The fiscal year 2012 budget request for ISS reflects increased funding for the transportation required to support this research.

The ISS transportation budget also supports NASA's continued use of the Russian Soyuz spacecraft for crew transportation and rescue services, pending the availability of a domestic crew transportation system, as well as U.S. commercial cargo transportation. The ISS transportation budget supports NASA's Cargo Resupply Services suppliers as they continue to make progress toward fielding their cargo resupply vehicles, which will be critical to the maintenance of ISS after the retirement of the space shuttle. We anticipate that the first commercial resupply flight will take place by the end of this year, and that both providers will have their systems operational in 2012.

The fiscal year 2012 budget request for Space and Flight Support (SFS) is \$840.6 million. The budget request provides for critical infrastructure indispensable to the Nation's access to and use of space, including Space Communications and Naviga-

tion (SCaN); Launch Services Program (LSP); Rocket Propulsion Test (RPT); and Human Space Flight Operations (HSFO). The SFS budget also includes investment in the 21st Century Space Launch Complex, intended to meet the infrastructure requirements of the SLS, MPCV, and commercial cargo/launch services providers. It will increase operational efficiency and reduce launch costs by modernizing the Florida launch capabilities for a variety of NASA missions, which will also benefit non-NASA users.

In fiscal year 2012, the SCaN program will continue to improve the robustness of the Deep Space Network (DSN) through its efforts to replace the aging 70m antenna capability with 34m antennae, launch Tracking and Data Relay Satellite (TDRS)-K and continue the development of TDRS—L. In the area of technology, we will conduct on-orbit tests using the Communication Navigation and Networking Reconfigurable Test bed (CoNNeCT), integrate the optical communications system on the Lunar Atmosphere and Dust Environment Explorer (LADEE) spacecraft, and begin operational space mission use of Disruption Tolerant Networking communications. The SCaN operational networks will continue to provide communications and tracking services to more than 75 spacecraft and launch vehicles during fiscal year 2012. LSP has several planned NASA launches in fiscal year 2012 including the NPOESS Preparatory Project (NPP), MSL, Nuclear Spectroscopic Telescope Array (NuSTAR), TDRS-K, and RBSP, and will continue to provide support for the development and certification of emerging launch services. The RPT program will continue to provide test facility management, and provide maintenance, sustaining engineering, operations, and facility modernization projects necessary to keep the test-related facilities in the appropriate state of operational readiness. HSFO includes Crew Health and Safety (CHS) and Space Flight Crew Operations (SFCO). SFCO will continue to provide trained crew for ISS long-duration crew rotation missions. CHS will identify and deliver necessary core medical capabilities for astronauts. In addition, CHS will gather astronaut medical data critical for determining medical risk as a result of spaceflight and how best to mitigate that risk. NASA has enlisted the NRC to conduct an independent study of the activities funded within NASA's HSFO program, focusing on the role, size, and training requirements of the human spaceflight office after space shuttle retirement and space station assembly completion.

The fiscal year 2012 budget request also establishes a new line item called Mission Operations Sustainment, which will address future space operations functions essential to NASA's human spaceflight mission, including funding to purchase U.S. commercial crew transportation services to and from ISS once they are developed, and key ground and space infrastructure improvements required by the Space Network (SN) in order to accommodate anticipated demand in the out years; the Mission Operations Sustainment budget would be utilized to fund this performance gap. Although the exact amount of funding required for these needs is unknown, it is clear that NASA's human spaceflight mission cannot be sustained without resources provided by Missions Operations Sustainment beyond fiscal year 2012. The agency will perform the requisite technical and program analysis and planning, and the results will be reflected in the fiscal year 2013 budget request.

#### EDUCATION

The fiscal year 2012 budget request for education is \$138.4 million. This budget request furthers NASA's commitment to inspiring the next generation of explorers in the science, technology, engineering, and mathematics (STEM) disciplines. In fiscal year 2012, NASA will continue to strongly support the administration's STEM priorities and to capitalize on the excitement of NASA's mission to stimulate innovative solutions, approaches, and tools that inspire student and educator interest and proficiency in STEM disciplines. The agency's education strategy will increase its impact on STEM education by further focusing K–12 efforts on middle-school pre- and in-service educator professional development. It includes an increased emphasis on providing experiential opportunities for students, internships, and scholarships for high school and undergraduate students. NASA higher education efforts will increasingly target community colleges, which generally serve a high proportion of minority students, preparing them for study at a 4-year institution. NASA will use its unique missions, discoveries, and assets (e.g., people, facilities, education infrastructures) to inspire student achievement and educator teaching ability in STEM fields.

In fiscal year 2012, NASA will support the administration's STEM education teaching and learning improvement efforts, including the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (America COMPETES) Reauthorization Act of 2010, Race to the Top and Educate to Innovate, while continuing efforts to incorporate NASA missions and content into

the STEM education initiatives of other Federal agencies. This may include providing competitions and challenges, supporting clearinghouses of Federal STEM education resources, providing high-quality professional development, and other engagements.

NASA will continue the Summer of Innovation (SoI) Pilot through partnerships with organizations that currently work with girls, minorities, and low-income students in grades 4–9 in summer and extended learning settings. The SoI project will deepen and broaden the efforts of communities and schools to successfully engage these students by providing high-quality, inquiry-based content, customized support, and access to NASA people, facilities and technology.

NASA will continue to partner with universities, professional education associations, industry, and other Federal agencies to provide K–12 teachers and university faculty with experiences that capitalize on the excitement of NASA discoveries to spark student interest and involvement in STEM disciplines. Examples of experiences include research and hands-on engineering in our unique facilities and on a variety of real-world platforms that include high-altitude balloons, sounding rockets, aircraft, and satellites. NASA will also partner with science centers, museums, planetariums, and community-based education providers to allow informal educators to engage students in NASA's real-time, cutting-edge science and engineering discoveries and challenges.

The fiscal year 2012 budget request places increased emphasis on cyber-learning opportunities and the use of the ISS National Laboratory to engage students (at all levels) in launch activities, research and engineering grants, and courses based upon NASA science and engineering.

In fiscal year 2012, the agency aims to increase the availability of opportunities to a diverse audience of educators and students, including women, minorities, and persons with disabilities. An example is the Innovations in Global Climate Change Education project that will be implemented within the Minority University Research and Education Program. The project provides opportunities for students and teachers to conduct research using NASA data sets to inspire achievement and improve teaching and learning in the area of global climate change.

#### CROSS-AGENCY SUPPORT

The fiscal year 2012 budget request includes \$3,192 million for cross agency support, which provides critical mission support activities that are necessary to ensure the efficient and effective operation and administration of the agency. These important functions align and sustain institutional and program capabilities to support NASA missions by leveraging resources to meet mission needs, establishing agency-wide capabilities, and providing institutional checks and balances. Within this budget request, NASA has taken steps to reduce its administrative expenses, including a partial hiring freeze and reduced travel.

NASA's fiscal year 2012 budget request includes \$2,402.9 million for Center management and operations, which funds the critical ongoing management, operations, and maintenance of nine NASA Centers and major component facilities. NASA Centers provide high-quality support and the technical engineering and scientific talent for the execution of programs and projects. Center management and operations provides the basic support required to meet internal and external legal and administration requirements; effectively manage human capital, information technology, and facility assets; responsibly execute financial management and all NASA acquisitions; ensure independent engineering and scientific technical oversight of NASA's programs and projects in support of mission success and safety considerations; and, provide a safe, secure, and sustainable workplace that meets local, State, and Federal requirements. Cross-agency support also funds salary and benefits for civil service employees at NASA Centers who are assigned to work on Center management and operations projects. In addition, the account contains center-wide civil service personnel costs, such as institutionally funded training.

NASA's fiscal year 2012 budget request includes \$789.1 million for Agency Management and Operations, which funds the critical management and oversight of agency missions, programs and functions, and performance of NASA-wide activities, including five programs:

- Agency management;
- Safety and mission success;
- Agency Information Technology Services;
- Strategic capabilities assets program; and
- Agency management and operations civil service labor and expenses.

Agency management supports executive-based, agency-level functional and administrative management requirements, including, but not limited to:

- Health and medical;
- Environmental;
- Logistics;
- General counsel;
- Equal opportunity and diversity;
- Internal controls;
- Procurement;
- Human resources; and
- Security and program protection.

Agency management provides for the operational costs of Headquarters as an installation; institutional and management requirements for multiple agency functions; assessment and evaluation of NASA program and mission performance; strategic planning; and, independent technical assessments of agency programs.

Safety and mission success activities are required to continue improving the workforce, and strengthening our acquisition processes, including maintaining robust checks and balances, in order to improve the safety and likelihood of mission success for NASA's programs throughout their lifecycles. The engineering, safety and mission assurance, health and medical independent oversight, and technical authority components are essential to NASA's success. They were established or modified in direct response to several major Government accident and mission failure investigation findings in order to reduce the likelihood of loss of life and/or mission in our human and robotic programs. The budget request also supports operation of three activities that each provides a unique focus in support of the independent oversight and technical authority implementation:

- the Software Independent Verification and Validation (IV&V) program;
- the NASA Engineering and Safety Center (NESC); and
- the NASA Safety Center located at the Glenn Research Center.

Agency Information Technology Services (AITS) encompasses agency-level cross-cutting services and initiatives in information technology (IT) innovation, business and management applications, and infrastructure necessary to enable the NASA mission. AITS includes management of NASA's scientific and technical information; identity, credential and access management services; overarching information security services; enterprise-level business systems; and, other agency operational services, such as email, directory services, and enterprise licenses. NASA's Security Operations Center (SOC) will continue to mature capabilities to improve security incident prevention, detection, response, and management. NASA will continue implementation of major agency-wide procurements to achieve:

- consolidation of IT networks leading to improved network monitoring, management, and reliability;
- consolidation of desktop/laptop computer services and mobile devices to achieve improved security and enable NASA Centers and programs to realize improved efficiencies;
- consolidation of agency public Web site/application management to improve the agency security posture and to facilitate access to NASA data and information by the public;
- minor enhancement and maintenance of integrated agency business systems to provide more efficient and effective agency operations; and
- reduction in overall agency data centers and related infrastructure currently funded outside the AITS budget.

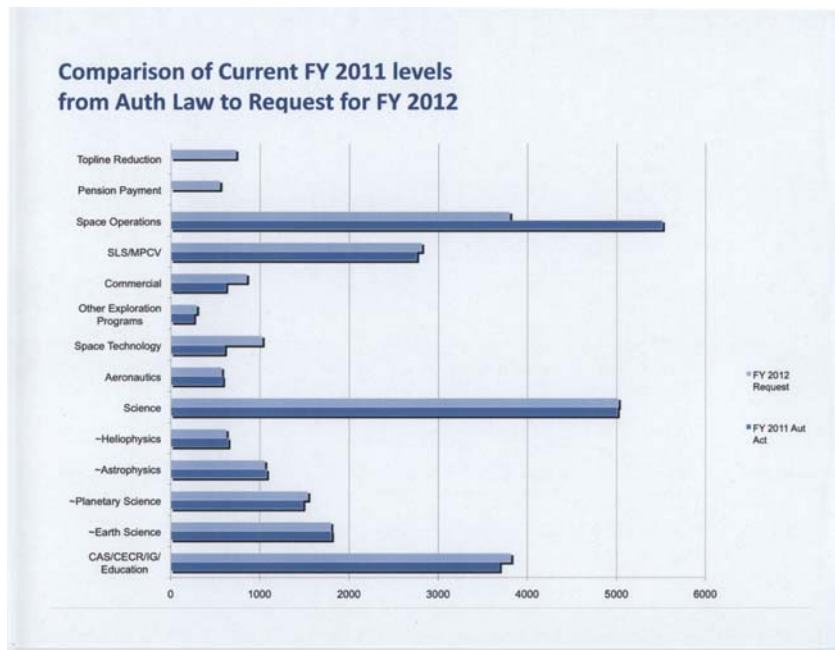
The Strategic Capabilities Assets Program (SCAP) funds key agency test capabilities and assets, such as an array of flight simulators, thermal vacuum chambers, and arc jets, to ensure mission success. SCAP ensures that assets and capabilities deemed vital to NASA's current and future success are sustained in order to serve agency and national needs. All assets and capabilities identified for sustainment either have validated mission requirements or have been identified as potentially required for future missions, either internally to NASA or by other Federal entities.

The Agency Management and Operations Civil Service Labor and Expenses funds salary and benefits for civil service employees at NASA headquarters, as well as other headquarters personnel costs, such as mandated training. It also contains labor funding for agency-wide personnel costs, such as agency training, and workforce located at multiple NASA Centers that provide the critical skills and capabilities required to execute mission support programs agency-wide.

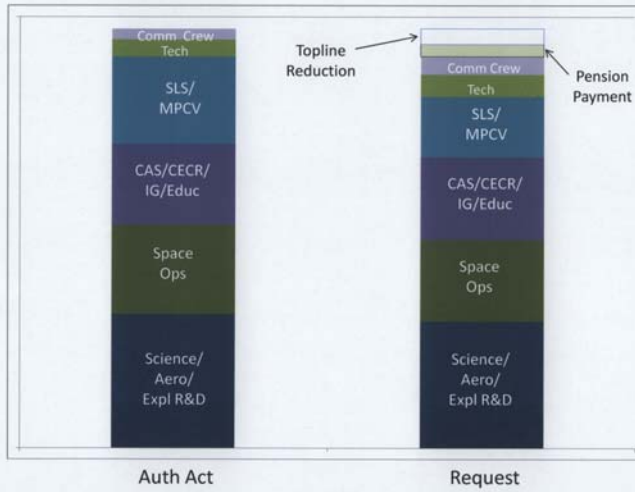
#### CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION

The fiscal year 2012 budget request includes \$450.4 million for construction and environmental compliance and restoration. NASA construction and environmental compliance and restoration provides for the design and execution of all facilities con-

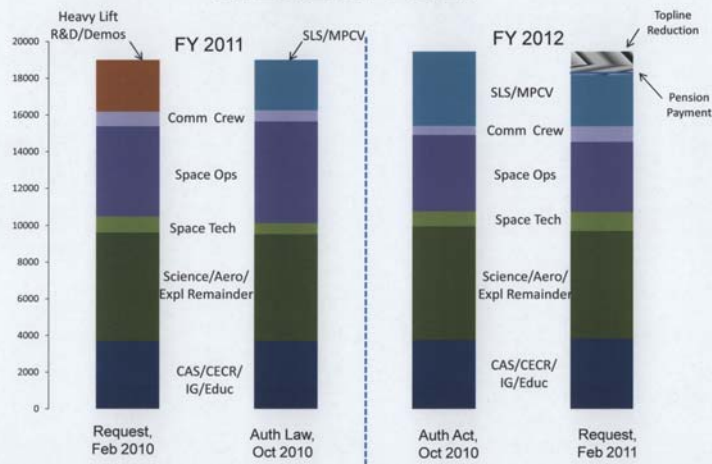
struction projects, including discrete and minor revitalization projects, demolition of closed facilities, and environmental compliance and restoration. The fiscal year 2012 budget request includes \$397.9 million for the Construction of Facilities (CoF) program, which funds capital repairs and improvements to ensure that facilities critical to achieving NASA's space and aeronautics programs are safe, secure, sustainable, and operate efficiently. The agency continues to place emphasis on achieving a sustainable and energy-efficient infrastructure by replacing old, inefficient, deteriorated buildings and horizontal infrastructure with new, efficient, and high-performance buildings and infrastructure that will meet NASA's mission needs while reducing the agency's overall footprint and future operating costs. The CoF program prioritizes this budget based on risk of impact to NASA and Center missions, safety issues and accessibility. The fiscal year 2012 budget request includes \$52.5 million for the Environmental Compliance and Restoration (ECR) program, which supports the ongoing cleanup of sites where NASA operations have contributed to environmental problems. The ECR program prioritizes these efforts to ensure that human health and the environment are protected. This program also supports strategic investments in sustainable environmental methods and practices aimed at reducing NASA's environmental footprint and lowering the risk of future cleanups.

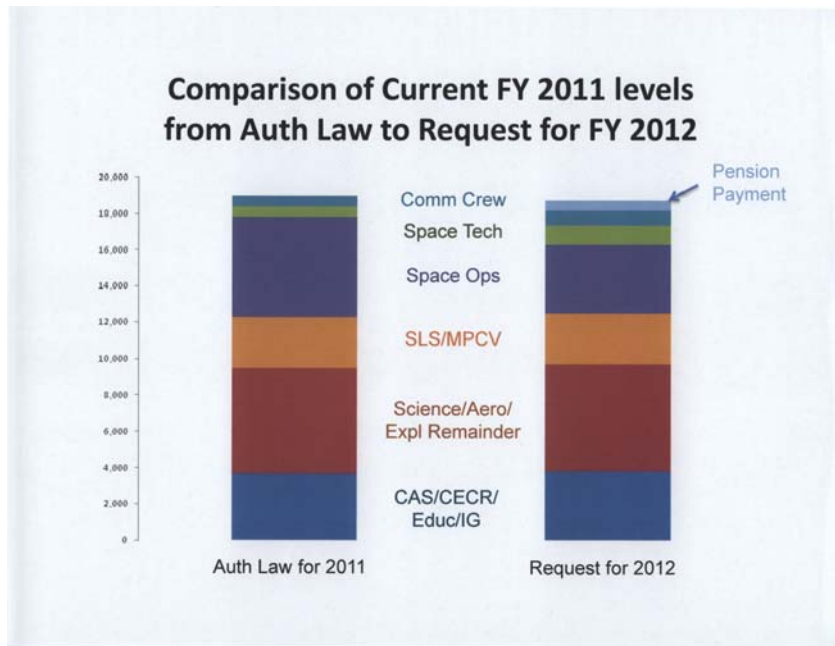
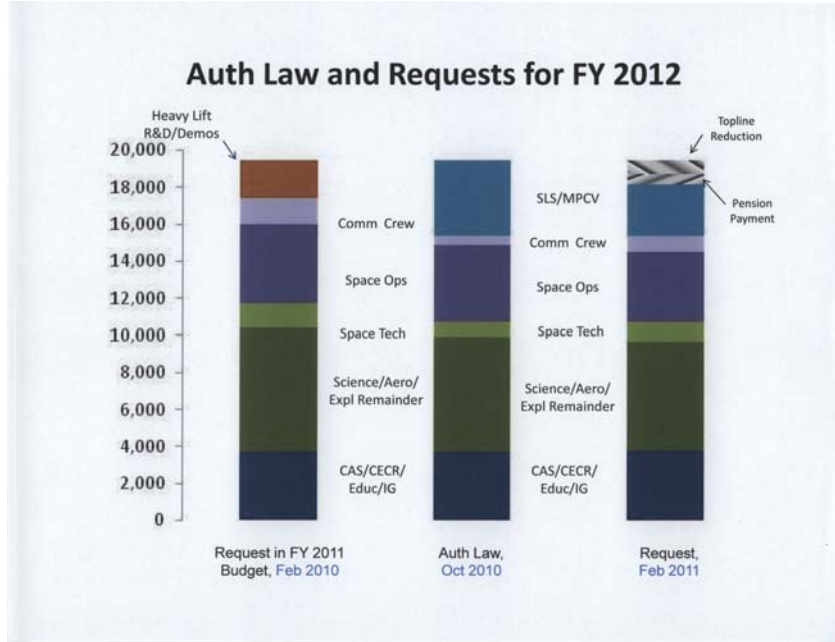


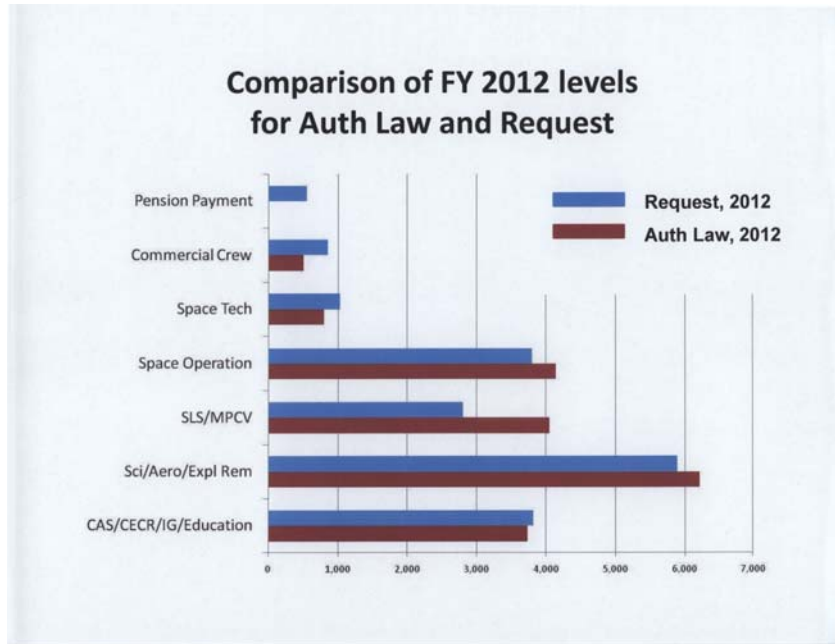
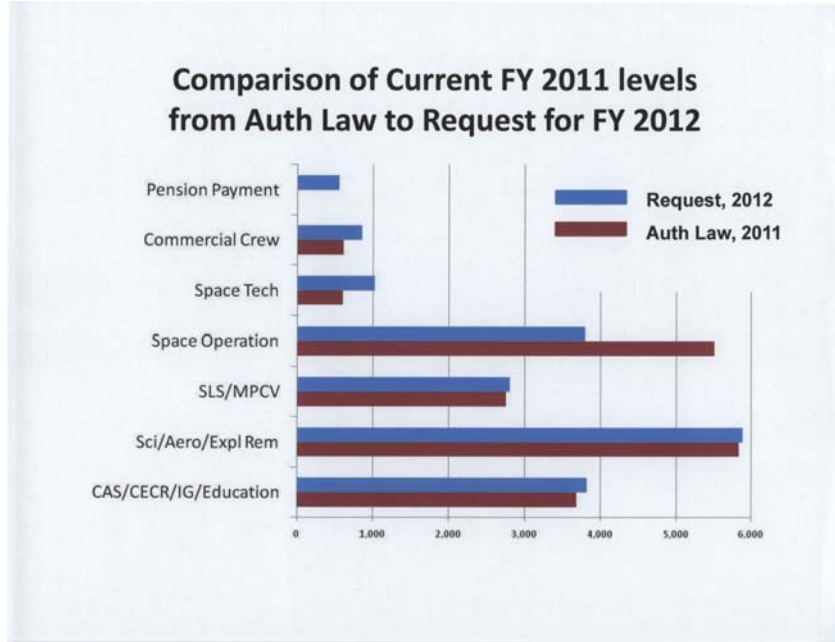
### Comparison of Auth Act to Request, FY 2012



### Comparison of Auth Law to Requests: FY 2011 & FY 2012









### Amounts (\$M) & Percentages

	FY 2011 - \$19.0B				FY 2012 - \$19.45B			
	Request		Auth		Auth		Request	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
CAS/CECR/IG/Education	3,691	19%	3,688	19%	3,738	19%	3,818	20%
Science/Aero/Expl Remainder	5,926	31%	5,841	31%	6,224	32%	5,875	30%
Space Tech	872	5%	600	3%	798	4%	1,024	5%
Space Operation	4,888	26%	5,509	29%	4,141	21%	3,799	20%
Commercial Crew	812	4%	612	3%	500	3%	850	4%
SLS/MPCV			2,751	14%	4,050	21%	2,810	14%
Heavy Lift R&D/Demos/Trans	2,811	15%						
Pension Payment							548	3%
Topline Reduction							727	4%
<b>TOTAL</b>	<b>19,000</b>	<b>100%</b>	<b>19,001</b>	<b>100%</b>	<b>19,451</b>	<b>100%</b>	<b>19,451</b>	<b>100%</b>

#### 2012 CONTINUING RESOLUTION

General BOLDEN. Thank you, ma'am.

Senator MIKULSKI. Now, we have, in other hearings, been talking about asking administrators about the consequences of the continuing resolution. Actually, where we are today, you're going to ask us the consequences of the continuing resolution. Rather than going into that today, here is what I suggest:

At midnight today, the Senate Appropriations Committee will present its bill. It, as I understand it, will be on the Web at [www.appropriations.senate.gov](http://www.appropriations.senate.gov).

Am I correct?

Senator COCHRAN. I'm not sure.

Senator MIKULSKI. Well—

Senator COCHRAN. I would defer to your judgment.

Senator MIKULSKI [continuing]. He's the ranking member of the full committee. So—but pretty much it will come out around midnight, that'll be the full bill.

My suggestion to you, and it would be enormously helpful, is that, when that comes out, I know you're going to scrub it—

General BOLDEN. Yes, ma'am.

Senator MIKULSKI [continuing]. To see what we did, so you know what you need to do. When you do that, it would be useful if you then could share with Senator Hutchison, Senator Inouye, Senator Cochran and I, what you think that means to NASA and what you think that means to 2012. We would be in speculative number games, and we're all rushing to meet those deadlines. And I know there's always a leadership blip here or there.

So, what we want to say, as full partners, scrub what we've done, then come back and tell us what it means to 2012, because, in effect, you're going to be below 2010.

General BOLDEN. Yes, ma'am.

Senator MIKULSKI. Okay?

General BOLDEN. Madam Chair, we'll do that and look forward to it.

#### JWST

Senator MIKULSKI. Now, let's go to the 2012, as proposed by the President and your advocacy today.

We want to join with the President in his national goal of out-building and out-innovating and out-educating. At the same time, we need to be stewards of the money.

I'd like to raise some questions about those things that could be targets for big cuts, particularly for those who have not spent the time on NASA, like our colleagues at the table. That goes to the JWST.

The JWST is scheduled to be 100 times more powerful than the Hubble telescope. But, we were troubled about its management. We were troubled about the use of money. We asked for a report, the Cassini report, which then said it was technically sound, but we had to worry how—we, meaning NASA, had to have a real sense of urgency related to management and keeping on track for both deadlines and expenditures. You and I have had a private conversation about that some weeks ago.

But, could you tell us now: What is NASA doing, number one, to have a sense of urgency; number two, that it has top-level attention—it hasn't been delegated to the coordinator of the coordinator of the coordinator; and that we have this spectacular opportunity on track now? Because, quite frankly, we—"we", on a bipartisan basis, cannot sustain technology with repeated cost overruns. The House won't put up with it. And, quite frankly, with no money to spare, we won't, either.

So, we want this telescope; it's important to our future. Tell us what you're going to do now to make sure we can deliver this; what your timeline is; and what your management and urgency activities are.

General BOLDEN. Senator, as you and I discussed when we did talk at Wallops and, as I told you then, I don't think there's anyone who was more disappointed and angry than I when we got to the bottom of the situation, where we found ourselves with Hubble. But, since then, we have moved with urgency. As I mentioned in my opening statement, the telescope continues to make exceptional technological progress. But, I have made some significant management changes in NASA. The program now is my responsibility, and I have delegated my associate administrator, Chris Scolese, to oversee that program for me. He meets with the team on a regular basis, several times a week, and also meets with some of your staff periodically.

Senator MIKULSKI. What is the team?

General BOLDEN. The team consists of Rick Howard, who is the program manager at NASA headquarters; and Ed Weiler, who is the Associate Administrator for Science. The program comes di-

rectly to him now. I extracted it from its former division, in astrophysics, because it was unfair to put a program of that magnitude in the astrophysics division.

Senator MIKULSKI. What are you doing about meeting with the private sector, building it?

General BOLDEN. We are working with Northrop Grumman, which is our prime contractor. We actually talk to Gary Ervin; I talk to Wes Bush periodically. They have made some management changes, and I would defer to them to explain to you what they've done. But, we communicate with them on a routine basis. As I said, Chris Scolese is usually talking to Gary Ervin every week. We're trying to make sure that—

Senator MIKULSKI. So, now, you've got this on track—

General BOLDEN. Yes, ma'am.

Senator MIKULSKI [continuing]. And you review it. Now, tell me, how much money is needed to keep JWST on track? And is it in 2012?

General BOLDEN. Senator, we are working to complete our bottoms-up assessment that will allow us to bring you a draft baseline assessment, hopefully by the end of this month. The final—

Senator MIKULSKI. Do you know—

General BOLDEN. Do I know—

Senator MIKULSKI [continuing]. This is—

General BOLDEN [continuing]. What it is—

Senator MIKULSKI. Yes, this is not argumentative or adversarial. I'm trying to drill deep on this issue.

General BOLDEN. We honestly do not think that we need money in fiscal year 2012 that will allow us to continue to carry the program to the point where we can make what we think now is a reasonable launch date of 2018. If something does happen, and we find that we have more funds than necessary in fiscal year 2012, we will put them to use to accelerate some of the testing that we're doing or some of the other developmental work. Right now, we are looking at how much we need to add to fiscal year 2012—

Senator MIKULSKI. Well—

General BOLDEN [continuing]. To come to this subcommittee and—

#### CASSINI REPORT

Senator MIKULSKI [continuing]. Going back to the Cassini report—

General BOLDEN. Yes, ma'am.

Senator MIKULSKI [continuing]. Which I know is advisory—

General BOLDEN. Yes.

Senator MIKULSKI [continuing]. They said they needed \$500 million each year, in 2011 and 2012. And it's not there.

General BOLDEN. Senator, I respect the Cassini report. When we looked at what they said, and where we are in these fiscal times, I cannot responsibly bring myself to this subcommittee, or any other, and propose that someone try to find \$500 million a year for the foreseeable future. We are working up a baseline, and there will be some additional spending that will be required, but we have not arrived at that yet. But, I hope to have you an original estimate by the end of this month.

Senator MIKULSKI. Well, my time is coming to a close, and I want my colleagues to be able to fully participate. I know of their keen interest, because, you know, we have big tickets in human spaceflight, and this telescope is a big ticket in space science.

First of all, we really appreciate the President adding \$5 billion to the science budget.

But, let me tell you what I worry about: "Oh, we're going to live in our fiscal time and time of our austerity, and spartan." I'm all for that. Everyone at this table is for a more frugal Government. But, what I don't want to be is—I'm ready to be frugal, but I don't want to be foolish. So, let me tell you what I worry about in being foolish: that, because we skimp now, we then end up paying two or three times later. And that's what I don't want. I really need a realistic picture so that we could—this is a rational group of people who work together. We need to hear, truly, what is needed, not what you think you can get Office of Management and Budget to agree to—

General BOLDEN. Yes, ma'am.

Senator MIKULSKI [continuing]. Or what we can even get the House or ourselves to agree to. But, we need to know that. And what I also need to know is, if we don't spend the money now, when will we spend it, and will it ultimately cost us more? And I might be wrong, but I think we've been around the track on some of these things. Either the thing grows and becomes a boondoggle—you're now standing sentry, that won't happen. But, I'm again concerned that if we don't do the right thing now, it'll cost us more in the future. So, we really do need your wise counsel on this.

And we thank the President's support of science.

Senator Hutchison.

Senator HUTCHISON. I'm going to defer to Thad, and then I'll go after Sherrod.

Senator MIKULSKI. Senator Cochran.

#### TESTING CAPABILITY AT STENNIS SPACE CENTER

Senator COCHRAN. Madam Chairman, thank you very much for your leadership of our subcommittee and working in concert with our other subcommittee members.

Mr. Administrator, we appreciate your cooperation with our subcommittee, and your presentation today.

Despite some uncertainties about the fiscal year 2011 budget, I'm hopeful that we can stay on track to meet the goal of developing our heavy lift capacity for operation by 2016. And I'm hopeful that's at a 130-ton capacity. And I know that your advice is important in keeping us on track, in terms of taking the right steps with funding of those activities that will help us reach that goal. We want to be sure we have ample rocket testing results and an infrastructure to support this capability. We know that safety and competence and national interest are all goals that we share. And we know you are on that same team, and we appreciate your leadership.

You mention, in your written testimony, about the investment importance of a 21st century launch complex. And it strikes me, that's a way to describe what we have in the NASA facilities in the Mississippi/Louisiana area, which have become so important to this

launch infrastructure. Do you have enough funding requested in this budget request to ensure that we meet our updates to keep the schedules that are in place for fiscal year 2011 and 2012, to improve our rocket propulsion test infrastructure?

General BOLDEN. Senator, as you and I have discussed before, the 2012 budget that I put forth will support the continued development of our testing capability at Stennis Space Center. We intend to complete the construction of the A-3 Test Stand. As you are probably very well aware, Stennis has become rejuvenated and reinvigorated. We have had three tests now of the AJ26, just in this year, which is the rocket produced by Aerojet for Orbital Sciences Corporation. We have a test that's supposed to be going on today. When we get the A-3 Test Stand done, we'll be able to test even bigger and more advanced engines.

#### TESTING COMMERCIAL LAUNCH VEHICLES

Senator COCHRAN. What are your views toward using existing NASA infrastructure with regard to testing commercial launch vehicles?

General BOLDEN. We have demonstrated our capability to do that. In fact, the first time we tested an engine at Stennis in more than 10 years, it was the AJ26, Aerojet-produced. It's a Ukrainian rocket that Aerojet has modified for domestic production. It is also a rocket that we are currently talking to Aerojet about that has potential for upgrade, for even heavier lift than the Taurus II.

Senator COCHRAN. Do your future plans include subsidizing the construction of commercially owned propulsion test infrastructure elements?

General BOLDEN. I don't use the term "subsidizing". We provide the test facility, that's what Stennis is. It's the propulsion test center for the—we'd like to say it's for the world, but it's for the United States. We want to get everybody to come there and do their tests. We will make sure that we are competitive, in terms of cost, but we will take all comers.

Senator COCHRAN. Thank you.

Thank you, Madam Chairman.

Senator MIKULSKI. Senator Brown.

#### TEN HEALTHY CENTERS

Senator BROWN. Thank you, Madam Chair.

General Bolden, nice to see you, thank you.

The previous administration declared 10 healthy centers and laid out responsibilities for each. When you and I first talked, right prior to your confirmation, you assured me this policy was no longer needed, because NASA had 10 healthy centers. However, in last year's budget, NASA Glenn, in Cleveland, was promised the Exploration Technology Development Demonstration, the ETDD program. With the fiscal year 2012 budget request, we're giving \$1 billion to the Office of the Chief Technologist, being told only that a significant—a substantial portion of the working leadership will be at Glenn.

Additionally, NASA has a history, as you know, of allowing its centers to fight among themselves. Not a day goes by that I don't hear that Cleveland's going—to that NASA Glenn's going to get a

mission, or somebody else—1 of the other 9 is trying to take a mission from NASA Glenn and from each other. Now, I hear some NASA leadership saying that, instead of collaboration between and among centers, they want to encourage, again, that competition. While I have great respect for Dr. Braun, I've seen what happens when the Congress provides NASA latitude to shift funds.

I have two questions on this issue. One, do you have a serious commitment to the goals of the previous policy of 10 healthy centers and the people that work there? Two, how will you work with the Congress to detail a more specific plan for 10 healthy centers?

General BOLDEN. Senator, I have a very serious commitment to 9 functioning, effective, efficient NASA centers and one laboratory, the Jet Propulsion Laboratory. You know, "healthy" is a relative term. Because of the fiscal constraints that we are all under now, our centers are stressed. You talk about H.R. 1, for example; change like that would have a dramatic effect on a center. But, I have the best center directors in the world. I have the best workforce in the world, and we're doing everything we can to make sure that we balance the work across the 10 NASA centers. We want to make sure that we have a balanced portfolio in the agency. We want to have vibrant involvement in aeronautics, in technology development, in science, and in human spaceflight.

I'm not asking every center to be capable of participating in every single thing we do. I want to find out what their sweet spot is and then let them go do that. I think the center directors enjoy that, the members of the workforce enjoy that. But, I am committed to making sure that all of our centers stay as strong as they can.

#### ETDD

Senator BROWN. And I can be assured that ETDD's work will be at Glenn, regardless of where the OCT is located.

General BOLDEN. The answer is "Yes".

Senator BROWN. The people at Glenn don't necessarily believe that—

General BOLDEN. Well, the—

Senator BROWN [continuing]. You understand.

General BOLDEN [continuing]. Point that I tried to explain and I think I know the center director does. And it's because—

Senator BROWN. He does.

General BOLDEN [continuing]. He understands and, as Ray Lugo has probably told you before, he's not worried about having titles at his center; he is interested in having the contracts and the work. So a program management office at a center does not mean that the center is going to handle the bulk of the work in that program. It just means that 's where the focus of the oversight is going to be. But, work on ETDD—Glenn is where much of it is being done and will be done. So, Glenn will make out relatively well.

#### DISPOSITION OF ORBITER VEHICLES

Senator BROWN. Let me shift to an issue that we've talked about many times. I'd like you to detail the selection of the shuttle that—the process NASA undertook in deciding where the retiring shuttles would be exhibited. I never heard you or your top assistant or

the White House or anyone else talk about this commission, that supposedly was put together 4 years ago, that will apparently decide the disposition policy with the NASA authorization law that set out guidelines in the role that the commission is playing. Could you explain, one, who is the one that's ultimately going to decide—

General BOLDEN. Is this a commission on deciding where the orbiters go?

Senator BROWN. That's my understanding.

General BOLDEN. If there is such a thing, I don't know about it. I am going to make the decision, probably when I get back over to my office this afternoon, so if I need to consult with them, somebody should tell me, really quick.

Senator BROWN. Will you just make that decision based on the last person you talk to, by chance?

General BOLDEN. No, Sir, my team has put together—

Senator BROWN. A "Yes, Sir" would have been much more preferable.

Senator MIKULSKI. You know, you could end up with a filibuster on this subcommittee, if you—

Senator HUTCHISON. And I have to follow you, Senator Brown.

General BOLDEN. My team and I—that's a good point—

Senator MIKULSKI. For once, I have no dog, or orbiter, in this fight.

General BOLDEN. There are—well—

Senator BROWN. So, the decision is totally yours, there is no statutory commission to which—

General BOLDEN. Not to my knowledge.

Senator BROWN [continuing]. The matrices that you must—on which you have to base your decision.

General BOLDEN. I have made an effort to keep people, not the President, but people close to the President, informed of the process that we were following. I have made an attempt to keep at least the staffs, here, in both the House and Senate, informed of the process that we were following. We offered to brief people on the process. We established, I think, 10 criteria for consideration.

We had 29 applicants for an orbiter. All of them met the criteria, in varying degrees. So, I will make my decision this afternoon based on points that were assigned to the degree to which they met those criteria. It has nothing to do with where it is, or anything. It's just how they fell out in a matrix of criteria, and the points awarded for that. There will be 25 people who won't be happy; 4 who will be really happy.

Senator BROWN. The three shuttles that will be sent to these three locations, is— are you also deciding on the *Enterprise*, the one that has never, and will not have, flown? Or are you only making that decision on the three that have flown or will have flown?

General BOLDEN. The decision is being made on the distribution of all four orbiters, because the Smithsonian is in competition with everyone else. So, I have four orbiters to dispose of. All of them have, I know I'm being picky here, but all of them have flown. *Enterprise* was the first orbiter. It conducted all of the approach and landing tests. It flew three times—I mean, had some pretty challenging things happen to it, also. So, it is quite a vehicle, in and

of itself, in terms of being a pioneer vehicle. But, those four vehicles will be distributed around the country to the four places selected.

Senator BROWN. But, the *Enterprise* been promised or owned in some by some definition, by the Smithsonian?

General BOLDEN. By law, the Smithsonian is the recipient of all artifacts that come from spaceflight. So, we are working with the Smithsonian and my committee to determine just how we go about that. But, I will—

Senator BROWN. So, if one of the—

General BOLDEN [continuing]. I will make that announcement tomorrow—

Senator BROWN. Okay.

General BOLDEN [continuing]. At 1 o'clock—

Senator BROWN. If one of those three—

Pardon me, can I continue for 2 more minutes, Madam Chair?

This matters a lot to Dayton, Ohio. And I know—and she's going to—I understand. I understand. I won't take much—

If those three—if one of those three that has been defined as having a mission and going up and—while the *Enterprise* is defined a little less so, generally—if one of those three goes to Washington, goes in the Smithsonian, does that mean that this the *Enterprise* will go somewhere else—I assume.

General BOLDEN. If one of them ends up at the Smithsonian—they only get one. So, that means that I will take possession of *Enterprise*, and then it will be up to NASA to determine where *Enterprise* goes.

Senator BROWN. In that decision, if one of these three goes to— one of the first three, or “the” three, goes to the Smithsonian when you make your decision tomorrow, you will then—right then, decide where the, some call it the consolation prize, others call it much more than that—you will make that decision then—

General BOLDEN. I'll make the—

Senator BROWN [continuing]. Where the fourth one goes.

General BOLDEN [continuing]. Determination between when I leave this session and when I announce it tomorrow, where all four—

Senator BROWN. Okay. And—

General BOLDEN [continuing]. Space shuttle orbiters are going. So, when we make the announcement tomorrow, it will be very specific. It will cite the orbiter and its destination.

Senator BROWN. Okay.

Thank you. Thank you, General.

General BOLDEN. This process has been as pure as I could make it, and free of any political involvement. I can say that until I'm blue in the face, but there will always be someone who will have the opinion that was not the case. But, the team that was put together before I became the Administrator has done an absolutely incredible job over the last couple of years. I would just hate to see their work be castigated by somebody who assumes that they were unduly influenced. They were not.

Senator BROWN. And, General, you of course know that Dayton, Ohio, is within a—1 day's drive of 60 percent of America's population—



General BOLDEN. I do, indeed.

Senator BROWN [continuing]. And that the Wright brothers and Neil Armstrong and—

Senator MIKULSKI. And John Glenn.

Senator BROWN [continuing]. And John Glenn all called Ohio home.

General BOLDEN. I know that all very well, from lots of phone calls from—

Senator MIKULSKI. The only two prominent people I don't know from Ohio are Mother Theresa and Nelson Mandela.

Senator BROWN. No, they actually are. Thanks, Madam Chair.

Senator MIKULSKI. Senator Hutchison.

#### CONSTELLATION PROGRAM CONTRACT MODIFICATION

Senator HUTCHISON. The NASA authorization bill allows NASA to modify any contract from the Constellation program. And, of course, it seems that Orion would be the perfect candidate for such action, because the whole theme of the authorization bill is to use the technology, expertise, and experience that we've already invested in to go to the next generation of vehicle. The President himself brought back Orion last year. He wanted Orion continued. And your staff and managers agree that Orion is the reference vehicle, and easily falls within the scope of the authorization law that you have said you are following.

Yet, it doesn't seem that the contract modifications to achieve this result are happening. Do you intend to modify the current launch vehicle and Orion contracts, as directed in the authorization law, or is it just going to be strung out so that eventually it just can't be revived?

General BOLDEN. Senator, there may be no requirement for a modification on the contract to Orion. The present Orion was designed as a deep-space exploration vehicle. If it's found that—the basic information that we have at hand today says that the scope of the existing Orion contract as a deep space exploration vehicle easily maps to the scope of what we call a MPCV. It may come to the fact that it matches so well that there's no need to modify the contract.

I will tell you that, in any of the contracts that we have today, we cannot pay the amount of money that was contracted X number of years ago. So, there will be negotiations among us and all of our contractors, because we have got to get our costs down. We may have to de-scope the vehicle in some manner. Orion is the design reference vehicle for MPCVs. So, what it's called—

Senator HUTCHISON. Let me just ask you this—are you taking the previous contracts, the Constellation, which is no longer, and modifying those so that we get the next generation, the Orion, both launch and capsule—

General BOLDEN. Senator, that's our hope. We have had the lawyers, the procurement folks, everybody, look at mapping the scope of the existing contracts to what it is we want to do for an evolvable heavy lift launch vehicle and MPCV. I'll go back, because Senator Cochran mentioned a 130 metric ton vehicle—that is the ultimate—

Senator HUTCHISON. Okay.

General BOLDEN. That is where we will end up. We will end up with, no question, a 130 metric ton vehicle, because that's what we judge is needed if we're going to do a deep space exploration to asteroids and Mars and other places.

Senator HUTCHISON. Do you—

General BOLDEN. It will be an evolving program to get there, though. The first vehicle that we fly may be a 70 metric ton vehicle. But, we will eventually have 130 metric ton vehicle.

#### UTILIZATION OF THE CONSTELLATION CONTRACTS

Senator HUTCHISON. The budget request, at the \$2.8 billion level, which is level until 2016—are you telling us that you are using the previous experience and expertise from Constellation and transferring that in an expeditious and timely manner so that it is going to be done in a timely way, even with the flat line budget that you are requesting?

General BOLDEN. Senator, we are using the experience, expertise, and assets of the Constellation program to the greatest extent possible. The vehicle Orion is already in testing as an MPCV. Lockheed Martin, under its Constellation contract, which I am not allowed to terminate at my direction, the Constellation program, which does still exist—I told them that we should focus on putting our money on technology and assets that could move forward to a deep space exploration system. And that's what we're doing.

So, we are not making much progress on a heavy lift vehicle right now, because it is not clear that the Ares configuration is what you want to go with. As you saw, the design reference vehicle, for a space launch system (SLS), is a shuttle-derived system, not the Ares system. So, I know that there will be some contract mods required to go from an Ares type system to a shuttle derived system, which is the design referenced—

Senator HUTCHISON. You say that you're not able to—

General BOLDEN. Design referenced vehicle for now.

Senator HUTCHISON [continuing]. Cancel Orion, but the authorization bill vitiated the—or took the place of any previous supplemental or appropriations bills. So, the law is the authorization bill. Are you saying that you believe that you are fully utilizing the previous Constellation contracts for the next generation of vehicle, that we are not wasting money pursuing something that is now obsolete, but that you are expeditiously using that money for—

General BOLDEN. Senator—

Senator HUTCHISON [continuing]. The Orion vehicle—

General BOLDEN. Senator, we are complying with the requirements of the authorization act. But, I'm out of my league, here, so I will ask your staff and some of my folks to—I will say, my understanding is, I am still governed by the 2010 appropriations—

Senator MIKULSKI. Yes.

General BOLDEN [continuing]. Law, and that is what says I cannot cancel. I can take no action to cancel the Constellation program or to stop any expenditures on that program. What I did, though, was, I said, I want to make sure that we spend the taxpayers' money very prudently. So, in some cases, we stopped doing things that were in the Constellation program, because we knew they weren't going anywhere, things that had not begun yet. Contracts

that we hadn't even started, I said, "Okay, let's not start them. We have not funded them, we have not started them, let's just stop right there." But——

Senator MIKULSKI. Let me just cut in here.

General BOLDEN. Yes, ma'am.

Senator MIKULSKI. Senator Hutchison, Administrator Bolden is right, they are still under the excellent authorization you and Senator Nelson did, did not remove the prohibition regarding Constellation.

General BOLDEN. Yes, ma'am.

Senator MIKULSKI. However, I think if we all just sit tight, look at what we're going to be looking at as the continuing resolution moves forward now, I think that you're going to see there's some flexibility. So, if everyone could—your questions are excellent.

Senator HUTCHISON. Well, I mean, it's, they can modify and use common sense to know that the authorization bill takes the place of the original 2010 supplemental——

General BOLDEN. And, Senator, you know——

Senator HUTCHISON [continuing]. And you are going to get more help—hopefully within this week.

General BOLDEN. Senator, we've—again, I think the——

Senator HUTCHISON. But, I just, our concern is that you have not been using the capability that you have for modification to stop obsolete things, but continue using the same technology, experience, and people, moving forward toward Orion.

General BOLDEN. Senator, I have directed that we spend money on things that will be useful for the exploration system going forward. You had an inspector general report that said that we were wasting funds by spending money on obsolete Constellation contracts, and that is not the case. We took issue with that report, and we submitted our own report to you, to identify the areas where we were doing exactly what you said.

We are spending money, for example, on the Orion vehicle, because it maps well to the MPCV. We are spending money on doing some things from the Orion program—from the Constellation program—that look like they will map well to an SLS. But, we are trying not to spend money on things that will not go forward. So, we're not wasting the taxpayers' money.

Senator HUTCHISON. Well, that would be our hope. And know you know we have worked with your staff and with the Government Accountability Office (GAO) to completely clarify, going forward after this next continuing resolution, that you will have complete freedom to completely follow the Orion pursuit and the 2010 law that was passed for authorization.

Madam Chairman, I do have another question, but——

Senator MIKULSKI. Sure.

Senator HUTCHISON [continuing]. I know other people are——

Senator MIKULSKI. No, go ahead.

Senator HUTCHISON. If you have a second round, if you want to go again——

Senator MIKULSKI. Why don't you ask that question, and then we'll pick up——

Senator HUTCHISON. Okay.

Senator MIKULSKI [continuing]. If any members want a second round.

DISPOSITION OF ORBITER VEHICLES

Senator HUTCHISON. I just want to go back to the law that was passed in 2010 regarding the disposition of the orbiter vehicles. And since Senator Brown suggested that maybe the last person you talk to might be the one that you listen to—I'm kidding, but, here's what it says: that the criteria should have priority consideration given to eligible applicants that meet all the other conditions, providing for the display and maintenance at locations with the best potential value to the public, including where the location of the orbiters can advance educational opportunities in science, technology, engineering, mathematics disciplines, and with a historical relationship with either the launch, flight operations, or processing of the space shuttle orbiters or the retrieval of NASA manned space vehicles, or significant contributions to human spaceflight.

So, you know, that seems—I mean, if you go back to that priority consideration, it just seems to me that it would be very difficult to leave out both Houston and Florida. Now, I know you're getting ready to make the decision, but I think you have acknowledged that in the past, as well; I mean, when people think of our space shuttles, they think of Mission Control in Houston and the astronauts training in Houston, and they think of the cape where we launch.

So, I just want to ask you—in your determinations, you're weighting these factors—how much is the historical relationship with, as the law says, flight operations, launch, et cetera, weighing in the factors that you're putting in your decision?

General BOLDEN. Well, the 10 criteria that were used by the people that made the recommendations to me did not include the prioritization from the law. I was aware of it. And so, I think you will find when the announcement is made, that every place receiving an orbiter has a historical connection to human spaceflight. In fact, I think you will find that every one of them has a historical connection to the space shuttle.

Senator HUTCHISON. So, the other—

General BOLDEN. And that does not—

Senator HUTCHISON [continuing]. Did not put that in—

General BOLDEN. I'm not—

Senator HUTCHISON [continuing]. But the priority of the law would prevail, correct?

General BOLDEN. Yes, ma'am. We will comply fully with the law.

Senator HUTCHISON. Thank you.

Thank you, Madam Chairman.

CONTINUING RESOLUTION

Senator MIKULSKI. Mr. Administrator, I want to come back to Senator Hutchison's questions about Orion, Constellation, et cetera. Here is—my suggestion is—sometime this week, we're going to pass the final continuing resolution for this year, and you'll be scrubbing what we've done, as I said, you know, on appropriations.senate.gov, et cetera. What I am going to suggest is that your staff review the legislation and the issues raised by Senator

Hutchison, come back and brief the Senator's staff, and my own, just exactly where we are on this topic—and, of course, the Inouye and Cochran staff will always be present, at their pleasure. But, we want to make sure we all understand the same thing, and then identify if there's any further clarification language we need to do or anything else to look at this.

Does this sound like good way to go?

Senator HUTCHISON. I think——

Senator MIKULSKI. Because I think there's confusion, right this minute, between the authorization which you are mandated to do and what might be some activities we do in continuing resolution.

Senator HUTCHISON. I think, as much input as we can get and as much as we can work together, absolutely. I just believe, so much, that our goal was a balanced approach for manned spaceflight, and that we would have the commercial and the NASA experience working hand-in-hand, on a dual track, for the development of the next generation of vehicle. And that's what I'm trying to achieve. And I hope that it's what you're trying to achieve, because that's what we're trying to do in this continuing resolution and in the 2012 follow on budget. So——

Senator MIKULSKI. Well, what I'm trying to approve is the policy goals——

Senator HUTCHISON [continuing]. Any input is helpful.

General BOLDEN. Yes, ma'am.

Senator MIKULSKI [continuing]. That we have agreed upon through the authorization, with wise stewardship of Federal funds, which I think we're all committed to. And we are in an atmosphere of making every dollar count.

General BOLDEN. Yes, ma'am.

Senator MIKULSKI. So, we want every and all talent to count. I was so pleased, in your comments and in your opening statement, that you acknowledged the incredible talent that's at NASA. And I think we all share it. And a lot of people put a lot of hard work into that, so we don't want to throw out the ideas and what we can benefit from it. We don't want to waste any money through what was a good idea through a mandate once, but might no longer be a good idea.

And then we're all obsessed with jobs, Mr. Administrator. And, as the shuttle winds down, people, as you know, are deeply concerned in Florida, people at all the centers are very worried about jobs. And I think what we're looking at is, how do we continue innovation jobs in the future? But, I think every member here is concerned about jobs today. So, we need to talk about that.

#### NASA CONTRACT MANAGEMENT

But, I want to come back to a frugal Government and making dollars count. I know GAO has identified NASA contract management as they've got NASA on the high-risk list. In its annual review of large-scale NASA projects, GAO found that development costs for the 16 projects that have entered major development had grown nearly 15 percent. And that's not even with the JWST issue. Now, GAO has also told the subcommittee they're encouraged by NASA's corrective action plan to address flaws in acquisition management.

So, here is my question. You're on the high-risk list; GAO says you're making progress. Our question to you is, what are you doing to make sure that NASA contract management is back on track implementing the GAO recommendations? And also, the last part of this question is, should we be moving away from cost-plus contracting to fixed-price contracting, or is that just a cool gimmick? So, that's a lot. How do you get off the GAO high-risk list? What are you doing so that we feel confident about this? And then, if you've got thoughts, now, actually, on a new world order in contracting?

General BOLDEN. Senator, I guess the first thing I would say is, in hoping to manage expectations, I doubt that NASA will ever be off the high-risk list from GAO, because everything we do is high risk. We do dangerous stuff, we do risky things and we take big challenges that nobody else can do. So, unfortunately, we do one of a kind type programs. So, we do things that have never been done before.

However, being on the high-risk list, I can still make my program management better. We've established key decision points in every program that we do now. So, those are milestones that the program and project management have to take an assessment of: How are we meeting our cost and schedule goals? We look at life-cycle targets. We establish, at the outset of a program, how much we think it's going to cost to not just design a system, or design and build, but how much is it going to cost to operate that system?

So, when we bring you an estimate for a system today, it's a life-cycle cost estimate, as we're trying to do with JWST and others. We instituted something called the Joint Confidence Levels (JCL), where we look at cost and schedule. And unfortunately, this came about in 2009, and it was right after JWST had been baselined. But, we have two examples, in Gravity Recovery and Interior Laboratory and Juno; both of them will fly by the end of this calendar year, and they are on target in every respect, because they went through the JCL process, the total life-cycle process. We're very confident that, when we say we're going to deliver, we're going to deliver. We use independent assessments that are based on earned value, and that's what we're doing now.

We have retrained our program and project managers. We put them through a rigorous training course that they have to finish. One of the things it talks about is discipline, so if they're managing a science project, they learn how to say no when somebody says it would be a good idea to add one more experiment or a good idea to add one more instrument. So, we're going to de-scope a lot of missions that we have right now that just don't meet the smell test in this fiscally constraining time.

#### COST-PLUS CONTRACTS—FIXED-PRICE CONTRACTS

Senator MIKULSKI. Well, first of all, that's very encouraging. And we know you took the GAO flashing yellow lights very seriously.

But, what did you think about my question about moving away from cost-plus contracts to fixed-price contracts?

General BOLDEN. We would—in every—

Senator MIKULSKI. And I'm not saying I advocate that.

General BOLDEN. No, no, no, no I understand, ma'am.

Senator MIKULSKI. I'm really soliciting your views.

General BOLDEN. To the greatest extent possible, for the benefit of the Government, we would always prefer to have a fixed-price contract, where the Government signs a contract up front and follows its commitment to pay the contractor as they meet milestones. Because we do one-of-a-kind things, sometimes, when we're in a development program, or in the development phase of a program, a fixed-price contract might not be the most prudent thing to do. We may need a cost-plus contract until we get through the unknown, the uncertain part of the development cycle.

Once we do that, you will go through multiple types of contracts over the life of a program while it's being developed, where you move from a cost-plus contract during the development phase to a fixed-price contract when you go into the final phases of production.

#### CONTRACTING AND ACQUISITION

Senator MIKULSKI. Well, and it's not—today, we're not going to go into this, but we're really looking at contracting and acquisition—

General BOLDEN. Yes, ma'am.

Senator MIKULSKI [continuing]. In every one of the agencies, in our subcommittee. Not because we're going to break new ground; it must come through authorization and working with the executive branch. But, contracting, as we know it, I think, is going to be reviewed.

You know, we make these—we sign up for a contract—what you said—“one of a kind, we do what nobody else does.” But, the fact is it often takes 5 to 7 years to develop it; our mission changes or gets altered, politics change, and technology changes. And there we are, stuck with—not stuck, but in a track for a particular way and a particular cost and so on, and I'm not sure what's the best way to go.

I do believe there are lessons learned that are going on in Defense, through Secretary Gates and Dr. Carter and his initiatives. They're not all applicable, but I think we need to be able to look at it.

But, that's not for today. Today, we need to get that continuing resolution out on the Web, get it on both of our floors. Let's close out this year's 2011 appropriations and get a good direction on 2012.

General BOLDEN. Yes, ma'am.

Senator MIKULSKI. Senator Cochran, did you have any other questions, Sir?

Senator COCHRAN. I do not. Thank you, Madam Chair.

Senator MIKULSKI. Senator Hutchison, do you have any other? And then I'll—

Senator HUTCHISON. I have four questions that I'd like to submit for the record and ask that you respond to. They're not—I don't need to ask them here, but they are just general questions that I'd like to ask you—

General BOLDEN. Yes, ma'am.

Senator HUTCHISON [continuing]. To respond to, that I'll give to the Chairman.

Senator MIKULSKI. Senator Brown?

#### HUMAN-RATING REQUIREMENTS

Senator BROWN. Yes, thank you, Madam Chair. I have another couple of questions. Mr. Administrator, a study some time ago of 454 U.S. satellites found that fewer than 10 percent of spacecraft that complied with the military standard 1540B Qualification Test Program suffered failures, while more than 60 percent, almost two thirds, failed when only one-half of the qualification tests were performed. Since then, in 2009, a NASA satellite was lost, as you know. And, just a month ago, another NASA satellite was lost.

In the wake of the loss of these two, due to launch vehicle failures and the intent to utilize commercial crew in cargo launches for the ISS, my thoughts are of concern. First is for the safety of our astronauts and for the successful launch of supplies and critical hardware to orbit. What type of full-scale environmental testing is NASA requiring now or going to require of the commercial companies to achieve certification for human spaceflight? And what sort of full-scale environmental testing are we planning to qualify our own MPCV and SLS vehicle? What are you planning?

General BOLDEN. Senator, we are in the process of developing what we call human-rating standards. We actually have a series of 1,000 level NASA requirement documents that will deal with what stipulations a contractor has to meet in order to qualify to carry either our cargo or our crew members. As you said, my number one objective is the safety of our crews. So, we will not certify an industrial partner to carry a crew unless we're satisfied that they have met all of our safety requirements.

If I look at Orion, almost all vehicles go through thermal vacuum testing, they go through vibration testing, they go through radiation testing to make sure they're radiation-hardened and the like. So, any test that would have been required of, or will be required of, my MPCV, a commercial vendor will have to pass the same test or demonstrate that they have passed a like test, before we will put an astronaut on them, because we've got to be sure that they're safe.

#### PLUMBROOK TESTING FACILITY

Senator BROWN. What role do you envision Plum Brook playing in those testing of commercial and our vehicles?

General BOLDEN. What would—I'm sorry?

Senator BROWN. What role do you envision Plum Brook playing in that?

General BOLDEN. Well, it depends on the vehicle, itself, or the capability of the developer, the capability of the industry partner, to find another facility. I think you know, what Ray Lugo is doing as the center director at Glenn, is going out to industry and advertising the capabilities that we have at Plum Brook, just as Patrick Sherman is doing at Stennis. We are actively going out to industry and saying, "Hey, we have the best facilities in the world. Please use our facilities." I envision that we may have some of those contractors wanting to bring their crew vehicles through Plum Brook for testing. It is the best facility that NASA has. I'm certain it's better than anything else they can come up with.



The big thing we're trying to do is help them with their costs. Every facility that they don't have to build means more money to their shareholders. We promise that we will give them a reasonable price, but we do have to get back full value for the taxpayer. We don't have any sales.

## GLENN RESEARCH CENTER

Senator BROWN. Right. Well let me ask one more question, Madam Chair.

NASA Glenn has been leading the work for the Orion service module for Ares I upper stage electrical avionics and thrust vector control systems in the Ares V payload fairing. The work performed on these vehicles directly translates to the MPCV, to the MPCV, and the SLS as you know. In what specific way do you plan on utilizing NASA Glenn's heritage and proven expertise in these new MPCV programs and in SLS programs?

General BOLDEN. I will have Ray Lugo get in touch with you, but I would venture to say, any work that Glenn was doing with Orion will be the same work that Glenn continues to do with the MPCV, whatever we call it. You know, they are small propulsion. They do ion engines, electric engines, and the like. So, those types of things that they were responsible for in the Constellation program, they will continue to be responsible for in any program that we do, going forward.

If I go back to something that the chair mentioned: it is my hope that, within the week, we will be able to bring to the staff a report that I have received, that my senior management has been receiving incrementally now, on the MPCV—the plan for the plan, if you will—on the MPCV, the SLS, and 21st century launch complex. We have done incredible work. We have not been standing still. We've been doing this for almost a year now, and this is what supported our making the decision on the design reference vehicles. But, we're now ready to bring that to the committees so that you can get incremental looks at how we're progressing, so that you see that we are not stalling, we are not standing by, we're not wasting time nor money, that we have a plan, and that, if we are able to follow that plan, and that plan is sufficiently supported by budgets that we say we need, we will develop the best heavy lift launch system they have ever had and a deep space exploration vehicle that will do the things that we've all dreamed about up until now, but nobody's had the courage to do. So, we are going to do that. It's our desire to bring those reports to this subcommittee, to the staffs, at increments as we go along.

Senator BROWN. Thank you, Mr. Chairman.

Thank you.

## STS-134 SHUTTLE FLIGHT MISSION

Senator MIKULSKI. Mr. Administrator, we know, in 2 weeks, there is going to be a historic flight. And one of our last shuttles will go into space. We know that Captain Mark Kelly will be leading that effort. And we hope, with God's good grace and American medical care, that Congresswoman Giffords can see this. I think the entire subcommittee, and really the entire Senate, really wish-

es them, through you, Godspeed. And we really hope that NASA continues to do what it does best. So, good luck to them. And—

General BOLDEN. Thank you.

Senator MIKULSKI [continuing]. May the force be with them.

General BOLDEN. We really appreciate it.

Senator HUTCHISON. Madam Chairman, could I add to that and say: I, too, am so looking forward to this, because it has a very poignant side to it, because of Captain Kelly and his wife, who we all are pulling so hard for to be able to come.

But, also the spectrometer going up is such a big deal. This is the last major big piece of equipment that will be going, that has such enormous potential for the look at dark matter energy. And it was before one of the previous NASA Administrators, who said Dr. Ting, from MIT—who insisted that this was the one thing that we could do in microgravity that would be so important in the energy field. And Dr. Ting is a Nobel laureate, and we listened to him, and now his dream is becoming reality in this launch. So, it has so many important—

General BOLDEN. Yes, ma'am.

Senator HUTCHISON [continuing]. Historic and significant aspects to it. And I'm very excited about it as well, and looking forward to having that piece put in. And then our last launch on need mission, that is now going to be in June, we're very excited about doing the very last payload lifting that we're going to need to do until—we don't have an American capability, but we all want to—

Senator MIKULSKI. No. But, we will.

General BOLDEN. We'll get it to you soon.

Senator, may I make one comment? Because I—just to help people put things into perspective.

STS-134 is an incredibly critical mission. It's high profile. It's everything. I wear a bracelet for Gabby, because she's a personal friend. My number one objective, my number one goal, is making sure that our astronauts are safe. So, with all the high profile and everything, I want to keep all the pressure away from Captain Mark Kelly.

Senator MIKULSKI. Right.

General BOLDEN. Captain Mark Kelly is one incredible human being. He is also one incredible professional. He is a person who has garnered the respect and admiration of his crew and everybody in the astronaut office. So, I want everybody to understand, Captain Mark Kelly is focused on flying, and he is focused on making sure that his crew stays safe and carries out the mission, to the best of their ability. That's my goal, to make sure that I facilitate their success in doing that. I will try my best to shield them from everything else that's coming.

It is an incredibly high-profile mission. But, we're going to do nothing any different than we did for STS-133 or STS-125 or anything else. If we have a problem, we won't go. So, I just want everybody to understand there's not going to be any special anything for STS-134, other than, it will be incredibly special to have Gabby at launch, because, to me, it represents the triumph of good over evil. So, I think it's incredible for the country, if she's able to make it there.

Senator MIKULSKI. Well, we share your emotion, we share your passion, and we share the hopes and dreams for this mission.

General BOLDEN. Thank you.

#### ADDITIONAL COMMITTEE QUESTIONS

Senator MIKULSKI. If there are no further questions—Senators may submit additional questions for the subcommittee’s official record. We request that NASA 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 DIANNE FEINSTEIN

##### LAUNCH CAPABILITY AND SAFETY

*Question.* I share your belief that we must engage our commercial space partners if we are to have a sustainable, fiscally responsible human space flight program in the years to come. This is especially true when we look at the costs and capabilities of the commercial and Federal rockets that were destined for low-Earth orbit (LEO).

What has been the total cost to the taxpayer to build the Falcon 9 (SpaceX), and how long did it take for the rocket to have a successful launch?

What was the total cost to the taxpayer for the Constellation program and how long did it take to achieve a successful launch?

*Answer.* The National Aeronautics and Space Administration (NASA) signed a Space Act Agreement with SpaceX for commercial cargo development services in August 2006 as part of the agency’s Commercial Orbital Transportation Services (COTS) projects. The agreement with SpaceX established a series of technical milestones that would be paid by NASA once successfully achieved.

In June 2010, the company’s first maiden flight of its Falcon 9 launch vehicle took place. (NOTE.—This flight was not covered by the COTS project milestones. The first demonstration flight under the COTS agreement with SpaceX took place in December 2010.) Therefore, the first maiden flight took place about 3 years after NASA signed an agreement with the company, with the presumption that SpaceX likely performed some initial design work on the Falcon 9 prior to the signing of the SAA with NASA.

With regard to taxpayer investment in the Falcon 9, SpaceX has multiple sources of cash that fund its Falcon 9 and Dragon development activities. These sources include payments from commercial customers, other Government agencies, other NASA programs, private equity financing, bank lines of credit, interest income, and cash from company reserves.

Although NASA does not have specific insight into the details of how NASA funds are being applied in SpaceX’s company accounting system, in general, NASA’s COTS agreement with SpaceX was specifically designed to help the company develop, demonstrate, and test the Falcon 9/Dragon. As of mid-May, NASA had paid SpaceX \$298 million out of a potential \$396 million for completing 25 of 40 negotiated SAA COTS milestones. Therefore, NASA is pleased that its investment to date has successfully helped support the development of both the Falcon 9 launch vehicle and the Dragon spacecraft and the ground infrastructure required for launch.

Additionally, it should be noted that NASA’s International Space Station (ISS) program has made payments to SpaceX totaling \$466 million for work performed under the Commercial Resupply Services Contract with SpaceX, and also that NASA’s Launch Services Program also has made payments to SpaceX. Therefore, it is possible and likely that some of these NASA funds also have been used for Falcon 9 development as well.

As of April 2011, NASA had spent \$12.9 billion on Constellation which includes funding for labor, infrastructure, acquisition, and development testing of hardware elements and software systems for all of the Constellation Projects Ares I and Ares V, Orion, Ground Operations, Mission Operations, EVA, etc. Therefore, drawing a direct comparison between SpaceX and Constellation’s costs is a difficult task for several reasons: First, the SpaceX and Constellation transportation system are designed to support very different missions. The currently negotiated SpaceX milestones relate only to cargo transportation capability to the ISS and not crew transportation, whereas the Constellation architecture was being designed to provide crew and limited cargo transportation to the ISS, the Moon, and beyond. Therefore,

the Constellation system was being designed as a complete human launch capability (ground ops, launch vehicle, crew capsule, etc.) Second, SpaceX and NASA use very different business models with regard to personnel, infrastructure etc. For example, NASA was utilizing heritage hardware and infrastructure to build the Constellation architecture, as directed by law, and the agency also was developing a transportation architecture that was designed to employ shuttle contractors to a great extent, thereby mitigating contractor workforce loss following the retirement of the shuttle.

With regard to launches, the Constellation program, which was formally initiated in late 2005, did not achieve an orbital flight before it was canceled in 2011, but it had an active test program and had completed two key test flights prior to its termination, approved first by the NASA Authorization Act of 2010—the Ares I–X test flight in October 2009 and the Pad Abort I test for the Orion CEV on May 6, 2010.

*Question.* If the Heavy Lift Vehicle and MPCV were completed this year, could you send astronauts on missions to Mars? To Lagrange Points? Would these astronauts be safe from harmful radiation on a mission of this length?

*Answer.* NASA does not anticipate being able to conduct a Mars mission until at earliest the 2030 timeframe with the threat of deep-space radiation for crews during sustained human exploration beyond LEO needing to be resolved before such a mission could take place. NASA is continuing to conduct radiation research (both on the ground, and in-space aboard the ISS) and architecture and engineering solutions are aimed at developing the solutions and countermeasures necessary to safely execute these missions. The radiation mitigation solutions are planned and phased, much like the other key challenge areas, to produce the necessary capabilities when they are needed in the capability driven framework. A Mars mission duration is the horizon goal given the extended time period, so it is accordingly phased. However, a Lagrange Point (Earth Moon L-1 for example) is much closer and is viable given the current exposure levels and state of the art in technology/science. Radiation will remain an important enabling area for long-duration human spaceflight beyond LEO.

#### CONSTELLATION FUNDING

*Question.* Administrator Bolden, I recognize that we are here today to talk about the fiscal year 2012 budget, but there is still pressing work that must be done to complete the fiscal year 2011 spending plan. One issue I must raise is that the past six continuing resolutions have included a provision which prohibits your agency from cancelling any contracts related to the Constellation program. This program was terminated by both the Congress and the administration, but under these bills the NASA Inspector General says that the American people could be on the hook for \$575 million in unnecessary costs.

I want to give you an opportunity to share your thoughts with this subcommittee on how we can eliminate this waste, and where we should redirect this substantial amount of funding?

*Answer.* Over the last year, due to provisions of the fiscal year 2010 Consolidated Appropriations Act (Public Law, 111–117)—restrictions that have since been rescinded in the fiscal year 2011 Full-Year Continuing Appropriations Act, NASA was prohibited from terminating any Constellation contracts. As such, NASA continued to implement the Constellation Program and associated projects, while at the same time prioritizing Constellation funding on work that was most related to the SLS and MPCV, thus maximizing use of taxpayer dollars.

When the inspector general's letter was issued on February 2, 2011, NASA agreed with its conclusion that said the Congress should take action as soon as possible to remove the limitations in the fiscal year 2010 Consolidated Appropriations Act regarding the Constellation architecture; such action by the Congress would enable NASA to redirect funds more efficiently to the SLS and MPCV. Additionally, we were pleased that the inspector general had recognized that: "NASA has taken steps to concentrate its spending on those aspects of the Constellation Program it believes many have future applicability, and that these efforts have helped to reduce the potential inefficient use of taxpayer dollars."

The attached white paper was developed in February 2011 to respond to queries from Members and staff about the inspector general letter prior to NASA having the authority to terminate unnecessary Constellation work.

NASA is currently developing a plan for the orderly close out of Constellation activities, with the goal of completing transition and close out of Constellation early this fall.

DEFORMATION, ECOSYSTEM, STRUCTURE AND DYNAMICS OF ICE (DESDynI) SATELLITE PROGRAM

*Question.* I was deeply troubled to learn that the fiscal year 2012 budget provides no funding for the DESDynI (pronounced “destiny”) satellite program. This satellite would have provided NASA with unparalleled ability to monitor ground motion, and that capacity is critical to improving our understanding of earthquakes. This is not just my opinion, but the opinion of the National Academy of Sciences (NAS).

If the earthquake in Japan taught us any lesson, it is that we do not understand these events nearly as well as we once thought. So I question if this is an appropriate time to cancel the DESDynI program.

Administrator Bolden, how do you rationalize cutting this program given its high ranking in the NAS Decadal Survey and the clear need to improve our understanding of earthquakes?

*Answer.* NASA’s Earth science program studies a broad range of phenomena related to climate, weather, and natural hazards, including earthquakes. NASA strives to maintain a balanced portfolio across these areas that is responsive to national needs, and informed by recommendations from the National Research Council (NRC). To that end, NASA continues with concept design work on the DESDynI mission, a tier 1 recommendation from the 2007 National Research Council’s Earth Science Decadal Survey.

In March 2009, after more than a year of collaborative study involving the engineering and scientific research communities, NASA made the decision to implement DESDynI as a two-spacecraft mission (one carrying a radar payload, and one a lidar, both in orbit at the same time). This approach allowed the mission to provide maximum science information in support of the solid Earth, ecosystems, and polar ice communities. This approach was reviewed positively (for science content/value) by the Earth Science Subcommittee of the NASA Advisory Council. In the context of the President’s fiscal year 2011 budget request and the 2010 NASA Climate Initiative Plan, DESDynI was being studied and activities were ramping up to support a launch in late 2017. The Climate Initiative Plan also includes launches of Aquarius in June 2011, the Orbiting Carbon Observatory-2 in February 2013, the Soil Moisture/Active-Passive mission in late 2014, the Orbiting Carbon Observatory-3 as an instrument of opportunity for flight in 2015, the Gravity Recovery and Climate Experiment (GRACE) Follow-On mission in 2016, and the Surface Water-Ocean Topography and Active Sensing of CO<sub>2</sub> Emissions over Nights, Days, and Seasons missions in 2019–2020. These other elements of the plan are funded in the fiscal year 2012 request, along with research activities in the Earth science program’s Earth surface and interior focus area. These include crustal dynamics research conducted in coordination with United States Geological Survey to improve understanding of the forces that lead to earthquakes, volcanoes, and landslides.

By early calendar year 2011, the two-spacecraft DESDynI mission is in Pre-Formulation and has successfully passed its formal Mission Concept Review.

However, given the more constrained fiscal environment, NASA will be unable to move as aggressively as planned in the fiscal year 2011 request to manifest DESDynI. The fiscal year 2012 budget request provides sufficient resources to engage potential international partners on the radar mission, and NASA will evaluate whether contributions from partners can allow development of the radar mission alone for launch near the end of the decade within the overall Earth Science Division budget constraints. In addition, during fiscal year 2011–2012, NASA will work to identify an international contribution of the lidar portion of the mission.

NASA CENTERS

*Question.* I was greatly concerned to hear speculation about the closure of some small NASA Centers in response to budget cuts. NASA has three centers in California—Ames Research Center, Dryden Flight Research Center and the Jet Propulsion Lab—which provide more than 7,000 highly skilled, high-salary jobs in my State. These Centers also provide unique capabilities such as wind tunnels and arc jet testing for the aerospace industry in my State.

The prior NASA Administrator made a commitment to “10 healthy NASA centers” including those in California. Have you made or will you make that same commitment?

*Answer.* NASA has remained committed to the sustainment of its current complement of nine Centers and the Jet Propulsion Laboratory, each carrying out its mission in a well-functioning, effective manner. NASA is working to achieve a balanced portfolio, with each Center enjoying a vibrant engagement in its distinct areas of innovation and strength to support the agency’s missions in science, exploration, aeronautics, and technology development.

Prior to enactment on April 15, 2011, of the fiscal year 2011 Full-Year Continuing Appropriations Act (Public Law 112-10), NASA leadership stated before the Congress that the \$298 million reduction to NASA's Cross-agency budget, proposed in H.R. 1, would have an operational impact to the agency equivalent to the shuttering of two small NASA Centers. This reduction did not pass and none of the NASA Centers were closed.

In accordance with direction provided in the NASA Authorization Act of 2010 (Public Law 111-267), NASA is presently engaged in a careful examination of the agency's structure, organization and institutional assets, with the goal of identifying a strategy to evolve toward the most-efficient retention, sizing and distribution of facilities, laboratories, test capabilities and other infrastructure, consistent with NASA's missions and goals. The assessment of NASA's real property footprint at all of its Centers and facilities is also responsive to administration direction to executive departments and agencies regarding the disposal of unneeded and duplicative Federal real estate. As directed by Public Law 111-267, NASA will provide a report to the Congress on the results of its comprehensive study in fall 2011.

QUESTIONS SUBMITTED BY SENATOR MARK PRYOR

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) EDUCATION

*Question.* NASA's fiscal year 2012 funding request for education totals \$138.4 million. This request is \$41.6 million less than enacted fiscal year 2010 levels and \$7.4 million less than the authorized levels for fiscal year 2012.

The NASA Space Grant and Experimental Program to Stimulate Competitive Research (EPSCoR) programs are particularly impacted. These science, technology, engineering, and mathematics (STEM) programs help a large number of students and historically have had a good return on NASA's investment. The NASA Authorization Act authorized space grant at \$45.6 million and EPSCoR at \$25 million for fiscal year 2012.

Why is NASA proposing an almost 50 percent cut in combined funding for these two programs?

*Answer.* NASA's Office of Education will focus its funds on existing commitments and grant renewals, continuation of scholarships, internships and fellowships, and activities that directly serve educators, students, and the general public. The decrease will be managed by reducing the number of new grant awards and seeking operational efficiencies (e.g., increased use of education technologies, reduction in printing/warehousing/shipping costs, reducing travel, coordinating solicitations).

NASA's requests for Space Grant and EPSCoR funding have been relatively consistent for several years. The President's budget request for fiscal year 2012 reflects the need to develop a balanced education portfolio for the agency that supports its efforts in higher education, K-12 student and teacher programs, and informal education.

[Dollars in millions]

Program	Fiscal year 2010 PBR <sup>1</sup>	Fiscal year 2011 PBR	Fiscal year 2012 PBR
Space grant .....	28.4	27.7	26.5
EPSCoR .....	10	9.3	9.1

<sup>1</sup> In fiscal year 2010, NASA's Office of Education was appropriated additional funds to support increases to the budgets of these two projects.

We will make internal adjustments to the fiscal year 2011 Education portfolio in order to comply with the law as mandated.

*Question.* What is NASA's commitment to Space Grant and EPSCoR?

*Answer.* NASA remains committed to both Space Grant and EPSCoR. NASA initiated the National Space Grant College and Fellowship Program (Space Grant) in fiscal year 1989. Space Grant is a national network that expands opportunities for students, educators, and faculty to understand and participate in NASA's aeronautics and space projects. Space Grant is now composed of 52 consortia in 50 States, the District of Columbia, and the Commonwealth of Puerto Rico. Space Grant leverages the resources of more than 900 affiliates from universities, colleges, industry, museums, science centers, and State and local agencies. Space Grant supports and enhances science and engineering education and research efforts in higher education, K-12, and informal education. NASA establishes training grants with each consortium, aligning consortium work with the education priorities and the annual performance goals of the agency.

EPSCoR develops academic research enterprises that are long-term, self-sustaining, and nationally competitive by supporting States with modest research infrastructure so that they become more competitive in attracting non-EPSCoR funding. Funding is competitively awarded to lead academic institutions (in eligible States) to foster research and technology development opportunities for faculty and research teams. NASA actively seeks to integrate the research conducted by EPSCoR jurisdictions with the scientific and technical priorities being pursued by the agency. These scientific and technical priorities are established and evaluated by the agency's Office of the Chief Technologist and Mission Directorates. NASA's commitment to EPSCoR will be strengthened through alignment with the agency's new Space Technology Roadmaps.

#### TECHNOLOGY DEVELOPMENT PROGRAM

*Question.* In the late 1990s and early 2000s, NASA had a significant emphasis on developing game-changing technologies. That era brought such developments as National Aerospace Plane (NASP), X-33 and X-34 experimental Single Stage to Orbit (SSTO) Vehicles, and RS-84 LOX/RP engine, to name a few. These programs resulted in NASA spending billions of dollars without a single successful development. In the current budget submission you have a similar Technology Development Program with more than \$1 billion of funding.

What is different in NASA's current Technology Development Program that gives you confidence it is not a repeat of past failures?

*Answer.* During SSTO initiatives, NASA learned that developing new launch vehicles using unproven subsystems will increase the overall risk of the mission. Additionally, when major technology development embedded within the development of a new vehicle, the schedule is longer and the cost is greater. This conclusion was outlined in March 2009 testimony before the House Science Subcommittee by a Government Accountability Office (GAO) representative who described GAO's analysis of 13 NASA flight projects in the implementation phase. In this project phase, systems design is completed, scientific instruments are integrated, and the flight system is fabricated and prepared for launch. Prior to entering the implementation phase, it is standard NASA practice to have finalized requirements, concepts and technologies and establish a baseline project plan. Of the 13 NASA projects in the implementation phase assessed by the GAO, 10 projects experienced significant cost and/or schedule growth from their project baselines. Of the five causes of cost and/or schedule growth cited by the GAO, two issues pertained directly to technology development risk: technology immaturity and modifications required to previously considered heritage items. The common symptom of these two causes is a technological readiness considerably below that estimated by the project. The GAO report concludes, "Simply put, projects that start with mature technologies experience less cost growth than those that start with immature technologies."

The Space Technology Program was formulated to mature the technologies required for NASA's future missions outside the major vehicle development programs. By advancing technology prior to vehicle development, space technology allows for NASA's future projects to take an acceptable level of risk, resulting in a more stable portfolio. Space technology is not developing vehicles as the former Office of Aerospace Technology (late 1990s and early 2000s) attempted. In contrast to the NASP, X-33 and X-34 programs, space technology's approach is similar to the approach NASA used in the Apollo era where it was conceiving Apollo technologies while developing/testing the Gemini hardware and flying the Mercury missions. NASA space technology funding will be spent to advance and mature critical subsystems through concept, design and testing. When proven, these technologies will be baselined for NASA's future missions, enabling greater capability and reducing the risk and cost of NASA's future missions.

As a specific example, consider the X-33. In this program, NASA attempted to test multiple conceptual technologies within a new vehicle design. One of these technologies was a conformal, composite, cryogenic tank that would reduce the amount of fuel required to reach orbit, thus reducing the cost per launch. Unfortunately, the X-33 composite cryotank had manufacturing challenges that delayed the rest of the X-33 test program, increasing program cost significantly. NASA chose to cancel the X-33 program, in part because the design and manufacturing process of the cryotank prevented this technology from being matured to flight readiness status. In today's space technology model, NASA would focus on maturation of the composite cryotank and other technologies before trying to incorporate them into the X-33 design. This approach prevents a single technology from holding up an entire integrated vehicle. Since the cancellation of X-33, NASA has had some success in composite cryotank tests conducted at the Marshall Spaceflight Center (in 2004). In-

dustry and academia have also made measurable progress in separate efforts. Unfortunately, due to limited and uncoordinated investments, NASA and the aerospace industry have not been able to fully mature this important technology in time to incorporate into current vehicle plans. Through the Space Technology Program, the agency will invest in this critical technology so that when it is mature it may be incorporated into future missions including future incarnations of the Space Launch System (SLS) and planetary landers.

*Question.* Please describe exactly what projects will be pursued under this program and why they are a vital need for taxpayer expenditures?

*Answer.* The fiscal year 2012 budget request for space technology provides a modest increase above the level projected in the NASA Authorization Act of 2010, consistent with the administration's priority on Federal investments in research, technology, and innovation across the Nation. These investments are critical for the agency's future, our Nation's future in space, and our Nation's technological leadership position in the world. Expanding this program is not only required to enable NASA's future missions in science and exploration, but doing so will build our Nation's economic competitiveness and create high-tech jobs. As noted by the National Research Council in numerous reports, NASA needs to make maturing transformative, high-payoff technologies a high priority if we are to see reductions in the cost and risk of the agency's future missions. While the request is above the authorized level for fiscal year 2012, NASA believes this amount is critical, and this is a top agency priority.

Within the fiscal year 2012 budget request, NASA has integrated management responsibility of two technology development programs included in the NASA Authorization Act under the Office of the Chief Technologist. In fiscal year 2012, funding for the Space Technology Program is proposed at approximately 5 percent of the administration's \$18.7 billion request for NASA. As defined in the fiscal year 2012 budget request, the Space Technology Program consists of three major components, two of which are well-established. These three components, as listed in Table 1, are:

- the Small Business Innovative Research (SBIR)/Small Business Technology Transfer (STTR) program and related technology transfer and commercialization activities (fiscal year 2012 request: \$284 million) funded in fiscal year 2010 and earlier through NASA's Innovative Partnership Program;
- a majority of the Exploration Technology Development and Demonstration activities (fiscal year 2012 request: \$310 million) funded in fiscal year 2011 and earlier in the Exploration Systems Mission Directorate (ESMD); and
- the Crosscutting Space Technology Development activities, initially proposed as part of the President's fiscal year 2011 request (fiscal year 2012 request: \$430 million). All components of space technology have been carefully formulated over the past year, and have deep roots in technology development approaches NASA has successfully pursued in previous years.

TRACE OF FY12 SPACE TECHNOLOGY CONTENT: (\$ in millions and in full cost view)	FY 2010 Enacted	FY 2010 Actual	FY 2011 Authorization Act	FY 2011 Auth Act (as FY12 Structure)	FY 2012 Authorization Act	FY 2012 Auth Act (as FY12 structure)	FY 2012 PBR
<b>TOTAL</b>	327.2	275.2	600.0	512.0	923.3	796.0	1024.2
<b>Innovative Partnerships Program</b>	175.2	123.8 <sup>Ⓐ</sup>	350.0	175.2	486.0	175.2	284.0
<b>Crosscutting Space Technology Development</b>	0.0	0.0		174.8		310.8	430.2
<b>Exploration Technology Development</b>	152.0	151.4	250.0	162.0	437.3	310.0	310.0
	87.6 <sup>Ⓒ</sup>	87.2 <sup>Ⓒ</sup>		88.0 <sup>Ⓒ</sup>		127.3 <sup>Ⓒ</sup>	127.3 <sup>Ⓒ</sup>

**NOTES:**

Ⓐ Space Technology content as defined in President's FY 2012 request (inclusive of the SBIR/STTR program and related innovation, technology transfer and commercialization activities funded in FY 2010 through NASA's Innovative Partnership Program, a majority of the Exploration Technology Development and Demonstration activities funded in FY 2010 in the Exploration Systems Mission Directorate, and the Crosscutting Space Technology Development activities initially proposed as part of the President's FY 2011 budget request).

Ⓑ IPP merged into Space Technology in FY 2011. IPP FY 2010 Enacted levels are shown in FY 2011 and FY 2012 Auth Act split.

Ⓒ Sum of FY 2010 EDDP and planned FY 2011 EDDO efforts that are planned to move to Space Technology in FY 2012.

Ⓓ AES content requested within ESMD in FY 2012; not included in Space Technology total. Only includes Technology Infusion Projects; ISS Research (\$46.6M) not included in this total.

Ⓔ SBIR/STTR transfer (\$51.7M) to SMD with planned payback due to one year appropriated funds.

*Table 1.—Fiscal year 2012 space technology content integrates the long-standing efforts of NASA's Innovative Partnership Program, Exploration Technology Development Program, and the crosscutting space technology activities first proposed in NASA's fiscal year 2011 budget request.*



Relative to fiscal year 2010 enacted levels, an increase of \$109 million is requested for the SBIR/STTR and related innovation, technology transfer, and commercialization activities formerly associated with the NASA Innovative Partnership Program. Small businesses have generated 64 percent of net new jobs over the past 15 years. A significant fraction of this increase is targeted for the small business community, directly fueling the number of high-tech jobs that small businesses create in America. Additional funds are also planned to expand NASA's efforts in transferring and commercializing NASA-developed technologies into the private sector.

Relative to fiscal year 2010 enacted levels, an increase of \$158 million is proposed for Exploration Technology Development activities formerly budgeted within ESMD. This increase is consistent with the authorization act. This component of space technology funds activities largely at the NASA Centers that are critically focused on NASA's beyond low-Earth orbit (LEO) exploration priorities. In order to meet the exploration goals established in the NASA Authorization Act of 2010, NASA needs to develop the mission-specific capabilities required for its future exploration missions. Exploration technology development investments will benefit future adaptations of the Multi Purpose Crew Vehicle (MPCV) and the SLS and form the basis for the in-space transportation systems required for deep space exploration.

Relative to the NASA Authorization Act of 2010, an increase of \$120 million is requested for NASA's Crosscutting Space Technology Development activities. Focused on broadly applicable, high-payoff technology that industry cannot tackle today, NASA's Crosscutting Space Technology Development activities mature the technology required for NASA's future missions in science and exploration while proving the capabilities and lowering the cost of other Government agency and commercial space activities. As evidenced by more than 1,400 Requests for Information responses, more than 300 external participants at the July 2010 Industry Day Forum, and a relatively large number of letters and opinion editorials, there is a large community of innovators throughout the Nation interested in working with NASA on Crosscutting Space Technology Development activities. Consistent with the NASA Authorization Act of 2010, these efforts are guided by a strategic set of technology roadmaps, available today in draft form and presently under review by the National Research Council (NRC). The NRC's final report from external review of the draft NASA Space Technology Roadmaps is scheduled for release in January 2012 (with a preliminary report scheduled for September 2011) in time to guide the fiscal year 2012 space technology competition-based acquisition process.

NASA has identified a series of ongoing, high-priority, mission-focused space flight technology development activities, led by the NASA Centers, to address known capability gaps and deficiencies to achieve the science and exploration goals set by the Congress in the NASA Authorization Act of 2010. Each of these technologies, once matured, will reduce mission cost and risk. As an example, in fiscal year 2011, the following ongoing technology activities have been prioritized:

*Spacecraft Servicing.*—Continuing the ongoing development of robotic satellite servicing technologies such as end effectors, refueling systems, autonomous rendezvous and docking sensors and algorithms and tools, enabling robotic and human exploration mission architectures and demonstrating the commercial utility for servicing satellites.

*Optical Communications.*—Continuing the fiscal year 2010 effort, an advanced ground receiver and designs for flight hardware capable of providing a high-bandwidth downlink will be developed, enabling future beyond LEO exploration.

*Composite Cryotanks.*—Continuing fiscal year 2010 efforts, large-scale (5 meters and up to 10 meters in diameter) composite cryogenic propellant tanks will be developed and tested, decreasing the mass of future enhancements to the SLS and other in-space systems (e.g., lander systems).

*Inflatable Aerodynamic Decelerators.*—Continuing fiscal year 2010 efforts, develop and demonstrate hypersonic inflatable aeroshell technology suitable for an ISS down-mass capability and deep space exploration, and supersonic decelerator technology suitable for future Mars missions.

*Space Robotics, Propulsion, and Autonomous Systems.*—Continuing fiscal year 2010 efforts, advance robotics technology amplifying human productivity and the effectiveness of human-robot teams, test nano-propellants, and develop advanced propulsion technologies increasing the performance of future launch and in-space systems, and mature autonomous space system capabilities.

*Space Flight Technology ISS Demonstrations.*—Microgravity fluid dynamics and materials characterization testing on the ISS providing data to aid in the design of propellant management devices and structures of future in-space systems.

*Commercial Reusable Suborbital Research.*—Continuing fiscal year 2010 efforts, flight demonstration tests of at least two commercial reusable suborbital vehicles and development and/or integration of at least four suborbital technology payloads to stimulate the emerging commercial reusable suborbital research industry.

These ongoing activities as well as those projects currently managed by ESMD in exploration technology will continue to be funded in fiscal year 2012 through space technology. In addition to these agency priorities, NASA will competitively award, high-priority space flight technology development activities that engage the NASA Centers, industry and academia in reducing the risk and/or cost of NASA's future space flight missions. A limited number of competitively selected awards are anticipated in fiscal year 2011 for the Space Technology Research Fellowships, NASA Innovative Advanced Concepts, Game Changing Development and Technology Demonstration Missions solicitations. Spaceflight technology development projects focus upon key agency technology priorities identified in recent human spaceflight mission architecture studies, benefiting future enhancements of the SLS and MPCV and forming the basis for some of the additional spaceflight systems required for beyond LEO exploration. In some cases, these same activities will mature capabilities that are also required for future Science missions identified in NRC decadal surveys. These activities have deep roots in technology development approaches NASA has successfully pursued in previous years.

*Question.* In the current time of needed spending cuts and fiscal constraint, does it make financial sense to spend more than \$1 billion on far-in-the-future projects that may never be realized or could that money be better spent on current programs with tight budgets?

*Answer.* Space technology is the central NASA contribution to the President's revitalized research, technology, and innovation agenda for the Nation. These investments will produce cutting edge technological advances within 1–3 years, making dramatic improvements in technology areas such as propulsion, cryogenic storage, closed-loop life support, and avionics that could reduce the cost of future space missions by up to 80 percent. As an integral component of its Space Technology efforts, NASA plans to invest in small business innovative research and technology development—money that will directly fuel the number of jobs that small businesses create in America. Small businesses have generated 64 percent of net new jobs over the past 15 years, leading the innovation push into the future.

Not only do these technologies benefit NASA's line of work, but NASA's research and development has also been shown to stimulate new business lines that create future jobs. This is validated in "Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future" by the Committee on Prosperity in the Global Economy of The 21st Century, chaired by Norman R. Augustine. NASA has provided numerous achievements in the fields of aeronautics, electronics, computers, aerospace systems, health technology, imaging detectors, telescopes, and high-performance materials, for example. These technologies for NASA's science and engineering achievements are transferred into the Nation's economy through industries that apply them in innovative ways. The Augustine Committee reported that research and development investments, like those that NASA's missions require, have "social rates of return from 20–100 percent, with an average of 50 percent."

We recognize the important work the Congress is undertaking to simultaneously balance the Nation's checkbook, stimulate job growth and maintain our global competitiveness. The President's fiscal year 2012 budget request for space technology is consistent with NASA Authorization Act of 2010 and the administration's priorities on Federal investments in research, technology and innovation across the Nation. A renewed technology emphasis balances NASA's long-standing core competencies of research and technology, spaceflight hardware development, and mission operations. With commitment from the Congress, the investments outlined in NASA's fiscal year 2012 budget request for space technology could yield many thousands of jobs in this country making this an ideal time to increase our investment in these activities. The creation of new products and services, new business and industries, and high-quality, sustainable jobs will attract bright minds into educational and career paths in STEM, adding to the Nation's technological leadership and leaving a lasting imprint on the economic, national security, and geopolitical landscape. Through these technological investments, NASA and our Nation will remain at the cutting-edge while advancing technology components NASA needs to reach our exploration objectives.

## QUESTIONS SUBMITTED BY SENATOR SHERROD BROWN

## UNPUBLISHED TEST REQUIREMENTS DOCUMENT

*Question.* In the Commercial Crew Transportation System Certification Requirements for National Aeronautics and Space Administration (NASA) Low Earth Orbit Missions (ESMD-CCTSCR-12.10) document (dated December 2010), you cite MIL-STD-1540E, "Test Requirements for Launch, Upper-Stage, and Space Vehicles" as a fully applicable document. As of this time, MIL-STD-1540 rev E has not been published. How is an unpublished document capable of being fully applicable to Human Rating Standards? In the absence of the actual document, to what standard are the CCDev/CCDev2-developed vehicles being held?

*Answer.* The National Aeronautics and Space Administration (NASA) expected the MIL STD-1540 E to be released in December 2010 which is why it was included in ESMD-CCTSCR-12.10. NASA has since evaluated the SMC Standard SMC-S-016 (2008) and found this published document to be a more comprehensive test document that covers the content of MIL STD-1540 E.

ESMD-CCTSCR-12.10 is planned to be revised later this year. The revision will reflect SMC-S-016 (2008). References to MIL-STD-1540E will be deleted. NASA draft requirements documents were provided to CCDev/CCDev2 participants for consideration in developing their system concepts; however, NASA is not imposing requirements or standards on participants as part of the CCDev/CCDev2 activity.

## FEASIBILITY OF DEVELOPING COMMERCIAL CREW CAPABILITY

*Question.* The Aerospace Corporation recently published a feasibility study for Commercial Crew which was highly critical of NASA's current plans. In fact, it stated that given the current assumptions, development and operations of commercial crew capability may cost NASA \$10 billion-\$20 billion for one viable commercial crew provider, and still result in prices per seat of two to three times as much of current foreign-based alternative access options. What is your response to this?

*Answer.* The Aerospace analysis referenced in this question is one of many analyses about the business case for commercial crew that have been generated over the years. However, NASA believes the Aerospace analysis cannot be used for assessing the commercial crew business case or potential costs for crew launches because any definitive analysis of the business case for commercial crew must come from the companies themselves, not from NASA or the Aerospace Corporation, and such analysis must surely include proprietary, realistic data inputs from the companies themselves.

Aerospace has recognized the limitations of its hypothetical-based analysis with the following statement which they released publicly in April 2011:

"The intent of this report was not to pass judgment on the economic feasibility of a commercial crew transportation provider, but rather to illustrate the ability of the tool to conduct parametric sensitivity studies . . . The results shown to NASA and Congress recently were not intended to represent any specific real-world scenario. We modeled a scenario utilizing data from as long as 10 months ago in order to demonstrate the tool's viability, not the viability of any specific commercial crew transportation system."

When conducting its analysis, Aerospace developed its own model inputs regarding things such as cost, schedule, and price of launch services rather than asking NASA or companies for inputs for the Aerospace analysis. Thus, Aerospace's report was based on hypothetical versus real-world inputs from potential commercial crew providers.

## EARTH DEPARTURE STAGE (EDS) AND LANDER DEVELOPMENT

*Question.* Development of Orion is potentially continuing as Multi Purpose Crew Vehicle (MPCV), so crew capability to some destination beyond low-Earth orbit (LEO) is still being developed. Planning and budgeting for the Space Launch System (SLS) has begun. But there is no money in the budget—now or in the near future—to plan for or develop an EDS or a lander. What is your plan regarding both of those vehicles which are necessary to reach whatever final destination is chosen?

*Answer.* NASA architecture studies are ongoing and consistent with a capabilities driven framework. These analyses include plans for an Upper Stage, Cryo Propulsion Stage (CPS), or EDS, as well as landers of various types and configurations, based upon the destination requirements. Commonality assessments are also being done to ascertain whether common components, subsystems, or systems can be used across the portfolio. NASA is currently studying whether the SLS Upper Stage can be the same as the CPS or EDS, depending upon performance and mission require-

ments. By assessing commonality and basic system architectures now, NASA can further evaluate and plan for leveraged development and production, as well as, reduced risk and increased economies of scale benefits for these other critical systems and elements. Focused technology development activities in both the Advanced Exploration Systems (AES) within the Exploration Systems Mission Directorate and the Space Technology Program are planned consistent with the architecture and capability priorities. Finally, ongoing dialogues with the international and interagency communities are continuing to explore potential cooperation areas for key systems or potentially entire elements for these systems.

In the meantime, while planning for SLS and MPCV continues, our civil servants across the agency should feel confident that there is exciting and meaningful work for them to do following the retirement of the shuttle and the transition from Constellation, and the shift from assembly of the ISS toward ISS operations. Turning our focus toward a more capability-driven exploration architecture will offer far-ranging opportunities for our creative and skilled civil servant workforce across the agency. There will be opportunities for them to apply their cross-cutting talents to new challenges such as developing and demonstrating prototypes for human capabilities needed for beyond-LEO exploration. Here are just a few examples of enabling capabilities that must be developed before we can send crews beyond LEO—work that will be managed by our new AES program:

- Developing a ground-based test bed for demonstrating life support systems needed to enable long-duration crewed missions based on lessons learned from operation of the life support systems currently in use on the ISS;
- Developing and testing components for an advanced spacesuit to improve the ability of astronauts to assemble and service in-space systems, and to explore the surfaces of the Moon, Mars and asteroids;
- Developing design concepts for future space exploration vehicles and deep-space habitats; and
- Conducting ISS and ground-based analog testing to validate operational concepts for long-duration missions.

We have already employed this teaming approach quite successfully, as exemplified by the NASA in-house efforts with Robonaut2 (R2), which was delivered to the ISS on the last space shuttle flight. This robot was developed in partnership by a joint NASA-General Motors team. Another example is the Lunar Electric Rover, which is a pressurized surface rover to provide astronaut mobility for exploring a planetary body in a shirtsleeve (or nonspacesuit) environment. The prototype, developed at low-cost, has already been demonstrated and matured through field testing at sites on Earth that resemble the lunar terrain, for example. The rover, along with some of NASA's astronauts, also participated in President Obama's Inaugural Parade. In sum, both of these examples highlight the substantial benefit we will continue harnessing from our highly creative, competent and mission-focused workforces across the agency and at all centers.

#### COLLABORATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA) AND THE U.S. AIR FORCE

*Question.* NASA, FAA, and the Air Force Research Laboratory (AFRL) held a productive technical conference at Wright-Patterson Air Force Base to examine safety issues behind the integration of Unmanned Aerial Systems into the National Airspace System (NAS). What were the major outcomes and what plans do you have to continue this work with FAA and the AFRL?

*Answer.* The workshop explored the potential of the Unmanned Aircraft Systems (UAS) mission, together with the research and development (R&D) capabilities and plans of the organizations involved in addressing UAS access to the NAS. In designing the workshop, NASA, FAA, and AFRL established three primary objectives. The first was to identify the set of technical issues that must be resolved in order to ensure safe and consistent UAS operations in future airspace. The second objective was to catalog current R&D activities by each represented Government agency and identify gaps not currently being addressed. The third objective was to identify areas where joint demonstrations can advance progress toward UAS integration more effectively than single-agency efforts.

The workshop was divided into three technical teams:

- Air vehicles;
- Sense and avoid and communications; and
- Human factors and ground control station.

The teams focused their efforts on supporting R&D requirements for 2018 and beyond in order to achieve UAS integration and operations into the next generation airspace. Each track identified major “long poles” or critical technical challenges, as

well as technology gaps, which are currently impeding routine UAS access to the NAS. These were reported at the conclusion of the meeting.

Since the workshop, a plan has been developed by the member agencies of the Joint Planning and Development Office to establish a Research, Development and Demonstration (RD&D) Roadmap (referred to as the UAS Research Management Plan [RMP]) to guide the multi-agency work and cross-collaboration. Four tracks have been established to work the issues with representatives from key stakeholder agencies (NASA, Department of Defense, FAA, and Department of Homeland Security) participating as appropriate:

- Ground control station human factors;
- The unmanned vehicle;
- Airspace operations; and
- Communications.

In order to build the Risk Management Program, the partner agencies have formed Technical Tracks, in which senior research managers from each agency work together to:

- Identify the most critical technology and policy issues (R&D needs and challenges), taking into account UAS ConOps provided by the partner agencies.
- Identify current and planned RD&D activities by the partner agencies.
- Indicate the dates when series of activities are initiated and completed (on and off ramps).
- Identify linkages between these activities including dependencies in terms of entry criteria (prerequisites) and exit criteria (minimum required deliverables).
- Provide estimates of activity costs where such information is available and publicly releasable.
- Identify current plans or strong opportunities for interagency joint R&D or demonstrations.

This initial UAS RMP will be completed by the end of fiscal year 2011 and will provide the path forward for collaborative UAS research, development, and demonstrations across relevant Federal agencies. This will be the basis for a more comprehensive plan involving industry, academia, and other government agencies to ultimately provide routine UAS access to the NAS.

*Question.* Both NASA and the Air Force conduct research in aeronautics and space, and there is a long history of NASA and the Air Force working together on problems of mutual concern. Now, in an era of particularly tight budgets, it becomes even more important for these agencies to work together. Please describe your plans to work closer with AFRL in both aeronautics and space. In particular, can both the Air Force and NASA support the commercialization opportunities of the other?

*Answer.* NASA and the Air Force have opportunities to collaborate in specific programs as well as general collaboration in the commercialization of technology emerging from their respective agencies. At the NASA Center level, there are areas of technology development including propulsion, power generation and energy storage, alternate fuels, remote sensing, communications, robotic and UAV operations, sensor technology, advanced battery development, human factors R&D, advanced materials development, imaging technology, hypersonics, subsonic fixed wing research, and technologies associated with improving the environmental footprint of existing and future aircraft etc., that have corollary applications for Air Force mission operations as well as terrestrial commercial applications.

In terms of collaboration with Air Force management, NASA Chief Technologist Dr. Robert Braun met with the Air Force Chief Scientist Dr. Mark Maybury to discuss strategic plans and possible synergies between our S&T programs. NASA's Office of the Chief Technologist (OCT) cross-walked the draft NASA Space Technology Roadmap technology needs with the "Air Force Report on Technology Horizons—A Vision for Air Force Science and Technology During 2010–2030" and identified about 80 potential collaboration areas. NASA is currently identifying the top 15 areas for collaboration, and will ask the Air Force Chief Scientist and the Deputy Assistant Secretary of the Air Force for Science and Technology to identify their top 15. In addition, NASA's OCT and the AFRL are looking into possible collaboration for technological development or demonstration in the areas of solar electric propulsion, hydrocarbon boost, and space access.

These activities build on ongoing partnerships between NASA and AFRL. The joint NASA/AFRL/FAA Commercial and Government Responsive Access to Space Technology Exchange (C/RASTE) is specifically designed to help with commercialization opportunities. The third annual C/RASTE meeting will occur in October 2011 in Atlanta, Georgia. NASA and AFRL have also partnered to gather industry input from 32 commercial firms and develop a roadmap of technology priorities of interest to industry for developing commercial reusable launch vehicles. As our partnership strengthens, we anticipate that NASA and the Air Force will mutually sup-

port the significant commercialization opportunities for our respective assets, expertise, and technology.

In the area of aeronautics, collaborative efforts exist between several NASA research centers (Ames, Dryden, Glenn, and Langley) and both the AFRL and the Office of Scientific Research. Many of the aeronautics technologies (hypersonics, subsonic, fixed wing, etc.) have military applications as well as potential civil applications, both of which could lead to commercialization opportunities. Collaborative opportunities are identified and discussed at various levels (between technical/engineering peers as well as project/program/senior management) and in a number of different venues. In particular, NASA and Air Force leadership regularly meet as members of the NASA/Air Force Executive Research Committee and the Versatile, Affordable, Adaptable Turbine Engine Steering Committee to assess research accomplishments and challenges, current activities, and future collaboration plans. In addition to these research collaborations, through the National Partnership for Aeronautical Testing, the Air Force and NASA have put in place a joint technology development program to address future test techniques and instrumentation which involves NASA, the Air Force Arnold Engineering Development Center, and AFRL.

#### SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM) EDUCATION

*Question.* One of the major problems facing science organizations like NASA and AFRL—as well as the private sector—is the need for STEM education at all levels. Last year, NASA partnered with AFRL for a STEM symposium aimed at minority students. What additional plans do you have to promote STEM education to ensure that the rising generation of Americans has the scientific and technical skills we need to maintain NASA?

*Answer.* In January 2011, President Barack Obama stated that, “. . . over the next 10 years, nearly one-half of all new jobs will require education that goes beyond a high school education. And yet, as many as a quarter of our students aren’t even finishing high school. The quality of our math and science education lags behind many other nations. America has fallen to ninth in the proportion of young people with a college degree. And so the question is whether all of us ‘as citizens and as parents’ are willing to do what’s necessary to give every child a chance to succeed.” This speech echoes findings and calls-to-action by numerous committees, reports, professionals in education, and leaders in American industry. In response, the Department of Education has identified several strategies to improve STEM education and ways in which Federal agencies can contribute to the Nation’s STEM improvement efforts. NASA is a strong contributor to the national plan.

Consistent with section 202 of the America COMPETES Reauthorization Act of 2010, NASA works with professional organizations, academia, and State/local education providers to identify and address needs in STEM education. Quality professional development for STEM educators is a prevalent need. Through the education staff at NASA’s centers, NASA works cooperatively with States and school districts to identify content needs and opportunities, and with university partners to ensure that NASA investments will be effective in improving teaching practice. NASA also works through communities of practice to identify content areas and special events that supplement informal education programming offered by museums and science centers. NASA higher education efforts increasingly target community colleges, which generally serve a high proportion of minority students. NASA programs build student STEM ability, preparing students for study at a 4-year institution. Competitive opportunities support initiatives like the President’s “Race to the Top” and the Department of Education’s “Star Project,” which promote State-based education reform and identify replicable strategies for improving K–12 education.

NASA’s education programs aim to increase the number of students who are proficient in, choose to major in, and pursue careers in STEM fields. Improving STEM ability, increasing public scientific literacy, increasing the talent pool of future STEM workers, and developing the STEM skills of the future workforce are imperatives if the Nation is to remain globally competitive and sustain a strong economy. NASA actively works through mutually beneficial relationships with more than 500 colleges and universities, hundreds of K–12 schools and districts, and more than 400 museums and science centers to provide education experiences, so that all students can learn deeply and think critically in STEM disciplines. NASA supports cutting-edge undergraduate student research that contributes to NASA missions while training the next generation of scientists, engineers, and innovators. NASA targets recruitment and retention of underserved and underrepresented students, including women and girls, Hispanics, and students with disabilities.

NASA is committed to providing equal access to its education activities by providing any student with the opportunity to contribute to the future STEM work-

force. NASA is responding by focusing its education investments on areas of greatest national need and ensuring that the agency's education programs support national STEM priorities. With its wealth of science and technology content and its expansive network of education professionals, NASA is well-equipped to address national needs such as meeting State requirements for educator professional development. NASA provides practical experience and skills development for those who will become the future workforce through internships, fellowships, and student research opportunities. NASA is especially qualified to attract students to pursue STEM study and careers. NASA is also able to engage these future workers through inspiring NASA missions, fostering collaborative relationships between students and the current workforce and offering students opportunities to work in "out of this world" facilities. Hands-on challenges with expert mentors generate increased interest in STEM study.

NASA has engaged students and teachers in its engineering challenges and scientific discoveries since its inception. From school presentations to seeds flown in space, from filmstrips and posters to podcasts and virtual tours through the galaxies, NASA's education programs have fostered inquiry, built curiosity, and encouraged innovation. Generations of Americans have participated in NASA's STEM education programs, and thereby learned basic skills, discovered new career paths, and developed interests in emerging academic disciplines.

NASA is actively engaged in collaborations with other Federal agencies to ensure the agency's programs are supportive of national STEM priorities. The NASA Associate Administrator for Education represents the agency on the National Science and Technology Council Committee on STEM Education (CoSTEM). It was established pursuant to the requirements of section 101 of the America COMPETES Reauthorization Act of 2010. The NASA Office of Chief Scientist is also participating in the CoSTEM by providing the CoSTEM Executive Secretary, who works in close coordination with the Office of Education.

NASA's Earth and space science missions have an essential role in NASA's education mission. The discoveries and new knowledge from our missions and research programs consistently engage people's imaginations, inform teachers, and excite students about science and exploration. We are committed to utilizing our resources to foster the broad involvement of the Earth and space science communities in education and public outreach with the goal of enhancing the Nation's formal education system and contributing to the broad public understanding of science, mathematics and technology. NASA's Science Mission Directorate creates education products using NASA's results in Earth-Sun system science, solar system research, universe exploration, and the development of new technologies to support learning. Through a "Train the Trainer" model the SMD programs train master teachers, who reach their peers via in person and online professional development opportunities that range from 1-day to week-long workshops. Another aspect of Teacher Professional development includes providing summer research opportunities for in-service teachers.

In 2010, NASA chartered an Education Design Team (EDT) to develop a strategy to improve NASA's education offerings, assist in establishing goals, structures, processes, and evaluative techniques to implement new sustainable and innovative STEM education programs. EDT has completed its task, and its recommendations are reflected in the fiscal year 2012 education budget for NASA's Office of Education.

The fiscal year 2012 budget provides NASA with the resources necessary to continue this rich tradition in STEM education through support for the Nation's students and educators, the leveraging of cutting-edge education technologies, and partnerships with industry. The budget proposal will:

- Increase NASA's impact on STEM education by further focusing K–12 efforts on middle school pre- and in-service educator professional development;
- Increase emphasis on providing experiential opportunities for students, internships, and scholarships for high school and undergraduate students;
- Emphasize evaluation and assessment, including external independent evaluation, to ensure that investments are providing desirable STEM impacts;
- Engage strategic partners with common objectives and complementary resources; and
- Use NASA's unique missions, discoveries, and assets (e.g., people, facilities, education infrastructures) to inspire student achievement and educator teaching ability in STEM fields.

## CROSS-AGENCY SUPPORT (CAS) BUDGET

*Question.* Could you please detail the importance of the CAS portion of your budget, and for what specifically that part of the budget is used?

*Answer.* NASA's CAS funding provides critical mission-support activities that are necessary to ensure the efficient and effective operation and administration of the agency. These important functions align and sustain institutional and program capabilities to support NASA missions by leveraging resources to meet mission needs, establishing agency-wide capabilities, and providing institutional checks and balances. CAS includes two primary elements:

- Center management and operations (CMO); and
- Agency management and operations (AMO), which are detailed below.

*CMO*

CMO funds the critical ongoing management, operations, and maintenance of nine NASA centers and major component facilities. NASA centers provide high-quality support and the technical engineering and scientific talent for the execution of programs and projects. CMO provides the basic support required to meet internal and external legal and administration requirements; effectively manage human capital, information technology (IT), and facility assets; responsibly execute financial management and all NASA acquisitions; ensure independent engineering and scientific technical oversight of NASA's programs and projects in support of mission success and safety considerations; and, provide a safe, secure, and sustainable workplace that meets local, State, and Federal requirements. CAS also funds salary and benefits for civil service employees at NASA centers who are assigned to work on CMO projects. In addition, the account contains Center-wide civil service personnel costs, such as institutionally funded training.

*AMO*

AMO funds the critical management and oversight of agency missions, programs and functions, and performance of NASA-wide activities, including five programs:

- Agency management;
- Safety and mission success;
- Agency Information Technology Services (AITS);
- Strategic Capabilities Assets Program; and
- AMO civil service labor and expenses.

AMO supports executive-based, agency-level functional and administrative management requirements, including, but not limited to:

- Health and medical;
- Environmental;
- Logistics;
- General counsel;
- Equal opportunity and diversity;
- Internal controls;
- Procurement;
- Human resources; and
- Security and program protection.

AMO provides for the operational costs of headquarters as an installation; institutional and management requirements for multiple agency functions; assessment and evaluation of NASA program and mission performance; strategic planning; and, independent technical assessments of agency programs.

Safety and Mission Success activities are required to continue improving the workforce, and strengthening our acquisition processes, including maintaining robust checks and balances, in order to improve the safety and likelihood of mission success for NASA's programs throughout their lifecycles. The engineering, safety and mission assurance, health and medical independent oversight, and technical authority components are essential to NASA's success. They were established or modified in direct response to several major Government accident and mission failure investigation findings in order to reduce the likelihood of loss of life and/or mission in our human and robotic programs. The budget request also supports operation of three activities that each provides a unique focus in support of the independent oversight and technical authority implementation:

- the Software Independent Verification and Validation program;
- the NASA Engineering and Safety Center; and
- the NASA Safety Center located at the Glenn Research Center.

AITS encompasses agency-level cross-cutting services and initiatives in Information Technology (IT) innovation, business and management applications, and infrastructure necessary to enable the NASA mission. AITS includes management of NASA's scientific and technical information; identity, credential and access manage-



ment services; overarching information security services; enterprise-level business systems; and other agency operational services, such as email, directory services, and enterprise licenses. NASA's Security Operations Center will continue to mature capabilities to improve security incident prevention, detection, response, and management. NASA will continue implementation of major agency-wide procurements to achieve:

- consolidation of IT networks leading to improved network monitoring, management and reliability;
- consolidation of desktop/laptop computer services and mobile devices to achieve improved security and enable NASA Centers and programs to realize improved efficiencies;
- consolidation of agency public Web site/application management to improve the agency security posture and to facilitate access to NASA data and information by the public;
- minor enhancement and maintenance of integrated agency business systems to provide more efficient and effective agency operations; and
- reduction in overall agency data centers and related infrastructure currently funded outside the AITS budget.

The Strategic Capabilities Assets Program (SCAP) funds key agency test capabilities and assets, such as an array of flight simulators, thermal vacuum chambers, and arc jets, to ensure mission success. SCAP ensures that assets and capabilities deemed vital to NASA's current and future success are sustained in order to serve agency and national needs. All assets and capabilities identified for sustainment either have validated mission requirements or have been identified as potentially required for future missions, either internally to NASA or by other Federal entities.

AMO civil service labor and expenses funds salary and benefits for civil service employees at NASA headquarters, as well as other headquarters personnel costs, such as mandated training. It also contains labor funding for agency-wide personnel costs, such as agency training, and workforce located at multiple NASA centers that provide the critical skills and capabilities required to execute mission support programs agency-wide.

---

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

ROCKET PROPULSION TEST INFRASTRUCTURE

*Question.* Your written testimony references the importance of investment in a 21st Century Launch Complex. As you know, before a new Heavy Lift Vehicle can be launched, it must first be tested extensively to ensure the safety of our astronauts and others. Given the National Aeronautics and Space Administration's (NASA) interest in safety, are we making investments in testing infrastructure that are commensurate with the updates to launch infrastructure? What activities will take place during fiscal years 2011 and 2012 toward improving our rocket propulsion test infrastructure?

*Answer.* Beyond funds for normal operations, NASA's initial fiscal year 2011 Operating Plan identifies \$6 million to begin replacement of the Stennis Space Center High Pressure Industrial Water (HPIW) distribution system and \$15 million to continue construction of the SSC A-3 test stand in fiscal year 2011. In fiscal year 2012, NASA has identified an additional \$10 million to continue the HPIW replacement and is planning on \$42 million for the A-3 test stand. Additional funds for fiscal year 2011 were planned to begin refurbishment of critical propulsion test infrastructure, but has been put on hold pending decisions on the Space Launch System (SLS) architecture decisions. Launch system design and requirements will be mapped to the appropriate capabilities, which will define the investments required for the propulsion test infrastructure.

*Question.* Are any NASA funds currently being used to support the construction, rehabilitation, or otherwise invest in rocket propulsion test infrastructure not owned by the Government? Are there any plans to do so in fiscal year 2012?

*Answer.* No NASA funds are currently being used or planned to support construction, rehabilitation, or otherwise invest in rocket propulsion test infrastructure not owned by the Government.

*Question.* Given the uncertainty that accompanied the fiscal year 2011 budget process, have there been specific delays toward achieving the goal of developing a 130-ton heavy lift vehicle? When do you expect to launch a 130-ton vehicle?

*Answer.* Delays in the fiscal year 2011 budget have not caused actual delays with the SLS development efforts, but it has caused inefficiencies. Primarily, our fiscal year 2011 activities have been dedicated to completing analysis, trades, and devel-

oping an acquisition strategy, which we continued to do while awaiting final fiscal year 2011 appropriations.

NASA's SLS development effort is focusing initially on the 70 to 100 mT lift capability. We also are seeking ways to capitalize on synergies between the lower-range and upper-range lift capabilities, thereby allowing us to develop some of the upper-range capabilities at the same time as we are focusing on the 70 to 100 mT capability. Doing so is actually a fairly natural, evolvable progression in terms of developing these capabilities. However, before making any final decisions, we must first understand how our approaches to heavy-lift will fit within the budget profile, how they will be affordable and sustainable over the long term, how they will fit into future exploration architecture, and how they might benefit other agencies to maximize the investment for the taxpayer.

NASA is currently in the process of running budget exercises to determine the implications of various potential budget scenarios, and thus creating development schedules to fit those associated budget profiles. Ultimately, we must plan and implement an exploration enterprise with costs that are credible and affordable for the long term under constrained budget environments. As such, our development efforts also will be dependent on a realistic budget profile and sufficiently stable funding over the long term, coupled with a successful effort on the part of NASA and our eventual industry team to reduce costs and to establish stable, tightly managed requirements.

In the coming weeks, NASA will be refining the SLS concept and defining strategy alternatives based on detailed Government analysis and completed input from industry through Broad Agency Announcement study contracts. Due diligence will ensure the best value for the taxpayer with respect to cost, risk, schedule, performance, and impacts to critical NASA and industrial skills and capabilities. Further details about NASA's analysis and decisions regarding SLS and MPCV and their integrated path forward will be provided to the Congress in a report in the late spring/summer timeframe.

#### STENNIS SPACE CENTER

*Question.* Your deputy, Lori Garver, visited Stennis Space Center on March 10 of this year. I personally appreciate the continued attention you and your staff give to the NASA capabilities along the gulf coast. In one of the news reports following her visit, Ms. Garver called Stennis a "unique facility for the government" that should be "fully utilized." Do you share Ms. Garver's view that Stennis' identity as a "Federal city" makes it a unique asset for the American taxpayer in terms of efficiency and cooperation?

*Answer.* Each of NASA's nine centers has unique capabilities that ensure our ability to achieve the goals of a portfolio of challenging by exciting missions. The Stennis Space Center possesses several unique capabilities and assets of which the American taxpayer can be proud. More than 30 Federal, State, academic, and private organizations and many technology-based companies have offices at Stennis. These residents share the cost of owning and operating the center with NASA and provide Americans positive returns on their investments. Stennis is the location of America's premier rocket engine test complex and, in 2009; the Stennis team completed 34 years of testing space shuttle main engines that were used on more than 130 space missions. Because of this rich history of testing engines for our Nation's human spaceflight over the past 40 years, Stennis is key to testing the rocket engines that will propel humans into deep space. Center leadership has established partnerships with private industry to test engines for the commercial space sector. With its unique assets, the Stennis Space Center is positioned to have a major role in the future of America's space exploration mission.

#### HANGAR ONE

*Question.* Have you received proposals for private investment in the external skin of Hangar One? If so, why does the NASA budget ask for significant taxpayer funds to re-skin Hangar One, particularly if such private proposals could conceivably generate solar energy?

*Answer.* To date, NASA has not received a written proposal to re-skin Hangar One from a private investor. In the late summer 2010, NASA issued a Request for Information (RFI) with the intent of gathering technical ideas on how to re-skin a structure of this type, to compare the Government construction estimate with the estimates of potential interested parties, and to ensure that the materials to be used were consistent with NASA thinking, given the historical preservation requirements. The results of this RFI produced only three responses to the call and all of them were partial. One of the respondents provided an estimate that approached

the Government construction estimate. More recently, NASA issued a Sources Sought Notice for the purpose of identifying qualified companies who could perform the work of re-skinning Hangar One. The results of this call are yet to be finalized.

There have been several unsolicited proposals received for the re-use of Hangar One after it is re-skinning by the Government. The proposals range from lighter-than-air technology operations to corporate office space, from an air and space museum to a Science, Technology, Engineering, and Math education center. The local communities have a strong interest in the re-use of Hangar One, in general, and passionately support its preservation for almost any use, including multi-purpose.

In 2005, NASA released an Announcement of Opportunity (AO) for photovoltaic panel installation to be mounted on the outside surfaces of Hangar One. The intent was to develop a source of funding to pay for the replacement of the siding. It was determined through this AO that due to the orientation of the Hangar, insufficient power could be generated to provide for an economic solution.

---

QUESTIONS SUBMITTED BY SENATOR KAY BAILEY HUTCHISON

INTERNATIONAL SPACE STATION (ISS) CONTINUATION

*Question.* The National Aeronautics and Space Administration (NASA), following the NASA Authorization Act of 2010, is planning to keep the ISS operating until at least 2020. Because this is an international space station, we cannot unilaterally decide for all members of the partnership.

First of all, it is my understanding that our ISS partners have agreed to the continuation of ISS operations through at least 2020. Is that correct?

*Answer.* The European Space Agency (ESA) recently decided to continue station operations to at least 2020. The Governments of Japan and the Russian Federation already have approved continued station operations beyond 2016. NASA received approval in the NASA Authorization Act of 2010. The Canadian Space Agency is working with its government to reach consensus about the continuation of the station.

*Question.* Is NASA aware of any outstanding issues, funding or otherwise, with any international partner that must be resolved in order to meet that objective?

*Answer.* The ISS partnership is committed to fully utilizing the ISS to its maximum potential. There remain issues to be worked among the partners, both individually and collectively, including long-term funding for the out-years, transportation logistics, nominal hardware and software updates, but currently NASA does not believe any of these are insurmountable. We will continue to work as a partnership to maintain the ISS and reap the benefits for future space exploration and those on Earth.

ISS RISK IF COMMERCIAL CARGO IS LATE

*Question.* I am greatly concerned now that the ISS has been completed, we will not be able to utilize it as we all have hoped.

It has been explained to me that within 18 months of the last shuttle flight to supply the ISS, steps might need to be taken to curtail activities with fewer crew members if commercial cargo delivery capabilities are not fully operational and able to service the ISS in time. I am confident that our commercial providers will reach the ISS, yet I worry about what happens if we are forced to scale back our use of our more than \$100 billion investment.

At what point does NASA have to initiate contingency plans, or discussions with international partners to conduct supply missions if these capabilities need to be supplemented?

*Answer.* NASA is pre-positioning maintenance and logistics items on the final space shuttle mission as a contingency to mitigate any risk to ISS operations due to a delay in the availability of the Commercial Resupply Services (CRS) vehicles. The final shuttle mission, STS-135, is targeted for launch in early July. During the STS-135 mission, *Atlantis* will carry the Raffaello multipurpose logistics module to deliver critical supplies, logistics, and spare parts for the ISS, as well as a system to investigate the potential for robotically refueling existing spacecraft. This will help reduce the risk to ISS operations and maintenance should the CRS vehicles not meet their current launch dates. If the contracted commercial cargo services are not available at the beginning of calendar year 2012, there would be minimal impact to ISS operations. If commercial cargo services are not available by the end of calendar year 2012, there would be a reduction in utilization of the ISS. In that case, NASA would have to consider reducing the station's crew size to three in order to conserve supplies; this would in turn result in a reduced ability to conduct research

aboard ISS. The final shuttle flight will give the ISS the flexibility to maintain a six-person crew into fiscal year 2013 without any commercial cargo flights, effectively increasing the schedule margin by about a year.

Another risk reduction option is the availability of the ATV and HTV spacecraft. NASA already relies on bartered cargo transportation services provided by the ESA and the Japanese Aerospace Exploration Agency using these vehicles, and such barter agreements could be used to ensure a limited U.S. cargo delivery capacity, on the currently planned vehicles, as a stop-gap measure until the CRS vehicles are operationally available. NASA has also purchased cargo delivery services from the Russian Space Agency through 2011, though there are no plans to extend this service beyond the end of this year.

#### LIFE AND MICROGRAVITY RESEARCH

*Question.* With the upcoming addition of the Alpha Magnetic Spectrometer experiment to the ISS, NASA will have completed a monumental task that has taken more than a decade to complete. The ISS has been transformed from a small orbiting outpost to a fully capable research facility.

NASA has been tasked to utilize this opportunity. It has been given national lab status. Now, all that is needed is a comprehensive and integrated microgravity research program to take this opportunity and turn the station into a place where discoveries happen in order to enable exploration and also benefit the country.

The National Research Council (NRC) recently published a report that addresses key issues around the need for a solid microgravity research program. They believe that now is the time for a focused science and engineering program which can bring all the space stakeholders—researchers, the public, and policymakers—to an understanding that microgravity research can benefit us at home, and enable human space exploration.

This type of research is exactly what the ISS was built for and can be supplemented with free flying missions as well. Can you explain how NASA is planning to incorporate the recommendations in the report into the fiscal year 2012 budget and where this budget falls short, particularly in regards to taking advantage of the ISS?

*Answer.* The ISS represents an unprecedented national asset for advancing science and technology in the space environment, as well as stimulating new domestic economic expansion in low-Earth orbit. NASA is carefully positioning the ISS to maximize the value to the Nation through a series of initiatives designed to ramp up ISS research and development (R&D) projects now that the assembly phase is drawing to a close. NASA will pursue a diversified portfolio of scientific, technological, and economic development projects that draw upon the skills of all domestic sectors—government, academia, and industry—in order to leverage to the maximum extent the Nation's investment in the ISS.

The recent NRC decadal study on life and microgravity sciences represents an important element of guidance in assembling this balanced portfolio. With 65 "Top Priorities" for research, the report is unambiguous in its endorsement of the value inherent in the pursuit of biology, chemistry, and physics research and applications under microgravity, space-radiation, and ultra-vacuum conditions. Results from experiments conducted on Skylab, space shuttles, spacelab, spacehab, Mir, and the developing ISS, have consistently supported this conclusion over the past four decades. NRC's report will now serve as an authoritative and durable benchmark against which future progress can be assessed. NASA's supporting initiatives include:

- Competitive acquisition of a cooperative agreement with an external nonprofit entity charged to stimulate, develop, and manage the most effective use of 50 percent of the U.S. utilization capacity for national R&D needs. This initiative is being pursued in strict accordance with statutory direction embodied in section 504 of the NASA Authorization Act of 2010 (Public Law 111–267).
- Funding for strategic research assets for the pursuit of molecular, cellular, micro-biotic, plant, and animal research in the highly promising area of life sciences and biotechnology, and recovery of inorganic materials processing apparatus to re-establish progress in the development of exotic new materials of higher performance. These assets will be supported through a variety of management tools, including:
  - in-house development;
  - application of ISS program funds for capability enhancements, and;
  - pursuit of proofs-of-concept for known globally competitive applications; and
- Expansion of partnerships with universities, industry, and other government agencies based on a proven track record of success in forging new agreements for ISS-based R&D. The use of memoranda of understanding and Space Act

Agreements has effectively brought key resources to bear across a spectrum of new participants in space-based R&D, so that NASA is no longer the sole source of funding for value-driven R&D objectives.

—Assignment of a seasoned management group composed of leaders and staff with decades of experience in knowing what works, and doesn't work, in the formulation of multi-disciplinary and multi-organizational R&D teams for the pursuit of value-driven objectives.

The fiscal year 2012 President's budget provides the fiscal platform for launching and sustaining these key initiatives to maximize the value of ISS to our Nation. Under the guidance of NRC, and through a diversified portfolio that cuts across both the stages of research and all performing sectors of our economy, NASA is strategically positioned to carefully leverage the agency investment in ISS for R&D success in the coming era of utilization.

#### HUMAN SPACE FLIGHT SAFETY

*Question.* NASA is in the business of launching extremely valuable human lives into the harsh environment of space. No matter what NASA does, it will never eliminate 100 percent of the risk of sending people to space and those who are at the space station live in an environment where their lives are in danger every minute of every day. However, I am concerned that in the administration's rush to embrace commercial crew, that NASA is being asked to become less risk averse and thus will endanger lives.

NASA's own Aerospace Safety Advisory Panel has continually raised concerns about crew safety and specifically mentions the commercial crew acquisition strategy. It can be said that NASA may consider moving away from lessons learned from *Challenger* and *Columbia* and be settling for a strategy of "safe enough" as a trade for lowering development and seat costs.

How does NASA intend to determine safety for any provider wishing to carry NASA astronauts and be able to incorporate those standards into vehicles wishing to be a part of commercial crew?

*Answer.* At no point in the development and acquisition of commercial crew transportation services will NASA compromise crew safety. Simply put, U.S. astronauts will not fly on any spaceflight vehicle until NASA is convinced it is safe to do so.

NASA has unique expertise and history in this area and has learned hard lessons on the importance of crew safety. NASA will bring that experience to bear in the appropriate way to make sure that commercial crew transportation services are a success both programmatically, and with respect to safety. For example, NASA will have in-depth insight of the vehicle design via NASA personnel who are embedded in the contractor's facility. Additionally, NASA will impose strict requirements and standards on all providers that will be carefully evaluated and reviewed at multiple stages before a vehicle system is certified by NASA for crewed flight. NASA will make every appropriate effort to ensure that the systems selected to fly U.S. astronauts will be as safe as possible but also recognizes that these ambitious endeavor—human spaceflight—is inherently risky.

NASA's Commercial Crew Program Office at Kennedy Space Center in Florida is leading an effort to appropriately apply a series of existing health and medical, engineering, and safety and mission assurance requirements for the commercial space industry. The office is also developing but has not finalized the processes NASA will use to verify that these requirements have been met and to certify that a commercial partner's vehicle is capable of safely transporting agency personnel. This effort includes the full expertise of the agency including representatives from NASA's Office of Chief Engineer, Office of Safety and Mission Assurance, Office of Crew Health and Medical, the Flight Crew Office, and technical discipline experts (e.g., propulsion, structures, avionics, and ground operations).

*Question.* Are the final and definitive requirements in place so that in the competition for commercial crew services, companies can have those in order to accurately estimate vehicle development cost?

*Answer.* NASA is in the process of developing those requirements. We plan to have another workshop with industry in the August/September timeframe (the first Workshop was held on May 23–24, 2011, and NASA received extensive and valuable feedback from industry on our requirements). NASA plans to incorporate all this feedback into a baselined set of requirements by the end of the year, prior to the publication of any request for proposals for the development and certification of end-to-end crew transportation systems.

*Question.* Will vehicles that can reach the space station with crews that are not from NASA be able to come to the station with a lower amount of safety restrictions?

Answer. In accordance with the international agreements for the ISS, NASA has the responsibility “to establish overall space station safety and mission assurance requirements and plans” for the ISS. In the case of the Russian crew transportation vehicle, *Soyuz*, which typically has included NASA astronauts but not on all flights, the Russian Federal Space Agency is responsible for developing detailed safety and mission assurance requirements and plans, that “meet or exceed” the overall requirements established by NASA.

Similarly, current and future commercial crew or transportation vehicles that will conduct proximity operations with—and dock to—the ISS, must meet visiting vehicle requirements. Regardless of whether a particular vehicle is carrying NASA astronauts to the ISS, it must be operated in a manner consistent with these standards. The Russian crew and cargo vehicles have been shown to meet or exceed the visiting vehicle requirements.

---

QUESTION SUBMITTED BY SENATOR LISA MURKOWSKI

KODIAK LAUNCH COMPLEX (KLC)

*Question.* I compliment the National Aeronautics and Space Administration (NASA) for not only being the world leader in human space flight for the last five decades, but also for the many diverse scientific missions that have advanced our knowledge of the planet, the solar system, and the universe. These missions include the recent success of the three NASA satellites aboard the Space Test Program S26 mission launched out of the KLC last November. I am encouraged that the S26 mission along with the NASA Kodiak Star mission launched in 2001, out of Kodiak, indicates a willingness by NASA to utilize this key national spaceport. Please inform me of NASA’s assessment of the value, utility, and security that the KLC provides as a supplement and backup to Vandenberg Air Force Base, in assuring that our Nation has access to space for the polar and highly inclined orbits that are only achieved out of our west coast launch sites?

Answer. NASA’s Launch Services Program seeks to promote healthy competition in the expendable launch vehicle market and utilizes commercially available U.S. launch vehicles that are selected competitively based on “best value”. NASA buys commercially available launch services for its scientific missions on the NASA Launch Services contract. As such, the commercial companies, not NASA, determine which west-coast launch site will be used to meet polar and highly inclined orbit requirements. Currently, the Athena line of rockets from Lockheed Martin are on the NLS contract using the Kodiak launch site to meet these requirements.

It should be noted that the S26 mission mentioned in the question did not use a NASA-procured launch service. It was a U.S. Air Force launch of a Minotaur IV (not commercially available because it uses excess ballistic missile assets) and the NASA spacecraft were secondary payloads.

SUBCOMMITTEE RECESS

Senator MIKULSKI. The subcommittee stands in recess until Thursday, April 14, at 10 a.m., when we will take the testimony of Secretary of Commerce Gary Locke.

[Whereupon, at 5:25 p.m., Monday, April 11, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, April 14.]

**COMMERCE, JUSTICE, SCIENCE, AND RE-  
LATED AGENCIES APPROPRIATIONS FOR  
FISCAL YEAR 2012**

---

**THURSDAY, APRIL 14, 2011**

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

The subcommittee met at 10:03 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chairman) presiding.

Present: Senators Mikulski, Feinstein, Reed, Lautenberg, Pryor, Brown, Hutchison, and Murkowski.

DEPARTMENT OF COMMERCE

SECRETARY OF COMMERCE

**STATEMENT OF GARY F. LOCKE, SECRETARY**

OPENING STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Good morning, everybody. The Commerce, Justice, Science, and Related Agencies Subcommittee will come to order.

Today, we are going to take the testimony of Secretary Gary F. Locke, our Secretary of Commerce. Secretary Locke has also been nominated by President Barack Obama to be our Ambassador to China. I hope this will be his last hearing before us, not because he hasn't done a very good job as Secretary of Commerce, but because we know he will play an important role.

We really think that Secretary Locke brought such incredible expertise—not only his own background in the State of Washington, but he, as the Governor of the State of Washington, had to look within his own State and look outward to the Pacific Rim, where there are challenges in everything from opportunity, like trade, to the stealing of our intellectual property.

So he brought great skills here, and we want to hear, as he reviews the 2012 budget, how he made use of the money we have already given him. We have given him close to \$8 billion in the stimulus money, particularly in important fields like broadband.

He has attacked the U.S. Patent and Trademark Office (USPTO) backlog. He ensured that the 2010 census was done, inheriting what was, as even Secretary Gutierrez, his predecessor, said, “a terrible mess”; pursued smart grid standards; and generally used his keen executive skills to clean up some of the things that he had

(201)

inherited that even were deeply troubling to Secretary Gutierrez. And at the same time, the Department of Commerce should be one of our main innovation, job-creating agencies.

So we want to hear now, Mr. Secretary, as you look at 2012 and we look ahead—and we know we need to have a more frugal Government, which means a better use of the money we have—we also want to know how we can create jobs without having an industrial policy of picking winners and losers. We feel that the Department of Commerce is important to do this.

The President's request provides a total of \$8.8 billion for the Commerce Department, an increase of \$800 million. There are those that would say that is a staggering event, but pretty much, the Department of Defense can blow that on a satellite. And I am very prickly about satellites these days.

But for \$8 billion, I think we can get a lot of jobs and a lot of value. It is the economic engine, and we look forward to hearing more about that.

As we look at it, we know that within the Department—the Commerce Department is really a Department of departments, which really poses some significant management challenges. At the local level, we know that there is a very small agency, the Economic Development Administration (EDA), which, for \$325 million, is supposed to provide financial wherewithal for local communities to lower their unemployment rate.

One of the most important agencies in terms of job growth, I feel, at the Department of Commerce, is USPTO, because it is our new ideas, well protected through a patent process against the theft overtly and covertly of intellectual property, that provide us with the new jobs. All of us, going back even to Secretary Gutierrez, were deeply troubled by the backlog. We would like to hear how you are going to do that.

We could go agency after agency, but one of the two other areas of great keen interest to me is, number one, the International Trade Administration (ITA), which is, how are we going to be in the trade business? But not only for the big boys to sell big things, whether it is weapons systems, agriculture, et cetera—that is great. But I worry and think about opportunities particularly for small- and medium-sized business and how we do that. And I know that will be one of your issues as you go even farther back home west.

On the accountability thing, I am really worried about satellites. I worry about the National Oceanic and Atmospheric Administration (NOAA) satellite program, where we are on saying good-bye to the National Polar-orbiting Operational Environmental Satellite System (NPOESS) and hello to the Joint Polar Satellite System (JPSS). I worry about keeping our contract on track. But I am also worried that we don't go dark in our weather forecasting because one of the things that is really, I think, an important role of the Department of Commerce and NOAA is its weather forecasting.

I will elaborate more on that on my time in my questions. So we want to hear about the problems you have solved, and how, with the money that the President is proposing, how you see this as a job-generating, opportunity-generating, intellectual property-protecting agency.



Senator Hutchison.

OPENING STATEMENT OF SENATOR KAY BAILEY HUTCHISON

Senator HUTCHISON. Well, thank you, Madam Chairman.

I agree very much with the chairwoman regarding USPTO. If there is anything that is essential for us to bring our entrepreneurs and our new ideas into productivity, it is USPTO and also to protect them. So I hope that we are making progress in the backlog there, and I support that priority.

I also am very supportive of and concerned about weather prediction and modification. Living on the Gulf of Mexico, I have seen how the predictions have saved hundreds of thousands of dollars and at least hundreds of lives because I saw in Hurricane Ike the ability to tell people exactly when the hurricane was going to hit and to have evacuations that allowed for safety.

However, of course, JPSS, which is essential for that kind of tracking and prediction, seems to be troubled. And as of now, the reorganization for that program is not being funded. So I think we need to hear about that particular project and what is going to right that ship.

And I have to also mention that I have introduced a weather-modification bill for the last four sessions of the Congress, just to try to get NOAA to be able to do the research that would be necessary to know where weather modification science is. And if you have cloud seeding in the Midwest, what does it do to the Northeast? And I think we need to study that, and NOAA used to do it, but about 20 years ago, they stopped.

And I think we need to know more basic science, and we also need to use that to determine if we should or should not engage in weather modification, and particularly with the ferocity of hurricanes and the damage that is now doing to our country from—obviously, we saw Katrina, but all the hurricanes just produce a massive destruction path.

And if there is weather-modification information that we could glean, I think it would be wise to make that investment. But we have never been able to get the support, really, of any administration, including the last one, to do that. And so, I would like to pursue that with you.

Last, but not least, I do want to say that I hope that through the capabilities that you have in your Department regarding trade, that we will see more movement in the free trade agreements, particularly with Colombia and South Korea. We need to assure that we are doing everything we can to support Colombia, which has cleaned up its drug problems, and I think we need to do everything to help their economy with ours at the same time.

And I think we should be pursuing free trade agreements throughout Central and South America because I think that is where our best potential trading alliances are.

So, with that, I thank you, Madam Chairman.

And I will also end by saying that you have done a very good job. You really have, and we will miss you, as you take off for your new assignment in China. But I think you are a good choice for that position, and I think you will represent our country very well.

So, with that, good luck to you in the future. And for the same reason as the chairwoman said, I hope that we don't see you in this subcommittee again.

Thank you.

Senator MIKULSKI. Secretary Locke, why don't you proceed with your testimony, and then we will move to immediate questions.

SUMMARY STATEMENT OF GARY F. LOCKE

Secretary LOCKE. Thank you very much, Chairwoman Mikulski and Ranking Member Senator Hutchison and distinguished members of the subcommittee. I am pleased to join you to talk about the President's budget request for the Department of Commerce for fiscal year 2012.

Since I joined the Department of Commerce 2 years ago, we have focused on delivering our services more efficiently and at less cost to the taxpayers, and those efforts have paid off. As the chairwoman indicated, the 2010 census was completed on schedule and under budget, returning \$1.9 billion to the taxpayers. That was more than 25 percent under budget for fiscal year 2010.

Our EDA has cut the time it takes to award grants from 6 months to less than 1 month—18 business days to be precise. The USPTO, when the President took office, had a backlog of some 800,000 applications. We reduced that by 10 percent last year, even as applications surged by 7 percent. And in just a few weeks, applicants will be able to seek "express service" to have their patents evaluated within 1 year for a very small extra fee.

The Congress, during both the Bush and Obama administrations, gave the Department of Commerce some \$2 billion to prepare the Nation for digital television conversion. Ninety-nine percent of the households successfully made that conversion without any interruption in their broadcasting, and yet we achieved that program 25 percent under budget, returning to the Treasury some \$500 million.

Our smart grid program: we have been able to develop standards with the private sector. We have accomplished within 18 months what took the telecom industry almost 5 to 7 years to develop by way of standards.

So our efficiencies and cost savings are not one-time achievements. We have instituted comprehensive performance management processes throughout the Department, which should help our reforms stand the test of time.

It is in this context of proven savings and performance that I hope the subcommittee will consider Commerce's fiscal year 2012 budget—a request that is, as the President has said, a down payment for resolving our long-term fiscal problems.

Our 2012 budget request is lean. It cuts out outdated programs and drives major efficiencies in others, and our budget incorporates \$142 million in savings, thanks to aggressive acquisition reform and other administrative savings.

At the same time, it contains key investments that will help America win the future by spurring innovation, increasing America's international competitiveness, and supporting scientific research. These are the core missions of the Department of Commerce.

On the innovation front, the Department of Commerce is responsible for providing the tools, systems, policies, and technologies that give U.S. businesses a competitive edge in world markets. That is why we are requesting additional funds for our National Institute of Standards and Technology (NIST), including an increase of more than \$100 million for research into advanced manufacturing technologies, health information technology, cybersecurity, as well as interoperable smart grid technology.

These investments in standard-setting and in basic research, which are often too risky or too expensive for the private sector alone, have historically spurred waves of private sector innovation and jobs.

To further support innovation, our 2012 budget also requests that USPTO gain full access to its fees so that we can expand the already substantial reforms undertaken by Under Secretary David Kappos, working with our line staff, labor organizations, and career managers. These reforms will help get cutting-edge inventions and technologies into the marketplace quicker, which will create even more jobs.

The Commerce Department, through our ITA, is playing a key role in the President's National Export Initiative (NEI), which seeks to double U.S. exports by 2015. And American companies, especially small and medium-size ones, rely heavily on our Federal Government support available under the NEI, and I hear about it everywhere we go. These companies often face significant hurdles in getting access to working capital to produce the goods that they want to sell abroad, and they are having difficulty finding reliable customers and vendors, foreign customers and vendors for their goods and services.

Our ITA helps many companies clear these hurdles. Last year, we helped more than 5,500 U.S. companies export for the first time or significantly increase their exports. These are primarily small, medium-size companies. And we coordinated an unprecedented 35 trade missions to 31 different countries, and our efforts are paying off. With United States exports up 17 percent last year over 2009, exports to China were up. Goods exports to China were up by 32 percent and exports so far this year are 15 percent more than last year's impressive gains. In fact, exports in the month of January reached their all-time high in U.S. history.

And for fiscal year 2012, the budget envisions more funds for activities like business-to-business match-making services and identifying and tackling and resolving trade barrier issues that U.S. companies face around the world.

Finally, I want to touch on the critical work done by our NOAA, an agency that is a key source of scientific information and increasingly critical to America's economy. Last year, NOAA played a pivotal role in responding to the BP Deepwater Horizon oil spill by responding by providing targeted weather forecasts, oil spill trajectory maps, and by ensuring the safety of gulf seafood.

Several weeks ago, NOAA issued its first tsunami warning just 9 minutes after the tragic earthquake struck Japan. NOAA was able to so quickly sound the alarm because of strong congressional support. In 2004, before the tsunami that struck Indonesia, NOAA

had only six buoys in the Pacific to detect seismic and wave activity. But today, thanks to the Congress, we now have 39 such buoys.

The work that NOAA does to predict and respond to weather and natural disasters saves communities. It saves them money, and most importantly, it saves them lives.

What I have discussed, of course, is just a fraction of what the Commerce Department does. We are a Department of many bureaus, but there is one common theme—to help American companies be more innovative at home and competitive around the world.

#### PREPARED STATEMENT

I would like to direct you to our written testimony for more detail on what our Department does. In the meantime, I am more than happy to take your questions.

[The statement follows:]

#### PREPARED STATEMENT OF GARY F. LOCKE

##### INTRODUCTION

Chairwoman Mikulski, Ranking Member Hutchison, and distinguished members of the subcommittee, I am pleased to join you today to talk about the President's budget request for the Department of Commerce for fiscal year 2012. I very much appreciate the commitment this subcommittee's members show to the Department and our mission.

Since I joined the Department of Commerce 2 years ago, we have been focused intently on two key priorities: helping American businesses be more innovative at home and more competitive abroad. Our fiscal year 2012 budget request reflects those priorities with investments to spur innovation, increase our international competitiveness and support scientific research and our coastal communities.

Our innovation agenda is focused on building a foundation for private-sector economic growth and empowering entrepreneurs and businesses large and small to invent, grow and hire.

That's why our Economic Development Administration (EDA) is working to help local communities identify their own unique strengths and develop regional economic clusters. Rather than pursuing a one-size-fits-all approach, EDA is supporting private-public partnerships' bottom up strategies to respond to changing regional conditions and has more than halved the response time for its grant applications—from 128 to 20 business days.

To make it easier for groundbreaking ideas to move from research labs—or an inventor's garage—and into the marketplace, we're reforming the U.S. Patent and Trademark Office (USPTO) to accelerate patent examination and improve patent quality. We overhauled management processes at USPTO, and cut the application backlog by 10 percent, even as the volume of applications has increased by 7 percent.

As the Department works to strengthen American businesses at home, we've also played a lead role in the President's National Export Initiative (NEI), working to connect more U.S. businesses to the 95 percent of consumers who live beyond our borders.

It's important to note that although the United States is a strong exporter, only 1 percent of our companies export and of those that do, 58 percent only sell to one market. We can and must do better.

While the quality and costs of American companies' goods and services ultimately determine their success in the international marketplace, many firms—especially small and medium-size enterprises—rely heavily on the Federal Government support available under the NEI.

These companies often face significant hurdles in:

- Getting access to working capital to produce the goods they want to sell abroad;
- Navigating complex foreign customs, rules, and regulations;
- Forging relationships with key foreign governmental and business decision-makers; and
- Ensuring they get a fair shake when competing with other foreign firms for lucrative government procurement contracts.

The Commerce Department is working successfully with our partners throughout the administration to help companies clear these hurdles.

Last year, U.S. exports of goods and services increased nearly 17 percent more than 2009—the largest year-to-year percent change in 20 years. This puts us on pace to achieve the President's goal of doubling American exports over 5 years. During the first year of the NEI, the Department assisted more than 5,500 U.S. companies to export for the first time or increase their exports. Small and midsize businesses made up 85 percent of those successes. Our International Trade Administration (ITA) coordinated an unprecedented 35 trade missions to 31 different countries, with nearly 400 companies. Participating firms anticipate \$2 billion in increased exports from these missions. In addition, ITA's Advocacy Center has assisted U.S. companies competing for international contracts, and other U.S. export opportunities, worth \$18.7 billion in U.S. export content, supporting an estimated 101,000 jobs. We've recruited nearly 13,000 foreign buyers to visit major trade shows here in the United States, facilitating approximately \$770 million in export successes and supporting more than 4,100 domestic jobs. And, ITA has successfully resolved 82 different trade barriers in 45 countries that were adversely impacting a broad range of industries. This includes successfully encouraging Russia to enact a World Trade Organization compliant law that provides authority for its customs officials to interdict suspected counterfeit goods.

In addition, through the work of the Minority Business Development Agency, Commerce assisted more than 6,600 minority business enterprises in attaining almost 1,000 contracts and more than 500 financial awards, with a combined dollar value of \$4 billion.

Part of the reason why we have been so successful at increasing our assistance to U.S. businesses is that the Department's senior leadership is focusing everyone on delivering their services more efficiently, more effectively and at less cost. We can also help American companies thrive by making the Commerce Department run better, which has been a top priority of mine and my entire management team.

Consider the 2010 census, an undertaking that many experts identified as "likely to fail". The experts were proved wrong, as the 2010 census was completed on schedule and under budget, saving taxpayers \$1.8 billion.

Commerce has worked extensively with the White House on the National Strategy for Trusted Identities in Cyberspace, which is an initiative to work collaboratively with the private sector, advocacy groups, privacy experts and public sector agencies, to improve the privacy, security, and convenience of sensitive online transactions. The goals of the Strategy are to protect individuals, businesses, and public agencies from the high costs of cyber crimes like identity theft and fraud, while simultaneously helping to ensure that the Internet continues to support free speech, innovation, and a thriving marketplace of products and ideas. The final strategy is set to be released shortly, fulfilling one of the near-term action items of the President's Cyberspace Policy Review. Its implementation will be led by the Department of Commerce's National Institute of Standards and Technology (NIST), which plans to set up a program office to coordinate Federal activities and bring the public and private sector together.

A year after I arrived at Commerce, the Department stepped into a pivotal event with the explosion of the BP Deepwater Horizon oil rig on April 20, the largest oil spill in U.S. history. Within hours the National Oceanic and Atmospheric Administration (NOAA) responded by mobilizing ships, aircraft, and personnel to provide targeted weather forecasts and oil spill trajectory maps and EDA applied resources to help gulf communities. ESA provided the data needed to estimate the economic impact while NOAA-protected gulf seafood through closures and careful reopening of fisheries in Federal waters. We learned through the BP Deepwater Horizon oil spill and other events that we cannot have healthy economies without healthy communities and healthy ecosystems and that good science and stewardship is good business.

The destruction and loss of life resulting from the catastrophic disaster in Japan are heartbreaking. Nine minutes after the March 11 earthquake struck, NOAA issued its first tsunami warning for Japan, Russia, Marcus Island, and the Northern Marianas Islands as part of the coordinated global response to this tragic natural disaster. Shortly thereafter, timely watches, advisories, and warnings were extended to vulnerable coastal areas of Alaska, British Columbia, Washington, Oregon, and Hawaii well ahead of the arrival of the first waves. The NOAA-developed Deep-ocean Assessment and Reporting of Tsunami (DART<sup>G6,T1,K</sup>) stations detected and tracked the tsunami as it traveled from Japan across the Pacific Basin. The NOAA-issued tsunami warnings along with its education efforts allowed communities both here and across the globe to take action that saved lives and reduced property damage.

America is still in the process of economic recovery, and we at the Commerce Department must continue to build upon the past 2 years of successes. The President's fiscal year 2012 budget request for the Commerce Department makes tough choices—many of them reductions to programs that we might like to continue under normal economic conditions. But we also have the responsibility to prioritize investments in those things that are critical to winning the future. The President's request recognizes that this is only possible when the United States out-educates, out-innovates, and out-builds our economic competitors. For that reason, the fiscal year 2012 request for the Department of Commerce makes several targeted reductions and is focusing on organizational effectiveness in order to focus on investments in innovation, international competitiveness and science as well as supporting our coastal communities—to spur job creation here at home and improve American competitiveness in the global marketplace.

#### REDUCTIONS

With his fiscal year 2012 request, President Obama pledged to root out ineffective, outdated, or duplicative programs to cut or reform, taking further steps toward reducing our long-term deficit. In all, the Department's fiscal year 2012 budget proposes ending, reducing, or restructuring more than 15 lower-priority programs.

First, this budget cuts what is ineffective and outdated. For example, the Emergency Steel Loan Guarantee program made its last guarantee in 2003, and its elimination alone results in \$43 million in savings. Other reductions reflect the need to transition to new funding models, as in NIST's Baldrige Performance Excellence Program. To transition the program to be completely privately funded, the program's funding is reduced by \$2 million.

Second, hard choices were made among competing priorities. The termination of the Public Telecommunications Facilities, Planning, and Construction (PTFP) program saves \$20 million, and streamlines the current structure under which both the PTFP and Corporation for Public Broadcasting programs fund equipment for non-commercial television and radio stations.

Last, this budget strives for efficiency. The proposal to restructure ITA saves \$20 million through the streamlining of administrative functions, closing some overseas posts, and focusing on high-priority markets and industries.

By eliminating the Trade Adjustment Assistance for Firms program, discontinuing the Trade Adjustment Assistance for Communities program, and ramping up the Economic Adjustment Assistance (EAA) program, our Economic Development Administration will be able to get funding out more quickly and at a much lower cost to areas disrupted by import competition or other factors. EAA is the most flexible program in EDA's toolbox, tailoring economic recovery strategies to communities' needs with far lower overhead costs than Trade Adjustment Assistance. The elimination saves \$15.8 million.

We also took a hard look at our statistical programs and products within this budget, eliminating six statistical programs and reducing funding in three others at the Census Bureau, for a savings of \$16 million. We targeted programs, such as the separate publication of E-Business statistics that had, over time, been incorporated into other data collection efforts, thereby achieving greater efficiency.

But by far, our top saving initiative focuses on reforming the way the Commerce Department does business. We are doing more while spending less. We plan on saving \$142.8 million in fiscal year 2012 as part of the President's Administrative Efficiency initiative. The Department is digging into how we handle acquisitions and other administrative functions to find places where we can leverage our buying power. We have a six-point plan to reform acquisitions in order to deliver greater savings, greater results and greater efficiencies. Specific measures include saving taxpayers \$57 million in fiscal year 2012 through bulk buying and other smart purchasing strategies, stronger metrics to measure and increase performance, a new approach to requirements definition and validation, an enterprise-wide approach to identifying and managing high-risk projects, and a new Center of Excellence to best serve every bureau within the Department. Last, we anticipate savings in information technology through data center consolidation and slowing the replacement cycle for computer hardware.

#### INVESTMENTS

At the same time the fiscal year 2012 budget makes some tough but responsible choices that will put Government on a sounder financial footing, it also reflects this administration's commitment to invest in areas that will help create jobs here at home and better position America in an increasingly competitive global economic environment. Because of the savings discussed above, the Department is able to rein-

vest \$39.2 million to strengthen valuable programs. The budget does this by focusing investments in innovation, international competitiveness, science, and support for coastal communities.

#### *Innovation*

In his State of the Union Address, the President said: “The first step in winning the future is encouraging American innovation”, and he promised to deliver a budget that would ensure the Nation’s ability to achieve that goal. The Department of Commerce is responsible for providing the tools, systems, policies, and technologies that give U.S. businesses a technological edge in world markets. Key components of the Department’s innovation tools are:

- NIST’s cutting-edge research laboratories;
- USPTO’s protection of intellectual property that fosters the entrepreneurial spirit;
- the EDA’s regional innovation clusters; and
- the National Telecommunications and Information Administration’s (NTIA) efforts to accelerate the adoption of a wireless interoperable network for public safety, optimize the use of Federal spectrum, and increase broadband access.

NIST is a key agency identified in the President’s Plan for Science and Innovation, the administration’s Innovation Strategy, and the America COMPETES Reauthorization Act—which the Congress approved with broad bipartisan support at the end of last year. For fiscal year 2012, the Department is requesting \$763.5 million for NIST laboratories, which includes an increase of more than \$100 million for research into advanced manufacturing technologies, health information technology, cybersecurity, interoperable smart grid technology, and clean-energy research and development.

In fiscal year 2012, NIST will also expand its extramural programs to support technological innovation through a request of \$75 million for the Technology Innovation Program, an increase of \$5.1 million, to continue to fund high-risk, high-reward research competitions in areas of critical national need such as advanced robotics and intelligent automation, manufacturing, energy, and healthcare. NIST is also launching a new Advanced Manufacturing Technology Consortia (AMTech) Program, a public-private partnership program for industry-led research and development (R&D) aimed at increasing the Nation’s return on scientific investment, collapsing the timescale of technological innovation, and ultimately expanding the value added captured by the domestic economy for emerging technologies. The \$12.3 million requested for the program will provide grants to industrial consortia to develop roadmaps for research that will broadly benefit our Nation’s industrial base.

NOAA’s atmospheric and ocean, coastal, and Great Lakes research programs turn scientific discovery and innovation into products and services for our communities and businesses. The President’s budget request for 2012 includes \$212 million for the Office of Oceanic and Atmospheric Research (OAR). NOAA is proposing to strategically realign this existing core research line office to better support the goals of the America COMPETES Reauthorization Act of 2010. OAR will refocus its work to serve as an innovator and incubator of new science, technologies, and applications, and an integrator of science and technology across all of NOAA.

A prime example of NOAA’s work in advancing innovative technologies for weather forecasting is the adaptation of naval radar technology for use in severe weather and tornado forecasting. Multi-function Phased Array Radar, developed by the Navy for use on ships, is being adapted by NOAA and its partners, for severe weather forecasting. This work is improving the average lead time for tornado warnings. NOAA is also leading the way in weather and climate modeling and research. Since the 1980s, NOAA has more than doubled the accuracy of hurricane track forecasts. And public and private sector decisionmakers look to NOAA for climate products such as the air-freezing index to provide home builders with information on which to design home foundations. Also, in fiscal year 2012, the President’s budget invests \$2 million to advance our capabilities to understand and forecast atmospheric conditions to support wind energy generation in the United States.

USPTO’s work in fostering innovation is a crucial driver of job creation, economic recovery, and prosperity. American innovators and businesses rely on the legal rights associated with patents in order to reap the benefits of their innovations. Processing patent applications in a quality and timely manner establishes a business environment that cultivates new ideas, technologies, services, and products by ensuring their protection. USPTO has committed to taking action on a patent application within 10 months by 2014—a significant reduction from the slightly more than 2 years on average it currently takes to first address a patent application. The current backlog of more than 700,000 patent applications stands as a barrier to innovation and economic growth. USPTO has committed to reducing the patent back-

log to less than 353,000 by 2014. The fiscal year 2012 budget for USPTO continues to request full access to fees, which is estimated at about \$2.7 billion for fiscal year 2012. The request allows USPTO to levy a 15 percent surcharge to optimize patent and trademark quality and timeliness. Doing so will aid intellectual property policy, protection, and enforcement worldwide.

The fiscal year 2012 budget also supports innovation and economic opportunity by ensuring taxpayer investments in broadband are managed responsibly and achieve results. In fiscal year 2012, NTIA will continue its work in fostering greater access to and use of broadband services throughout the Nation. NTIA completed the award of its broadband grants at the end of fiscal year 2010 and now the funded projects are being implemented. The projects will be built between now and fiscal year 2013. The fiscal year 2012 budget includes funding for proper oversight of the program to guard against waste, fraud, and abuse by the grantees—many of whom have never received a Federal grant before.

The Department's establishment of the Broadband Technology Opportunities Program (BTOP) from the ground-up has yielded some valuable lessons and insights that may be applied to future initiatives, including the President's Wireless Initiative. A key finding is that the strongest, most sustainable project proposals are those where communities take a comprehensive approach in defining their critical broadband needs. In the BTOP context, we refer to these as "comprehensive community infrastructure projects" because they engage a wide range of local partners, addressing the needs of multiple target groups and leveraging public and private resources. Connecting anchor institutions, including local public safety first responders, or improving their connection speeds can have a multiplier effect throughout a community: as residents discover the benefits of broadband access at work or at school, they are generally more likely to adopt broadband at home. This is a lesson I believe can and should be applied to similar programs going forward.

The Department will also receive about \$1.5 billion in mandatory funding to be offset by spectrum auctions to support the President's Wireless Innovation and Infrastructure Initiative (WI3). NTIA, along with the Federal Communications Commission, will find 500 MHz of spectrum within 10 years that can be applied to commercial purposes in support of WI3. Of this funding in fiscal year 2012:

- \$1.4 billion would be for NTIA to establish and develop a nationwide interoperable public safety broadband network;
- \$100 million would be for NIST to work with industry and public safety organizations to conduct research and develop standards, technologies, and applications to advance public safety communications; and
- \$20 million for EDA to accelerate the development of innovative wireless applications that can accelerate job creation and promote the competitiveness of the regional economy.

#### *International Competitiveness*

The Department of Commerce embraces its core mission to improve U.S. global competitiveness and foster domestic job growth—and to do so while protecting American security. The President's fiscal year 2012 budget request will increase U.S. exports, ensure effective export control and trade compliance, and make certain that trade remedy laws are enforced.

Exporting is good for American business, good for American workers, and good for American jobs. That is why President Obama announced NEI and set the goal of doubling U.S. exports over 5 years to support several million American jobs and foster long-term sustainable economic growth.

We jump-started the NEI in fiscal year 2010 by pursuing new relationships with the business community. In addition, as previously mentioned we led a record 35 trade missions to 31 countries with 400 companies to promote industries including renewable and nuclear energy, as well as infrastructure, construction, and aerospace. One recent example of a successful trade mission involved Suniva, based in Atlanta, Georgia, which manufactures high-efficiency silicon solar cells and high-power solar modules using low-cost manufacturing techniques. The company is focused on the mass adoption of high-efficiency photovoltaic technology and the significant economic, social, and environmental benefits it brings to the world community. The company found potential partners on a clean-energy trade mission to India in 2009. They returned the next year with the ITA and secured several long-term customers with an estimated value of \$18.7 million.

With a relatively small and strategic Federal investment in export promotion, we can build upon our aggressive efforts to help American companies sell their American-made goods overseas. The fiscal year 2012 budget request for the ITA includes an increase of \$78.5 million to support NEI-related efforts, which will encourage new companies to export, and help current exporters expand to more markets.



These efforts mean leading more trade missions; helping U.S. companies win more foreign procurement bids; bringing more foreign buyers, distributors, and partners to U.S. trade shows; and providing more business to business matchmaking services to U.S. companies. In addition, a key part of the NEI involves ITA's continued work to assist companies and create trading opportunities by identifying, overcoming, and resolving trade policy issues and ensuring that our trading partners fully meet their obligations under our trade agreements.

The Bureau of Industry and Security (BIS) advances U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system, and by promoting continued U.S. leadership in strategic technologies. A major administration-wide effort to reform the current morass of bureaucracy that constitutes our export control regime is underway. Our focus, quite simply, is to build higher fences around fewer items—to focus resources on protecting those products that are truly sensitive. The fiscal year 2012 budget recognizes the important role of BIS programs and supports the national security mission with a request of \$111.2 million. This includes an increase of \$10.8 million for an Export Enforcement Enhancement initiative that increases staff for counter proliferation, counter-terrorism, and national security programs and investigations.

Another key priority for the Department is strengthening the Nation's cybersecurity infrastructure, which is vital to the economic and national security interests of the United States. The fiscal year 2012 budget requests an increase of \$81.3 million for cybersecurity, of which \$37.9 million secures Commerce Department systems and \$43.4 million supports NIST's work on the U.S. Government and national security infrastructure.

#### *Science*

The Department of Commerce also supports science with a focus on generating and providing timely data and analysis to support effective decisionmaking by policymakers, businesses, and the public. Before discussing other science-related initiatives, I'd like to speak on the NOAA's Joint Polar Satellite System—JPSS.

For fiscal year 2012 we are requesting \$1.07 billion for JPSS, an increase of \$687.8 million more than the fiscal year 2010 enacted. This large increase reflects the impact of not receiving our fiscal year 2011 request for this vital program. Even with this large increase, we are looking at a 12–18 month delay in the delivery of the first satellite and a very high likelihood of a gap in our polar satellite coverage. Continued inadequate funding only further jeopardizes this program. JPSS is essential for the Nation and provides the backbone of all National Weather Service forecasts beyond 48 hours. Without JPSS, our ability to provide timely and accurate weather forecasts and severe storm warnings for both civilian and military users will significantly diminish, thereby placing lives, property, and critical infrastructure in danger.

While we all wish that the predecessor NPOESS program had not had the history it did, the administration created a new structure that works, and we need this funding to ensure we can continue to provide this essential service to the Nation. I look forward to working with you to resolve this issue.

Finding the resources for JPSS was not easy. It was one of the tough choices the Department had to make and is one of several major science-related initiatives in the fiscal year 2012 request. The President's fiscal year 2012 request supports steps needed to improve the understanding of our climate and proposes a no-cost reorganization within NOAA: establishing a Climate Service line office. NOAA spends more than \$350 million on climate science and decision support, with the majority of spending spread across three different line offices. The current arrangement complicates coordination and the ability for NOAA to provide information to decision-makers who can use it—whether it's local governments looking at meeting a growing community's water needs, State governments looking at building a new road or bridge, or businesses looking at long-term site locations and investments. This new line office will allow NOAA to more effectively and efficiently provide reliable and authoritative climate data, information, and decision-support services. The climate service is primarily about providing one place for people to go to access and be able to use the data we are already gathering—at no additional cost to taxpayers. A streamlined Climate Service would increase NOAA's ability to more efficiently and effectively respond to the demands we are hearing from businesses and communities for science based climate information to help them make sound investments that lead to economic growth and innovation, and improve public safety.

The Bureau of Economic Analysis (BEA) provides the tools to identify the drivers of growth and fluctuation, and to measure the long-term health and sustainability of U.S. economic activity. One of the most valuable services the Department provides both the business community and policy makers are timely, accurate, and reli-

able economic data to inform their decisionmaking. These key decisionmakers would benefit from innovative statistical tools updated for the dynamic changes in the U.S. economy to make evidenced-based choices about growing their businesses and creating policy that fosters economic expansion. To answer this demand, BEA will focus in fiscal year 2012 on producing new economic statistics and tools to enhance its evaluation of the economic performance of U.S. industries. The fiscal year 2012 request invests an additional \$10.3 million to create these new products, which include a new suite of statistics showing the purchasing power of American households and how it varies across different households and over time. This will give small businesses information they need to grow.

The U.S. Census Bureau is the premier source of information about the American people and our economy. More than just numbers, this information supports important policy decisions that help improve the Nation's social and economic conditions. The Census Bureau completed the 2010 census and has turned to releasing that data. In the fiscal year 2012 request, the Census Bureau turns its attention to early planning for the 2020 census with a focus on cost containment, including an Internet option, and identifying research-based design options. The fiscal year 2012 budget includes \$69.3 million to begin a 3-year research and testing phase for the 2020 census—with a goal of designing a census that costs less per household while maintaining quality. The fiscal year 2012 budget also includes money to ramp-up for the economic census, which collects data every 5 years from all businesses in America to provide information that is used throughout the private and public sectors and that is vital to producing accurate economic statistics.

The Census Bureau's demographic statistics programs provide policymakers with social and economic data needed to make effective policy and program decisions as well as provide source data used to create the U.S. official measures of employment, unemployment, consumer prices, poverty, and widely used measures of income and health insurance coverage. The American Community Survey (ACS) provides the primary source of demographic and economic data for small geographic areas. As the Federal Government's most comprehensive demographic survey, ACS results are used to distribute more than \$400 billion in Federal funds. The fiscal year 2012 budget requests \$8.8 million to complete the expansion of the ACS sample size to improve the reliability of the data at the tract level.

#### *Coastal Communities*

The Department of Commerce has the responsibility to sustainably manage our Nation's oceans and coasts to promote economic sustainability and to ensure that future generations will also have the ability to enjoy and earn their livelihoods from these same resources. Impacts to water quality, fish stocks, and coastal habitat all impact our coastal communities through potential reductions in local fishing businesses that are the heart of so many coastal communities, tourism, and storm protection.

The National Marine Fisheries Service (NMFS) manages living marine resources throughout the Nation's coastal zone and protected areas. We are faced with the challenge of ending overfishing, improving fisheries management, and putting fisheries on a path to sustainability. Working with the Regional Fishery Management Councils, in fiscal year 2010, five fisheries stocks were rebuilt. Based on estimates, rebuilding U.S. stocks has the potential to increase the annual commercial dockside value by 54 percent, which is an estimated \$2.2 billion. The fiscal year 2012 budget requests \$1 billion for NMFS, \$7 million less than the fiscal year 2010 enacted. Within the request, \$54 million is to provide start-up costs for fisheries recently shifting to catch share programs, and to develop new catch share programs that incentivize more effective fisheries management. Recognizing the importance of increasing the number and timeliness of stock assessments, a total of \$67 million, including \$15 million to expand annual stock assessments which provide the scientific basis for setting appropriate catch limits.

Our oceans, coasts, and marine resources are a source of untold wealth. America has 95,000 miles of shoreline and the world's largest Exclusive Economic Zone at 3.4 million square nautical miles. The oceans and coasts provide many goods and services to the Nation, including food from wild fisheries and aquaculture, goods from maritime commerce, ship and boat building, energy, minerals, tourism, recreation, and pharmaceuticals. Nearly 80 percent of U.S. import and export freight is transported through seaports. The fiscal year 2012 budget requests \$559.6 million for NOAA's National Ocean Service (NOS), including \$8 million to support a National Working Waterfronts grant program to assist fishing dependent coastal communities adversely impacted by changes in regulations or environmental conditions that affect fishing resources on which the community depends and \$20 million in

grants to support regional partnerships for the development of comprehensive coastal and marine spatial planning.

*Organizational Effectiveness*

The Department of Commerce is also committed to organizational effectiveness and is undertaking a number of initiatives to streamline Government and improve how we deliver existing services to businesses and other customers. Through CommerceConnect, we are working to connect our infrastructure of web portals and customer service technologies, call centers, field offices in 18 cities, and training for customer-facing staff among the Commerce Department bureau's and their 70+ business-supporting programs. We recognize that the needs of any given business do not stop within Commerce's organizational boundaries. We are working with other Federal, State and local governments, and nonprofit partners to build customer service infrastructure to connect businesses to the right resources. CommerceConnect is designed to break down silos and make Government and partner programs more effective in serving America's businesses and entrepreneurs.

CONCLUSION

Ultimately, the fiscal year 2012 budget request for the Department of Commerce is a roadmap for winning the future by helping American companies be more innovative, export more, and create and sustain the jobs of the future. The budget strikes a balance between the necessity of responsible reductions that reduce spending with targeted, crucial investments in foundational R&D on technologies that will lead to private sector job creation and help America out-innovate and out-build its economic rivals.

Thank you for the opportunity to appear before you today. I look forward to answering your questions.

Senator MIKULSKI. Thank you, Secretary Locke.

I have questions in the area of USPTO, NIST, their cyber role, and also the National Telecommunications and Information Administration. If I don't get it in the first round—I want to be sure that all members have a chance, that we will move this along, and others I will do in my own wrap-up.

What I want to bring to the Members' attention because I know, look at the attendance here today, this is great, either we don't have a lot of hearings or we have a lot of interest, either way.

Senator HUTCHISON. You better worry, Secretary. This looks like the war department to me.

Senator MIKULSKI. So this is the A-Team here. This is nothing compared to confirmation, though.

USPTO BACKLOG

I would like to say this to my colleagues. You have heard me extend kudos to Secretary Locke's very keen management skills. However, I also want you to know that there is an excellent report put out by the Office of Inspector General on some of the significant flashing yellow lights that could eat our budget alive, whether it is satellite programs, information technology, and so on.

And I would really bring this to the subcommittee's attention as we work on the budget. We have a lot of work to do. And let me get to my initial round of questions.

You heard me, Mr. Secretary, talk about how the Commerce Department is one of our economic engines. I like the fact that you really paid attention to the management issues within Commerce. For too long, the Secretary of Commerce was viewed as America's salesman. Travel around the world, do those big business trips, try to get a deal or two, come and back and go "hoo-ha, hoo-ha" with America's private sector.

I think that is good, but I don't think the Secretary of Commerce is America's salesperson. I think America's private sector is its best salesperson, and we need to be able to facilitate trade. So you did the right thing.

But let us go then to creating new ideas. Could you tell us, as you wrap this up, where are we on USPTO? What is it that we need to do to do two things—make sure we deal with the backlog, and then the other issue—and this is what I want my colleagues to be aware of—USPTO is one of the big targets of cyber intrusion, where they are actually coming and trying to steal our secrets. Why invent a cure for Alzheimer's when you can steal it from somebody standing in line to get their patent?

So, could we lead off with job creation by protecting our intellectual property and how we best are able to do that? Could you address the backlog issue and as well as the cyber protection issue?

Secretary LOCKE. Well, thank you, Madam Chairman.

Senator MIKULSKI. And do you have the money and the resources and the policy to do it?

Secretary LOCKE. Well, first of all, when the President took office, we had a backlog of some 800,000 applications. The average waiting time is more than 3 years to get a patent determination. Our goal is to get it down to what the industry believes is anywhere from 18 to 20 months.

But we are also creating what we consider an express line service for those who really believe that they need a patent determination as quickly as possible for a very small extra fee. And under patent law legislation, if it is passed by the full Congress, we will have the ability to reduce that extra fee dramatically for small inventors and small businesses.

But the idea is that for a very small extra fee, we will guarantee express service and patent determination within 1 year. But we are dramatically reducing the backlog, working with organized labor, managers, and line staff. We are completely transforming USPTO to be much more efficient.

And as I indicated, even though we have had a surge of applications by 7 percent, we have actually reduced the backlog by 10 percent. And—

Senator MIKULSKI. So what does that add up to? So you have had 7 percent more where it shows that America is bursting with ideas. I mean, would you say we are bursting with ideas?

Secretary LOCKE. You know, we are one of the most innovative and intellectually stimulating countries around the world, and that is why we are creating these jobs and new technologies. But we need to make sure that people can get the patent so that they can get the funding that they need to start that new business. It is like going to a bank. If you don't have a patent—

Senator MIKULSKI. No, we got that. So how long is the backlog?

Secretary LOCKE. The backlog is almost, I believe, below 700,000. [The information follows:]

The patent application backlog as of April 30, 2011, is 706,778 applications.

Senator MIKULSKI. So if I came now with—if a biotech entrepreneur out of Maryland came with an idea for, say, breast cancer,

or cognitive stretch-out for an Alzheimer's disease, how long would they be in line?

Secretary LOCKE. I believe if they were to file a patent application today, they could expect to have a patent determination probably between 2 to 3 years. And if they pay an extra fee of \$2,000 under our proposal, which will commence in about 2 weeks, they will be able to get that patent within 1 year.

Under our proposal, if patent law legislation passes—and, of course, it passed overwhelmingly in the Senate; it needs to clear the House—but for a small inventor, our proposal is to charge only \$1,000 extra, and they will be able to get their patent within 1 year.

We are also saying that for a lower fee, you can actually delay your patent processing if you don't, let's say, need it within 5 or 6 years. Let us say you are seeking Food and Drug Administration (FDA) approval on something that is going to take a long time. You don't need that patent application. So we are actually creating three different lines.

The regular line under our goal should be 18 to 20 months. That is what the industry believes is a reasonable period of time: A slower line for lower fees and for a slightly higher fee, express service in which you will get it within 1 year.

Senator MIKULSKI. Okay. Well, thank you.

As you can see, my time is actually up. So I am going to turn to Senator Hutchison.

But my line of questioning will be, let us protect the ideas. Then I am going to ask you about NIST, which is to create the standards, so that your product meets American standards. We don't yield to a Chinese standard. And then how we sell our stuff around the world. So jobs today, jobs tomorrow.

Secretary HUTCHISON, Secretary—oops.

Senator HUTCHISON. Never. Thank you, Madam Chairman.

Senator MIKULSKI. Senator Hutchison.

#### DEPARTMENT FUNDING LEVELS

Senator HUTCHISON. Thank you very much.

Let me just talk to you because, obviously, we are all looking for places to economize and prioritize our spending for efficiency. Your request is \$5 billion below the fiscal year 2010 enacted levels. However, with the \$6 billion that was allocated on the once-every-decade census, it is actually an increase in your budget. Where are you trying to cut excess or outdated programs?

Secretary LOCKE. Well, you are correct. We need to take out the one-time census activity. And if you look at the President's proposed 2012 budget compared to the 2010 enacted without the census, after you back out the census, it is roughly \$1.3 billion—excuse me, it is \$822 million—

Senator HUTCHISON. Increase.

Secretary LOCKE [continuing]. Above the 2010 enacted census. But we need to understand that almost \$810 million of that increase or that differential is just for the satellite program alone. Almost \$687 million just for JPSS, but \$810 million for all the satellite programs, and it is absolutely vital that as we move forward on the replacement for some of our polar satellites, which are de-

grading, whose useful life is coming to an end, that we have a replacement in mind or replacements in place.

With respect to the savings, we have come up with savings on administration, especially acquisition reform—major savings on acquisition reform that is assumed in the budget. We are already making progress on that. We are trying to consolidate our acquisition programs and use the best practices throughout the agency instead of having each bureau have their own different types of acquisition programs, also in terms of consolidation of some of our IT programs and also our fleet management.

But we have actually gone through a whole host of programs line by line to figure out what things really are not as high priority, because we know that we are in a period of limited resources. We cannot do everything. We need to really focus on our strengths, and that means cutting back on things that are not as important.

#### CONSOLIDATION OF U.S. TRADE AGENCIES

Senator HUTCHISON. Well, following up on that, in the President's State of the Union Address, he mentioned the fact that multiple agencies have responsibility over trade. And I think he is right. You have got the United States Trade Representative (USTR), Export-Import, International Trade Commission, and the ITA.

Can that be consolidated under Commerce, and are there any ongoing plans to try to put all of the different trade-related agencies under the Commerce Department?

Secretary LOCKE. Well, the President has directed such an effort and issued an order, and those results, those recommendations are to be presented to the President within about 60 days.

[The information follows:]

The review on consolidating U.S. trade agencies is scheduled for June 9, 2011.

Senator HUTCHISON. But are you in an effort right now where you have the beginnings of a proposal for the President?

Secretary LOCKE. Well, actually, that effort is being led by Deputy Director of the Office of Management and Budget (OMB), Jeff Zients. And he has been meeting with both stakeholders—using all the different trade agencies that take advantage of the various functions of the various trade activities within the Federal Government, interviewing our folks, looking at all of our programs—and meeting with all of the other agencies that are involved in trade, whether Export-Import Bank, Small Business Administration, U.S. Trade Development Agency, the USTR's office, and so forth.

Senator HUTCHISON. Okay. Let me just ask you this. Do you think that—do you support putting everything in the Department of Commerce that is trade related? And do you think it all works, the different factors? Obviously, they are all doing a little bit different things, but with the same goal.

Secretary LOCKE. Well, I am not sure that all the different trade activities belong in the Department of Commerce. Some of them are more State Department oriented and related to improving our image around the world using trade and incorporating U.S. businesses in some of those development projects.

But clearly, there needs to be better coordination and elimination of overlap and duplication. So we look forward to the recommendations that would be presented to the President. But however these agencies and activities are coordinated or eventually configured, we are very proud of what we have been able to do and the benefits that we are bringing, especially to small- and medium-size companies, helping them sell around the world, where 95 percent of the world's consumers live outside the borders of the United States.

And yes, American companies need to increase their market share and their growth within America. But if they want to diversify, if they really want to sell, if they want to create more employees here at home, we need to help them sell around the world.

#### REORGANIZATION OF EXPORT-RELATED AGENCIES

Senator HUTCHISON. Well, thank you. Thank you, Madam Chairman.

Senator MIKULSKI. Senator Brown.

Senator BROWN. Thank you, Madam Chair.

I want to follow up on some of the comments of Senator Hutchison about reorganization. But first, brief comments about your discussion of innovation, how we can out-compete and out-innovate anyone in the world. We do that, and this, the article a year ago that Andrew Grove wrote that I am sure you saw about how we have fallen short as a Nation in scaling up after we out-compete and out-innovate. And over time, as we move manufacturing jobs overseas, the innovation that takes place on the shop floor is taking place in other countries instead of taking place here. And ultimately, we don't out-compete and out-innovate. So my question—or first, Senator Kirk and I, Mark Kirk and I introduced a bill, the National Manufacturing Strategy Act, which I think plays into some of this.

The administration, I understand, is right now examining a reorganization of export-related agencies. Some suggestions for reorganization include only consolidating export promotion with other reorganization options, including both export promotion and all trade functions, including the USTR. How do you see this happening?

Is this more likely—is this going to lead to a manufacturing strategy, per se? The legislation Senator Kirk and I introduced would pretty much say to the Commerce Department, come up with a manufacturing strategy, report to the Congress how you are doing it on a regular basis, because we really are the only major industrial power in the world that doesn't have a manufacturing strategy.

It is as Chairwoman Mikulski said; it is not picking winners and losers. If we have picked winners and losers in this country, 20 years ago, we picked finance as the winner and manufacturing as the loser. And I am not saying pick any part of any industry.

But manufacturing is such a key component of exports, such a key component of creating a middle class. So talk to me about how you see that organization in terms of manufacturing.

Secretary LOCKE. Well, obviously, as we look at reorganization and greater effectiveness of our trade agencies, manufacturing plays a key role in our exports, in our trade promotion, because so much of what we, in fact, make is exported. And in fact, virtually

half of the economic recovery in the last 2 years has been driven by exports, and we know that exports of manufactured goods are primarily what we in fact ship around the world.

And we need to have that policy to promote manufactured goods. And that is why Ron Bloom, who works in the White House, is helping direct that effort. And both the Commerce Department and, I am sure, Mr. Ron Bloom are more than happy to work with you on the legislation that you and Senator Kirk have proposed.

But clearly, to create more jobs in manufacturing and to support our manufacturing base, we need to create the environment for that economic recovery. We need to invest in innovation and especially work with those manufacturers who may not on their own be able to engage in the research and development (R&D) with respect to new technologies and new manufacturing items.

And we need to focus on helping those companies sell those "made in USA" goods around the world. I am pleased to report that under the President's NEI, which seeks to double exports by the year 2015, we are on track to do that, despite some of the predictions by experts that that was an impossible task when the President announced that.

In 2010, the first year of the NEI, we have increased exports by 17 percent. Goods exports were up 23 percent more than 2009. And in the first few months of 2011, exports are up, of which manufactured goods make up the bulk of those exports. In fact, I think January 2011 was the biggest exporting month in the history of the United States. And our exports of goods even to China were up 32 percent in 2010 over 2009.

But we also have to enforce our trade laws. We need to make sure that American companies have a level playing field, and we are talking about not just tariff, but nontariff barriers, whether it is customs rules in Russia to discriminatory policies that might favor products from another country versus American products. So we have to really focus on that whole panoply of strategies to support manufacturing, because manufacturing is the bulk of the things that we export.

Senator BROWN. Thank you.

Mr. Secretary, one other question. I sit on the President's Export Council and appreciate the work that you are doing on the export initiative. I have set up a sort of similar advisory committee in Ohio, as you and I have discussed, to give me input on what we should be doing with the President's NEI.

I think this is more than anecdotal. We are seeing an increasing amount of in-sourcing, foreign investment in the United States. Foreign companies in the United States have a significantly higher unionization rate than other companies in the United States overall. They tend to invest in manufacturing, as you suggest. They spend on R&D. They account for about 20 percent of U.S. exports.

So tell me what you are doing, as specifically as you can, to attract foreign investment here, especially foreign investment in manufacturing.

Secretary LOCKE. We actually have a program called Invest in America, and we have plans and proposals to enhance that. We are developing, for instance, a Web site that would feature all the various tax incentives and economic development proposals or incen-



tives that each State offers. That will be online, so that companies around the world, and investors, entrepreneurs around the world can look at the opportunities and understand what is available in America.

So many people who want to come to the United States or think about coming to the United States think of the United States as a monolithic structure, not realizing that the incentives in Ohio may differ from the incentives of California or Georgia, all the way from tax issues to economic development assistance to education programs. So we are trying to make that all available online.

And so, those are just some of the strategies. But clearly, we do not do enough as a country to attract foreign direct investment into the United States, creating jobs. I mean, for instance, the BMW plant that opened up in South Carolina manufactures their 300 series automobile there, and yet 25 percent of those automobiles being built in that plant are for export.

And we are now beginning to see many other U.S. companies and foreign companies trying to establish their operations here for manufacturing, bringing some of that back to America. And I have come across so many companies that used to make their stuff, produce very heavy machinery, equipment, dredging equipment overseas, and they actually find it cheaper now to build it in the United States with all the efficiencies, the R&D that they are able to incorporate together.

And of course, that "made in USA" brand is highly valued and in great demand all around the world. We need to help those small- and medium-size companies sell more of that around the world, take advantage of the great cache that "made in USA" brand has.

Senator BROWN. Thank you, Mr. Secretary.

Thank you, Madam Chair.

Senator MIKULSKI. Senator Murkowski, I know we normally would turn over here. But Senator Lautenberg came first, and I know you were getting caught up on the hearing. May I go to him and then come back to you?

Senator Lautenberg.

Senator LAUTENBERG. Thanks, Madam Chairman, and thanks, Senator Murkowski.

That may have been, Madam Chairman, a slip of the lip because we know that Mr. Locke is likely buying a long-term ticket to go elsewhere, and therefore, Senator Hutchison might be an eligible person for that position. So—

Senator MIKULSKI. If we had a Democratic Governor in Texas, it might be a good idea, but—

Senator LAUTENBERG. Ah, conversion.

Mr. Secretary, you have done a great job there at Commerce, and we are pleased to hear about some of the good things that are happening. One place that we know that competition is so keen is in the area of research and science engineering, and the fact that we have roughly 700,000 applications waiting for review at USPTO while China proceeds, and they have opened up, apparently, a series of satellite offices. It is something that I think we have to take a look at.

I am going to be in China next week, and we are going to discuss that as one of the issues. And has there been any thought here to

making services available—easier, geographically, by the opening of satellite offices?

Secretary LOCKE. Yes, very much so. In fact, we have already announced the intent to open up the first satellite office in the history of USPTO, and that would be the first one in Detroit. We are working under the Senate bill that passed. It calls for three additional satellite offices. That is something we very much support.

We believe that it is very difficult to attract workers to USPTO if they only can work in Washington, DC. We also believe that one of the ways in which we can reduce significantly the backlog of USPTO is to allow interaction between the applicant and the examiner, whether face-to-face, especially if we are able to have satellite offices, or by teleconference and videoconferencing. But especially face-to-face instead of passing paperwork back and forth or emails, but actually discussing the application itself and going over—

Senator LAUTENBERG. Well, New Jersey, and Mr. Secretary, I remind you, is a place where a lot of patents are created. And it is right in the middle of the New York/New Jersey marketplace. So as you think about it, I hope that you will come back from China and visit with me when we open that office. So thanks for your thoughts there.

China's undervalued currency reduces American exports, increases our imports and contributes to a \$273 billion trade deficit with China last year. We pushed for China to revalue its currency, but our trade deficit remains stubbornly high. What are we doing to fix this problem?

Secretary LOCKE. Well, first of all, Secretary Geithner has spoken at length about it and clearly outlined United States policy and our goals with respect to the Chinese currency. In the meantime, the Commerce Department has reinforced those messages in all of our meetings with top Chinese Government leaders, and I know that President Obama has raised that in his meetings with the Chinese leaders.

But we, at the Department of Commerce, can address that trade imbalance by helping American companies export more of their goods and services. We have had reverse trade missions, bringing several hundred trade shows in the United States, bringing foreign buyers to those trade shows. And just last year alone, we were able to help American companies through those trade shows with foreign buyers accumulate or log almost \$750 million worth of sales.

We have had numerous trade missions to China, and just last year alone, I had one focusing on clean energy. And immediate sales were around \$50 million just from a host of companies that we took, focusing on clean energy. Exports of goods to China in 2010 were up 32 percent more than the previous year. That compares with increase of exports of 23 percent for goods to all countries around the world.

So we are focusing on China. There is a great demand in China for "made in USA" goods and services because there is a huge need for medical devices, for education, for engineering, to address clean water systems, and also for our food. And so, we are targeting China very aggressively to help American companies.

Senator LAUTENBERG. But Mr. Secretary, the problem of their valuation of their currency does place us at a distinct disadvantage.

And obviously, it produces a different kind of living standard there than we have here. So I think that this pursuit has to be picked up, and hopefully, we will begin to see a change there.

And I would just finish my questions by making a suggestion here, that when I hear about express patent review, it says that the big guys, those with a lot of money, can continue to be in the first-class seats. Whereas the smaller business, the startup company, is looking for ways to get into the marketplace, and I don't think it is quite fair on balance to say if you have got the money, you go to the head of the line. If you don't, you are back further.

Secretary LOCKE. Well, that is why, Sir, we are focusing on overall reduction of the patent pendency period from the unacceptable 38 months on average now to what the industry believes is a proper timeframe of 18 to 20 months, to ensure that there is an opportunity to publish the proposals, to make sure that others who feel that they should not be granted have an opportunity to weigh in and offer their views.

But right now, the cost, all fees, the combination of fees that a small entrepreneur or small businessperson would pay for a patent application is \$1,000. And under our proposal, for an extra \$1,000, that would be the fee to the small innovator/inventor to go through and use the express line. The big companies pay substantially more than that.

But when you really look at the cost, for instance, of lawyers' fees to prepare that patent application, oftentimes, those legal fees are \$20,000, \$30,000. So all we are talking about is an extra \$1,000 for the small innovator/inventor.

Senator LAUTENBERG. Thank you very much, Madam Chairman.  
Senator MIKULSKI. Senator Murkowski.

#### CATCH SHARE PROGRAMS

Senator MURKOWSKI. Thank you.

Mr. Secretary, welcome and thank you for your leadership.

I want to talk fish a little bit this morning. Coming——

Senator MIKULSKI. I knew we would get to fish.

Senator MURKOWSKI. Yes, you have got to do fish. But coming from the Pacific Northwest, I have got an ally here. He knows and understands fish, and we appreciate that. But coming from a State where we have got about one-half the coastline, more than one-half the coastline in the United States, we pay attention to what goes on within the NOAA budget, and National Marine Fisheries.

So I want to just bring up the issue this morning. As you know, we have the most abundant fisheries in the Nation. We have the most sustainably managed fisheries in the Nation. We have averaged nearly 5 billion pounds a year for the past 20 years, account for nearly 60 percent of the fish that are harvested within this country.

We employ, well, I guess it is more than 60,000 Americans that are directly or indirectly employed in the industry. And I think, as we look to the contribution of the fisheries, certainly from Alaska's perspective, we recognize that the single most common trait seen among the fisheries and the communities is their dependence on well-managed marine resources, and our fisheries rely very heavily on good science and proper guidance from the resource managers.

We know that the better job that we can do, the more we are able to benefit those within the industry. And we are able to have sustainable fisheries. We have the largest fishery observer program in the Nation. It is the only one where the industry pays all of the direct cost.

Now, North Pacific Fisheries Council is restructuring the program to support the existing catch share programs and the stock assessment needs, and industry is eventually going to pay for the increased observer coverage. But what is needed is that startup funding.

So the question to you this morning is whether or not you anticipate that NOAA will fund the startup implementation costs that are needed for the program. Where are we on that?

Secretary LOCKE. We have requested in the—the President has requested in the 2012 budget additional funds for the catch share programs. And we are trying to figure out how we can use those dollars, knowing that the initial transition to catch shares is difficult, sometimes difficult. Although I want to emphasize that catch shares is a voluntary program. It is not imposed by NOAA. It is a decision of the Regional Fishery Management Councils if they want to go to a catch share program.

[The information follows:]

In regard to the plan for implementation of the requested funds for the National Catch Share Program, the requested increase of \$36.6 million, for a total of \$54 million, in fiscal year 2012 will enhance the implementation of catch shares nationwide. The requested increase supports analysis and development of catch share programs, improved program management and infrastructure on a national level, and implementation and operation of specific programs such as by supporting observing and monitoring at-sea and on shore and enforcement activities. The following table shows the catch shares breakdown in the fiscal year 2012 President's request:

#### NATIONAL CATCH SHARE PROGRAM BREAKOUT

[In thousands of dollars]

	Fiscal year 2012 request
Activities and capabilities that support catch share programs .....	<sup>1</sup> 10,550
Support requests from Regional Fishery Management Councils for analysis and development of new catch share programs .....	<sup>1</sup> 2,000
Implementation and operations of specific catch share programs:	
Continue support for existing Limited Access Privilege programs .....	6,000
NE multispecies sectors .....	5,400
Cooperative research .....	6,002
Subtotal, base funds moved into the National Catch Share Program line .....	17,402
NE multispecies sectors .....	4,350
Pacific trawl individual transferable quotas .....	11,847
Gulf of Mexico Grouper/Tilefish individual fishing quota (IFQ) .....	6,850
Alaska Halibut Sportfish IFQ .....	1,003
Subtotal, fiscal year 2012 funds specific to each fishery .....	<sup>1</sup> 24,050
Total, Implementation and Operations of specific catch share programs .....	41,452
Total .....	54,002

<sup>1</sup> These funds equal the requested program change of \$36.6 million for the National Catch Share Program.

## ACTIVITIES AND CAPABILITIES THAT SUPPORT CATCH SHARE PROGRAMS

Funding under this line item will support activities and capabilities common to many catch share programs that are more efficient to implement at a regional or national level, rather than managing each specific catch share program individually. Examples of such activities include overall program management, improvements in fishery dependent data collection systems to support future catch share programs, quality control on historic catch data to support individual or group allocations, fishery data management, social and economic data collection or analysis, and adjudication of administrative appeals by program participants. In addition, funding requested under this line item would also support electronic reporting and quota accounting. Some regions have implemented catch share programs, and therefore have a base of expertise and capability to add additional programs. Other regions need capacity building to begin development of, and will likely eventually implement and operate, catch share programs.

## SUPPORT REQUESTS FROM REGIONAL FISHERY MANAGEMENT COUNCILS FOR ANALYSIS AND DEVELOPMENT OF NEW CATCH SHARE PROGRAMS

The National Atmospheric and Oceanic Administration's (NOAA) fiscal year 2012 budget request includes \$2 million for analysis and development of new catch share programs through the Regional Fishery Management Council (Council) process. Catch share programs typically take several years of analysis, stakeholder participation, and Regional Council deliberation before being adopted. Catch Share programs are typically more complicated than other fishery management plan amendments, and thus carry increased costs for analysis of alternatives and their impacts. Special stakeholder committees and workgroups, requiring funds for staff support and meetings, are often established to advise the Regional Council on appropriate alternatives.

## IMPLEMENTATION AND OPERATION OF SPECIFIC CATCH SHARE PROGRAMS

NOAA's fiscal year 2012 budget request includes support for implementation and operation of four new catch share programs:

- Gulf of Mexico grouper;
- Northeast groundfish;
- Alaska Halibut Sportfish; and
- Pacific groundfish.

Following Regional Council adoption and Secretarial approval of a catch share program, an implementation period of 1 to 2 years is common. Key implementation activities include hiring management and enforcement staff, establishment of program specific share accounting databases and reporting systems, identifying eligible participants, issuing catch shares, and computing annual quota for each participant. The operational costs include program administration, monitoring, enforcement, cooperative research, and science evaluation for new programs as well as potentially for existing programs.

In regard to the restructuring of the Alaska Observer Program, the North Pacific Council (Council) and industry groups in the region have been at the forefront of fisheries management, including the use of catch share programs, for a long time. The current North Pacific Observer program supports the North Pacific and Bering Sea Groundfish, Trawl, and Fixed Gear Fishery. A restructured program will expand observer coverage, including smaller vessels in the groundfish fishery and the halibut/sablefish fishery. Under this restructured program the Council and National Marine Fisheries Service are planning for the collection of fees to arrange contracts to support more observers and reduce conflict of interest. National Oceanic and Atmospheric Administration recognizes the value of startup funds as these fisheries transition to this restructured observer program and the importance of the restructured observer program to overall fisheries management in the region. NOAA is working closely with the Council to identify ways to support this need, however all fiscal year 2012 funding is contingent upon final congressional appropriations.

Funding requested in the fiscal year 2012 President's budget for catch shares supports activities specific to catch share programs such as share accounting databases, electronic reporting systems and other infrastructure and operational needs and may be used to support both new and existing catch share programs. NMFS is encouraged by the efforts of the North Pacific Council and the fishing industry to provide industry funding to support the observer program in the out years, thus requiring a one-time Federal funding initiative only to transition from the status quo to the restructured observer program.

Catch share programs are not mandated by NOAA and are not appropriate for all fisheries. Under NOAA's catch share policy, NOAA's role in catch shares program development is a commitment to supporting Councils, fishing communities and all stakeholders in evaluating catch shares as an option for sustainable fisheries management. The discretion for determining whether to develop a catch share program rests with the Councils. If a Council decides to pursue a catch share program, NOAA will provide technical expertise and support to the Council, fishing communities and stakeholders in design and implementation of the catch share program. Once the program is implemented, an individual fisherman usually must participate in the catch share in order to participate in the fishery, unless the Fisheries Management Plan retains a common pool (e.g., as was done in the Northeast groundfish fishery). For more information about the catch share policy please see here: [http://www.nmfs.noaa.gov/sfa/domes\\_fish/catchshare/index.htm](http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/index.htm).

Secretary LOCKE. But we have requested additional funds for the catch share programs because we have seen their tremendous benefits, especially in the Pacific Northwest and along the west coast, and it is very much embraced by the fishing community there.

#### STOCK ASSESSMENTS

Senator MURKOWSKI. Well, we would like to be kept abreast on that because the concern, of course, is that if the startup funds aren't in place, then program implementation may be delayed. I don't think that anyone gains from that.

I am concerned about the strength of the fisheries assessments out there, what will happen with the programs. And we are looking at the budget very, very critically.

There is an increase in the fiscal year 2012 funding request for the stock assessments, but I am concerned that we won't be able to perform all of the fish surveys in Alaska this summer. Can you give me kind of—well, I guess what I am looking for is some assurance that, in fact, NOAA will be able to perform the fish surveys that we have on the schedule at this point.

Secretary LOCKE. We know how important these assessments are to update the scientific information so that we can make good decisions and so that the councils are able to have the information they need by which they can set annual catch limits, or the limits on fisheries. Because first and foremost, we know how important the fisheries are, how many jobs they provide, and the value of that food to the American public and to, indeed, people around the world.

We have got to make sure that we end overfishing and that we are on a course to rebuild the stocks, because we know that if we have robust stocks, we will have even more fishing and that will create the jobs for the people who depend on it, as well as the seafood for American consumers. And that is why we have to have that up-to-date information, and that is why the President has requested a significant enhancement in the funds for those assessments.

And we will focus on the priority stocks that will make a big difference. And so, it all depends on the level of funding that we will have, quite frankly.

#### MARINE SPATIAL PLANNING

Senator MURKOWSKI. Well, I understand that. But I appreciate your assurance and just the recognition of the significance of mak-

ing sure that we have got that good, sound science upon which to base these fisheries decisions.

I have several more questions that I will submit for the record. But just as my time is expiring here, I want to bring up the National Ocean Policy and the framework for the coastal and marine spatial planning. As you know, Alaska is not one of those regions where there are user conflicts. We are our own region up there. We don't necessarily want this as a planning tool.

What we really need is environmental data collection, mapping, integration, and all of that, and I hope that as you are looking to how you make priorities within the Department, within the agency, that you would work to implement marine spatial planning in those areas where they are seeking that. And in those areas where they are not seeking that, save your dollars and allow States like Alaska, whole regions like Alaska to proceed. Give us the environmental data, but don't include us in that marine spatial planning at this point in time.

Secretary LOCKE. We are very aware of the concerns of your constituents and your stakeholders about this issue.

Thank you.

Senator MURKOWSKI. I appreciate that. Thank you, Mr. Secretary.

Thank you, Chairman.

Senator MIKULSKI. Senator Reed.

#### NEW ENGLAND FISHERIES

Senator REED. Thank you very much, Madam Chairman.

Let me change the locale, but not the topic. You have heard a lot of issues about fishing from New England. First, let me thank you, Mr. Secretary, because you are sending up EDA assessment teams to our ports, and that is deeply appreciated.

But as you know, there is a great deal of concern not only in Alaska, but in New England, on fishing policy. The Rhode Island fishery is much more diverse. It is not simply groundfish. And one of the key elements of our fishery is the American lobster, and there have been some proposals that would cause basically a 50 percent reduction in catch, which would put us out of business.

And I would ask if you would work with NOAA to start thinking in terms of more creative management of the species, working with the industry. It is going to require some resources to do that, rather than adopting this arbitrary and significant cut. Could you do that?

Secretary LOCKE. Well, thank you very much, Senator Reed.

Of course, the management of the lobster industry in your area is under the province of State commissions because we are talking about a fishery that is in State waters where NOAA has no jurisdiction, and these are very tough decisions that the State commissions have to embark upon.

Nonetheless, we pledge our full support and all the scientific information at the disposal of NOAA to help the State decision-makers do the right thing and develop the policies that will, hopefully, bring the lobster industry back and to have a very strong lobster fishery.

Senator REED. I mean you are absolutely right about the initial regulatory authority. But NOAA routinely adopts these regulations for Federal waters, and we do have some activity, not as pronounced, but some activity in Federal waters. But also NOAA, because of its leadership on a lot of these issues through marine fisheries, has the ability, I think, to be very influential in trying to develop alternatives in terms of managing catches.

So it is those alternatives, together with their, if not official, their unofficial authority that I would like to see invoked. Could you do that?

Secretary LOCKE. We would love to work—bring all of our experts at NOAA to help the States develop good policies that can bring this fishery back and reverse this decline in the lobster.

#### COOPERATIVE RESEARCH

Senator REED. And there is a proposal in the President's budget to cut, and I echo some of the comments of my colleague, cooperative research and fisheries. And again, it is vital across the country.

And the other issue here is sort of the very limited, or concentration of institutions that get this money, and I would ask you to not only comment on the cooperative research effort, but how you engage in a broader representation from the fishing community and from affected interests?

Secretary LOCKE. Well, cooperative research we think is very, very valuable and should have a very significant place as we update our stock—our assessments involving the fishing community in determining how much fish is out there. If they are part of the process, then I think they have greater confidence in the results. And so, I think cooperative research is something that we need to—that I personally have favored and am trying to enhance within the limited dollars that we have.

Senator REED. Well, I think one of the issues is the limited dollars. I mean, that is an area that not only provides, as you well point out, Mr. Secretary, the accurate science, but also the legitimacy within the fishing communities. But it also puts boats out at sea—

Secretary LOCKE. That is right.

#### CATCH SHARE PROGRAM

Senator REED [continuing]. In a time at which they have to pay the rent and the mortgage and the gasoline, et cetera. So I would urge you to relook at those numbers.

A final point here is that I note in this year's continuing resolution that there is language preventing any new catch share programs. And catch share management is a controversial issue, but can you give us, sort of, the logic, together with those steps you are taking to improve the existing catch share programs?

Secretary LOCKE. I am sorry. I didn't quite understand that last part of the question.

Senator REED. There are existing catch share programs, and there is some controversy involved with them. Are you looking in any way to try to improve the efficiency of these programs, their



acceptance, and their legitimacy in the eyes of the fishing community?

Secretary LOCKE. Yes, we are. We know that we have problems in some areas of the country with respect to the existing catch share program. We need to make sure that as we, for instance, determine that there are more stock available through these assessments, that we are able to make sure that there is a sharing of that additional stock that can be fished by, perhaps, those who are not part of the catch share program.

And so, we need more information. We need more frequent assessments because we know how the transition has been difficult and that not all are getting the benefits of the catch share program. But again, the catch share program is voluntary. It is not imposed by NOAA. That is made at the direction—or, at least, decisions to embark on catch shares are made by the Regional Fisheries Management Councils.

But I can tell you that we think that catch shares is a better way of approaching fishing in many parts of the country because instead of a race for fish, which oftentimes puts fishermen at risk—their safety—it allows for a more methodical, planned way in which fishermen can reach their limits and go after the very best stock and perhaps the most economically prized or valuable stock.

#### MID-ATLANTIC FISHERIES MANAGEMENT COUNCIL

Senator REED. Let me make a final quick point, and that is you raise the issue of the fishery councils, the management councils, the Mid-Atlantic Fisheries Management Council. Rhode Island lands more fish than any other State except New Jersey, and we don't have representation on there. So you might read about this in Beijing. We are going to try to get that amended so we can put someone on the council.

Secretary LOCKE. And of course, I understand the concern that you and the fishing industry from your State have about that representation. That is set by legislation, set by the Congress and not by NOAA.

Senator REED. Thank you.

Senator MIKULSKI. Senator Reed, is that membership a legislative initiative?

Senator REED. It is, Madam Chairman. And we have tried in several different years to alter the composition, and we will try again. And your support would be deeply appreciated.

Senator MIKULSKI. Well, you know, we are a part of that, too. No, no, it has literally like been the zoning commission for fish.

Senator REED. Indeed, as the Secretary points out, it sets catch limits. It does lots of very critical things, and one-half the landings are—we are one of the most significant participants in that area, but we don't have representation.

Senator MIKULSKI. Well, I want to hear more about that.

Senator REED. Thank you.

Senator MIKULSKI. Senator Feinstein.

Senator FEINSTEIN. Thank you very much.

And Mr. Secretary, congratulations on your nomination. We look forward to that confirmation and see you going on to great new heights.

Secretary LOCKE. Thank you.

CALFED BIOLOGICAL OPINION

Senator FEINSTEIN. You are welcome.

I wanted to take you into the heart of California water versus fish. And of course, that is the Sacramento delta area. We are 38 million people. We are the largest agricultural State in the Union. And we also have fish, and we prize that.

I have come to have considerable question about the biologic science, two cases in Interior and one in yours. So I would like to go to the salmon opinion, if I might, for a moment. This opinion has been criticized by the National Academy of Sciences (NAS). It is the subject of ongoing litigation. United States District Court Judge Wanger has been critical of parts of the biological opinion, but has yet to issue a final ruling. He did enjoin the smelt opinion.

This year, we have had a bumper crop of water. So water is likely not going to be the problem with respect to operation of the pumps this year. Given that it appears likely that Judge Wanger will overturn at least portions of NOAA's biological opinion on the salmon, what is NOAA doing to proactively come up with a science that is more sustainable, more credible, and more protective of both the salmon and the livelihood of south of delta farmers?

Secretary LOCKE. Thank you, Senator Feinstein.

And I have always appreciated the opportunity to work with you and the other members of the California delegation on this very, very important, very contentious, and very complicated issue.

We have taken some of the recommendations of NAS to heart. We are working with, in fact, Interior on how we can collaborate more, and they regulate and preside over the smelt, and we are presiding over the issues dealing with salmon. We have got to bring all of our scientists together.

Senator FEINSTEIN. That doesn't make sense to me.

Secretary LOCKE. We need to really bring our scientists together and come up with a comprehensive strategy and biological opinion. We want flexibility, and we are prepared to exercise greater flexibility if we can, working with the stakeholders, come up with different ideas by which we can achieve the same objective.

We all have that objective. How do we protect the salmon, which are so important to commercial and recreational fishermen and a very important part of the economy of California? But we have got to do it in a way that we are not also harming the agricultural community, because so much of America depends on the agricultural output of California and certainly the delta there.

And of course, you need water for the other parts of California, southern California for their growing communities as well. So it is water for fish. It is water for agriculture. It is water for people. And we have got to strike that balance.

And so, we are having our scientists go back, look at all the different ideas, and I know that, for instance, there is a proposal of a solid barrier in part of the delta. We are very excited about that. We want to engage with the stakeholders, local folks on research, demonstration projects as quickly as possible to see if we can use that to solve some of the water problems and provide sufficient water for people, fish, and agriculture.

Senator FEINSTEIN. You see, the problem I am having, and I really appreciate what you have said, is with the smelt opinion. Seven smelt could stop the pumps. Smelts are smaller than the size of a finger. Nobody knows how many smelt there are. Nobody knows how many predator fish there are, and no one knows the impact of ammonia releases from inadequate sewage treatment plants into the delta. And we have now asked NAS to take a look at other stressors, which would include those that I have just mentioned.

In the salmon opinion, which concerns me greatly, it is not only the delta where the problem is. It is the rivers up north. It is the ocean. It is the coast. And I somehow wonder how biologists come up with these opinions that really don't stand the test of scrutiny, which NAS—which I believe to be the premier body with respect to this.

So I happen to believe that we need a new relook at how we do this science. And I hope that comes out of this effort.

Secretary LOCKE. Well, I think that we have to understand that there are many factors affecting the survival of salmon and the return of salmon. It is not just the practices in the delta, operation of the pumps, but the use of pesticides and septic tanks and just sewage treatment.

But then, what is happening with the oceans as well? And are some of the things happening in the oceans, whether it is the increasing salinity, to the rising temperatures of the oceans, are they also having an impact? And so, how much burden are we putting on other practices that are occurring, and conditions within the delta if, in fact, they are not contributing to the mortality or to the lack of returning salmon?

So we need to really look at all of those factors and understand how much are really manmade.

Senator FEINSTEIN. Thank you very much. Just know there is very deep concern about this. I thank you for your work—

Secretary LOCKE. But ultimately, I think we need to work with the local and State governments in terms of, how do we move that water, and how do we capture the water that is abundant during parts of the year, to have that available for movement whether in the spring or in the summer so that, ultimately, the challenge is, we need more water.

We need more water, and we know that oftentimes there is water flowing at abundant levels at various times of the year that are flowing out to the ocean that will not—and the diversion of that, storage of that will not impact the salmon. And what type of devices, storage, and/or transfer mechanisms are available to take advantage of that abundance of water?

Senator FEINSTEIN. Exactly. Thank you. Thank you for your reasonableness, and I wish you well.

Secretary LOCKE. Thank you.

Senator FEINSTEIN. Thank you.

Senator MIKULSKI. We now turn to Senator Pryor from Arkansas.

Senator PRYOR. Thank you.

Senator MIKULSKI. Now you don't have a coast?

Senator PRYOR. We don't have a coast.

Senator MIKULSKI. You do have catfish?

Senator PRYOR. We do have catfish.

Senator MIKULSKI. So my staff advises me that NOAA doesn't regulate catfish.

Senator PRYOR. That is correct.

Senator MIKULSKI. It is classified as "livestock".

Senator PRYOR. That is correct.

Senator MIKULSKI. Is that correct?

Senator PRYOR. That is correct.

Senator MIKULSKI. And therefore, regulated by FDA and the Department of Agriculture?

Senator PRYOR. That is correct. That is right.

Senator MIKULSKI. Okay. Well—

Senator PRYOR. We will have no catfish questions today.

Senator MIKULSKI. But we could have a catfish lunch sometime.

Senator PRYOR. We can do that. We can certainly arrange that.

Senator MIKULSKI. Well, I turn now to Senator Pryor.

#### ADMINISTRATIVE SAVINGS—DEPARTMENTAL EFFICIENCIES

Senator PRYOR. Thank you, Madam Chair. Thank you very much, and Secretary Locke, always great to see you, thank you for being here today.

I do want to focus—since I can't talk about catfish, let me focus on the President's budget request. And I know that in his proposal, he and you do things like trim spending here and there and try to eliminate programs that you may not need. One of those, apparently, is the Emergency Steel Loan Guarantee program.

And I think you have come out and talked about how some of your administrative costs you are going to try to cut by maybe as much as \$140 million through efficiencies in human capital, logistics, acquisitions, IT, and just general good business practices, and your administration of that. So could you just walk the subcommittee through what your vision is for trying to achieve those efficiencies within your Department?

Secretary LOCKE. Well, it is my belief that we will never have enough money to do it all, and the more that we can focus on efficiencies, we are able then to free up people to focus on other aspects of the mission that are of a high priority, but not yet being addressed.

And that includes the President's call for reorganization and efficiency among the exporting agencies, our trade-related agencies. That is what we are doing within the Department of Commerce in terms of looking at acquisition reform, motor pool operations and the use of technology to improve and speed up our processes.

But if you are asking about the philosophy of all of these programs, it is that we need to take advantage of the technology that we are, for instance, issuing patents for and that the private sector is developing to improve our own operations. We have got to set very high-performance goals, but really trust the employees and the line staff, the career people that are here to really flesh out the details and to devise these—to provide the details for how we get from here to there.

#### GOVERNMENT ACCOUNTABILITY OFFICE (GAO) REPORT

Senator PRYOR. In March—I am not certain that you have seen this. But in March, GAO issued a report that many of us in the

Senate had requested about finding redundancies, waste, and inefficiencies in Government that we're missing right now. And they came up with a long list of items that basically touched on every department.

And I am wondering if you have seen that GAO report and if you are already trying to implement some of those suggestions?

Secretary LOCKE. I very much look forward to all the GAO reports and inspector general reports that comment on the Department of Commerce. And, for instance, we have taken to heart all of the inspector general reports, whether it is on NOAA, whether it is on our ITA, to acquisition reform, to the Census Bureau, and we have always tried to incorporate those as our metrics and as our priority action plans for improving the functions and the efficiencies and the operations within the Department of Commerce.

And I am very pleased that the inspector general has commented on the incredible management reforms and efficiencies that have been carried out by each of our bureaus. Not that there isn't more work to be done, but we take to heart those reports and make those very much part of our performance measurements.

Senator PRYOR. Well, if you haven't had a chance to see this one, I hope that you and your staff will look at it, because this is more of a Government wide report. It is not just focused on your Department. But there are many very solid and thoughtful recommendations that GAO has made.

Secretary LOCKE. Right.

#### NEI

Senator PRYOR. The last question I think I will have time for is about your NEI. And I think exports are very important to this country. It concerns me when I see our trade deficit numbers, and I am not trying to blame other countries. I think some countries do put up barriers, and one of those could be currency barriers, but they could do lots of things that create barriers.

I think that we should do everything we can on our end of the equation to try to maximize the number of exports to get this country working again, and those manufacturing jobs are very important to our national economy. So how can we strengthen our exports? And I know that you have that initiative in the Department, and I would like to hear your thoughts on what we can really achieve when it comes to exports.

Secretary LOCKE. As I stated at the very beginning, exports have accounted for almost one-half of the economic recovery and the growth of the economy since the start of this great recession. And exports are up 17 percent in 2010 versus 2009. Exports of goods overall is up 23 percent in 2010 versus 2009. Agricultural exports are their second highest in U.S. history, and 2011 may actually set the record.

And exports of goods to China were up 32 percent in 2010 versus 2009. And the first couple months of 2011 shows impressive gains as well. So we believe we are on track to meet the President's goal of doubling exports by 2015, despite the earlier predictions to the contrary by a lot of experts.

But we are focusing especially on the medium- and small-size companies, because the big companies of the world have hundreds,

if not thousands of marketing staff all around the world to help them sell. We help the big companies with respect to making sure that they have a level playing field, that they are not facing discriminatory or nontariff barriers, whether it is on procurement—we help advocate on their behalf if they are seeking Government contracts all around the world, and we have been successful in helping them.

But we really need to help the small- and medium-size companies who don't have their own marketing staffs.

Senator PRYOR. I agree with that.

Secretary LOCKE. And so our programs with export assistance center personnel through the commercial service. We have personnel in almost 100 cities throughout the United States and hundreds of people stationed in almost 80 countries around the world, and their sole job is to find buyers and customers for “made in USA” goods and services.

And that is why—and we are partnering with companies like UPS, FedEx, the National Association of Manufacturers, to identify some of their companies that export, let us say, to only one or two countries, to say we really can help them export to four or five more countries.

The reality is that 58 percent of all United States companies that export, export to one country—typically, Mexico or Canada. Fifty-eight percent of all U.S. companies that export, export to only one country. Our goal is to help them, who already know about customs, logistics, borders, currency, and international contracts.

I mean, if they understand this, they are really willing and able to export to additional countries, as opposed to companies that have never exported before and may never get over that hurdle. And that is why, under the NEI, we are bringing all of the Federal agencies together, and to inform small- and medium-size companies of the services that we offer, from financing to finding those buyers and customers for them, to even guaranteeing that they will be paid by that foreign buyer.

It is one thing if you sell to Massachusetts from Arkansas and you don't get paid. You know how to go after that buyer or customer. But what happens if you sell to Poland or Hungary and you don't get paid? The Export-Import Bank actually offers a service, a product that is an insurance policy that guarantees that you will be paid by that foreign customer or buyer so that this small business owner can really sleep at night.

And so, those are some of the services we offer.

#### INTELLECTUAL PROPERTY

Senator PRYOR. I appreciate that. I think that is good.

Madam Chairman, I am out of time. But I would like to add one more to your list that I think the United States should be very, very firm on with our trading partners, and that is the protection of intellectual property.

I think that it really harms our ability long term to export goods and even things like music, DVDs, et cetera, from this country when they can just reverse engineer those things or pirate those things overseas. And really, it seems the United States does not

take any recourse against that. So I hope that this will be another front that you and others can work on.

Thank you.

Secretary LOCKE. I can tell you that this is a major concern of the entire administration. Vice President Biden is overseeing a multiagency effort focusing on intellectual property rights. As the Vice President has indicated, American companies are losing hundreds of millions of dollars, hundreds of billions of dollars every year in lost revenues, and that is tantamount to theft.

He calls it outright theft, and it is—

Senator MIKULSKI. Oh, it is.

Secretary LOCKE [continuing]. Depriving us of jobs.

#### INSPECTOR GENERAL CONCERNS

Senator MIKULSKI. I would just like to have one more. I have many questions, but one more in the interest of accountability. And you spoke about the inspector general report and the GAO reports.

Mr. Secretary, I want to go to the issues around acquisition contracts and acquisitions, and I know you are in transition. But I want to know what Commerce has put in place. So here is my point.

If you go to the inspector general report, the top management challenges facing the Department of Commerce, on page 7, they talk about how in fiscal year 2009, the Department of Commerce spent \$3 billion to acquire a wide range of products. They range from the census, and quite frankly, a lot of this was before you. The census was a boondoggle. Secretary Gutierrez and I had many heartburn meetings over that as we both worked together to rescue the census and its funding.

There is the satellite acquisition issue, which is a significant issue affecting NOAA, and I want to drill down on that. I know the gentlelady from Alaska is concerned about the ability to forecast weather in Alaska, which, as you know, without it can be quite dangerous, the info-tech security, and so on.

And according to the inspector general, it says that the Department does not have a robust oversight process for major system acquisitions. They cite the so-called NPOESS, now JPSS, as a way to do that, that we need to have a highly qualified acquisition workforce. And then they go into specific agencies.

Now I know Commerce is almost like a holding company. You are an agency of agencies—NOAA, NIST, USPTO, all related to jobs. Then there is the Commerce Department.

And my question is, particularly with these high-expense, high-value acquisitions, what is it that the Commerce Secretary and that the leadership—should there be a—and I am not into rearranging the chairs here, but I don't know how we get a handle on each individual agency through the role of the Secretary of Commerce. And I know this is your kind of thing. And I know you take the inspector general report seriously.

So where are we in terms of addressing these concerns raised by the inspector general?

Secretary LOCKE. Well, I found some of the reports of the inspector general detailing some of the past practices and so-called problems within the Commerce Department most alarming. When we,

for instance, on the handheld computers for the Census Bureau, spent hundreds of millions of dollars for things that we actually could not use, and we actually paid out the vendors almost all the money and got almost nothing in return and then had to go to a very expensive paper and pencil program.

Then, of course, the problems detailing our satellite programs, NPOESS, which is now JPSS, we took those recommendations to heart and have restructured that program along the lines recommended by the inspector general and various other select committees, task forces that the Congress set up to look at it.

And now the acquisition program for the satellites is very much along the lines of the Geostationary Operational Environmental Satellite-R program, which the inspector general has set out as the model and one that we should emulate. I think the problem that we have had with acquisitions in the Department of Commerce really breaks down to two fundamental things, or at least one fundamental thing. There has always been a disconnect, too much of a disconnect between those who set the program objectives and those who actually are in charge of procurement, the actual oversight and the management or the letting of these contracts.

There is not enough back and forth between them, questioning and saying, do we really need this? Is this really desirable? Can you really achieve your program objectives by using things off the shelf instead of customizing things?

Senator MIKULSKI. So where are we?

Secretary LOCKE. So we have, in fact, hired consultants, and we have embarked on a massive overhaul of our complete acquisition programs. And that is why we are already seeing that we will be able to make a lot of these savings assumed in the budget from the transformation of our acquisition program, in which many things will now be brought in-house or centralized, in which the program managers will have much more interaction and ownership with the procurement officers and vice versa.

So we are very, very pleased with the progress we are making, and it is an interagency or interbureau collaborative effort. And I would be more than happy to share with you the actual findings, details, the timeline, and the actual reforms that are underway right now, as we speak, with respect to acquisition reforms.

[The information follows:]

The Department of Commerce has taken substantial, concrete steps over the past 7 months to improve the effectiveness and efficiency of its acquisition operations, including important steps to respond to long-standing issues that led to several high-profile, problematic acquisitions.

Last June, I directed an immediate and comprehensive review of Commerce acquisition operations. The Department of Commerce hired LMI, an independent, highly regarded consulting firm with significant expertise in acquisitions, to review its acquisition operations.

The study examined the entire range of activity from simplified acquisition to major systems acquisition. It included an analysis of publicly available and internally generated data, and interviews with nearly 100 key personnel in the Department of Commerce.

The study resulted in eight significant findings depicted in the following table. The preliminary findings were presented to two expert panels to gain their insight and commentary. One panel was composed of current senior managers from other Federal agencies, including Steve Kempf, Commissioner, Federal Acquisition Service, General Services Administration; Dan Gordon, Administrator, Office of Federal Procurement Policy, Office of Management and Budget; and Scott Gould, Deputy



Secretary, Department of Veterans Affairs. A second panel was composed of former Federal leaders with relevant experience and expertise.

EIGHT FINDINGS OF THE ACQUISITION IMPROVEMENT STUDY

Primary issues relating to high-profile programs	Additional acquisition issues
The requirements management process is insufficient; as a result, requirements are not rigorously validated, refined, and managed.	Department lacks a reliable, automated information system for all acquisition functions.
Acquisition planning, including analyses of alternatives and strategy development, is weak.	Department lacks strong standardized acquisition performance metrics and monitoring.
Bureaus initiate programs and manage acquisitions relatively autonomously, without Department-level governance, oversight, or insight.	There is no standard quality assurance for the acquisition process.
	There is little leveraging of spend across the Department. OS and Bureau customers are frustrated with the contracting process.

As part of its Acquisition Improvement Project (AIP), the Department assigned a team of Bureau acquisition and Department personnel, as well as senior management from the Office of the Secretary and the Commerce Office of Inspector General, to conduct weekly reviews and discussions of the Project.

The project is led by a formal governance structure to provide strategic direction and guidance. The Deputy Secretary and General Counsel serve on my behalf as the Secretarial leadership, and the Chief Financial Officer and Assistant Secretary of Administration serves as the executive chairman. The governance structure also includes senior Bureau management co-sponsors.



FIGURE 1. Governance of Acquisition Improvement Project.

The Department also recently hired a new Director of Acquisition Management with extensive experience in risk management, acquisitions and project management. The new Director has more than 30 years Federal experience and will ensure that acquisition headquarters plays a stronger, more strategic role in acquisitions planning, risk assessment, and program/project management.

SPECIFIC PROJECTS

Through the AIP, the Department has assembled a team of program managers and contracting officials from the Bureaus to tackle the issue of how to better integrate program managers and acquisition staff from the very beginning of the process, when we first ask: "Do we need to buy this? If so, what do we need to buy?"

As shown in Figure 2, AIP is being conducted through six project teams, each with considerable Department Bureau leadership or membership comprised of program/project management, information technology, and procurement professionals. The acquisition program/project management framework (a comprehensive and executable process by which acquisition projects will be managed) is being jointly devel-

oped by three teams—those responsible for the requirements definition, validation, and control; the program/project management process and procedures; and the roles and responsibilities. The teams are working in an integrated fashion to ensure alignment.

A draft framework has been developed and will be finalized in July, followed by a draft Department-level implementing guidance manual delivered in October 2011. This framework is being selectively tested in NOAA, where program managers and acquisition staff are working collaboratively to develop requirements from the very start. We will soon implement elements of the framework into a new, department-wide IT buy for “end point security,” which will provide laptop and desktop security. We are also conducting an analysis of how this proposed framework would have impacted several high-profile acquisitions that were over-budget, over-schedule or performing poorly.

As part of the framework development we are creating a communication, training, and outreach plan to help with the roll out, acceptance, and adherence to the processes and procedures being developed. We started that communication with a presentation at the Department of Commerce Acquisition Conference held during May 2011. We are planning a focused mini conference as a follow-up this coming October to continue with the communication and outreach.

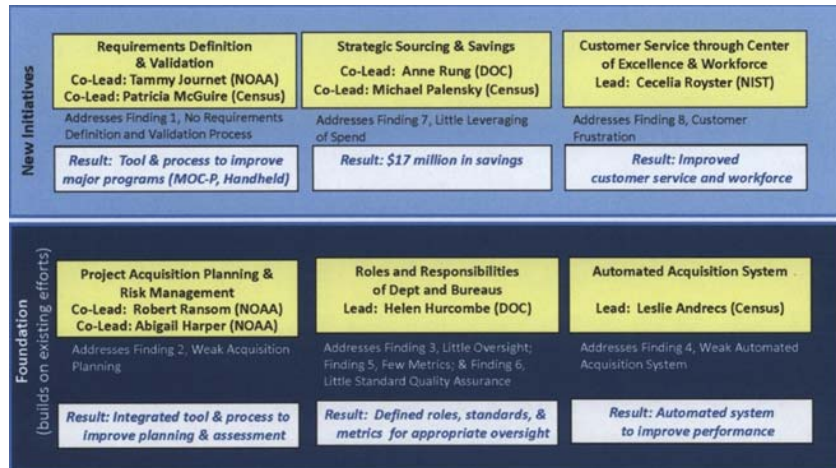


FIGURE 2. Acquisition Improvement Projects.

The Department is on target to meet an ambitious set of goals surrounding each initiative. By the end of fiscal year 2012, the Department will have contracts and other strategies in place to begin saving \$17 million annually through strategic sourcing. These savings are part of the Department’s overall administrative cost savings plan as part of its fiscal year 2012 budget request.

Other goals are to strengthen acquisition requirements through a new integrated, enterprisewide approach, implement a new acquisition program/project planning and risk assessment process, launch a new Center of Excellence to service small bureaus, and strengthen Department management of acquisition through comprehensive performance metrics, clearly defined roles, and full integration of acquisition into other critical department-wide reform effort in risk, IT, and facilities.

See Figure 3 for timeline and deliverables.

THREE PROJECTS FOCUSED ON IMPROVING ACQUISITION PROCESSES

Three of the projects—requirements, acquisition planning and risk, and a better defined role for acquisition headquarters and the Bureaus—are designed to ensure appropriate insight, oversight, and management of departmental acquisitions. It will guide specific bureau leadership and workforce activities including executive oversight councils, bureau program management offices (PMO), acquisition project managers, Contracting Officer’s Technical Representatives (COTR), and contracting/procurement offices.

The requirements project team is focused on fixing the problem that project requirements are often not well-defined, validated or managed, and developed too late in the project lifecycle, resulting in cost over-runs, delays, and poor performance. The acquisition planning and risk assessment team is aimed at increasing the likelihood of successful acquisitions by minimizing risk and strengthening planning. The roles and responsibilities project team is focused on better defining the role of acquisition headquarters and the bureaus; redesigning acquisition headquarters to reduce risk, measure and enhance performance, and drive common standards and policies; and leading workforce development to include training of, support to and interaction among project managers, COTRs, and contracting/procurement offices.

After study and analysis of their individual mandates, the three teams determined their focus areas overlapped and they needed to integrate their efforts. They are now working together to develop an acquisition project management framework that will provide a structured, systematic foundation for project management of all departmental acquisitions throughout their lifecycle. The framework is designed to educate and guide the activities of executive oversight councils, bureau PMOs and project managers, and to be scalable, with different required elements depending on the size and criticality of a project.

The end result of the integrated efforts of these teams will be an acquisition framework that includes details on milestone reviews, interfaces with stakeholders, oversight mechanisms, roles and responsibilities, metrics, and risk management. It will identify required capabilities to implement and sustain the process including organizational leadership, stakeholder engagement, life-cycle cost analysis, program/project management, and requirements development functions. Further, this acquisition framework will specifically inform acquisition project managers on the processes they are to undertake, the deliverables required and the necessary organizational interactions with process participants for successful acquisition project accomplishment.

To validate the effectiveness of the new approach, the teams will identify pilot projects that will be used to evaluate individual steps in the process, as well as longer-term pilots that will follow projects through their lifecycle.

#### THREE PROJECTS FOCUSED ON SPECIFIC CHALLENGES

The Department's acquisition improvement efforts include three projects that address specific challenges identified in the study—a lack of a reliable acquisition automated information system, insufficient leveraging of spending across the Department, and customer frustration with acquisition services.

The automated information system project team is developing the system requirements and budget for an automated procurement system linking to other Department systems to allow full accountability and transparency into acquisition operations. Current efforts include market research for the new system as well as the development of an interim solution to provide greater granularity and reporting of spending patterns.

The strategic sourcing and savings project team is focused on finding opportunities for leveraging spending across the Department, improving sourcing standardization and visibility into spending, and increasing the efficiency of acquisition operations. They have completed their analysis of current spending and have launched five strategic sourcing projects on selected commodities. Strategies and contracts in place by the end of fiscal year 2012 are projected to achieve annual savings of \$17 million.

The customer service and workforce project team is focused on improving customer service, particularly for smaller bureaus without in-house acquisition capability, and enhancing the acquisition workforce to meet the acquisition needs of the entire Department. The team's efforts will result in the launching of an Acquisition Center of Excellence to provide contracting services to the small bureaus. Additionally, it is developing an action plan to address departmental acquisition workforce development issues.

#### CONCLUSION

Real reform takes vigilance, commitment and a great deal of work by many people. However the lasting results of those efforts—a stronger agency focused on mission success—is critically important. The Department of Commerce looks forward to continuing to work with the Congress on this important initiative.

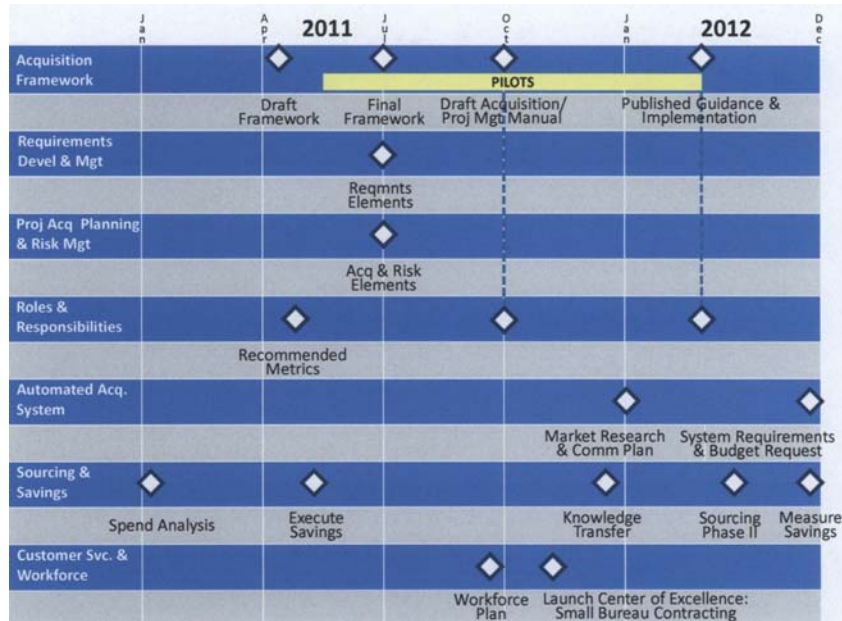


FIGURE 3. Deliverables and Timeline.

## JPSS

Senator MIKULSKI. Well, we need to. And I intend to work very closely with your successor so that the fact that when we do the census, even though our population is increasing only by 10 percent, the census for 2010 cost double—double—what it did to do the census in 2000.

So I don't want to wait until 10 years from now. And I don't want to wait an hour-and-a-half before people are supposed to hit the streets and we have another boondoggle. That is the census.

But when we get into these big satellite issues—and I must say, this is an issue throughout the Government—I don't know if we know how to buy satellites and, in other words, the design, the acquisition, the procurement, and the deployment. I know Dr. Carter at the Department of Defense has embarked upon this, and you and NASA are the big satellite agencies.

Now I am glad we could get the NPOESS matter straightened up, and we have had this velvet divorce with the Air Force. That, in and of itself—all divorces are messy, but now that we have gone to JPSS, which goes directly to weather when it is deployed and so on, where are we now in making sure that this satellite is on track, both in terms of its deployment and then within the parameters of the appropriations request?

I am concerned about delays. I am also concerned that if we shortchange what we need to do now, we will pay later, either in late deployment of very important weather information, or we will pay more in terms of our contracts. Can you share this?

And while NOAA is working and doing their work, at the Secretariat level, is this at your level and as you transit out, is this one

of the red flashing lights that you have for your successor in transition documents? And my question is, are we really on track with JPSS? And then, in transition, I don't want this just kind of lost out there.

Secretary LOCKE. Let me just say that from my very first day as Commerce Secretary, this was the number one priority for me because I read the reports, the inspector general reports, and I went to the White House and spoke with Dr. Holden and others about how we had to pursue this, as you call it, velvet divorce. And that took quite some time, but we ultimately succeeded.

We now have, I think, in place, a very good system by which we are working with NASA, in which we are, of course, the primary customer. They are helping us execute, but we are helping set the framework and overseeing this project because it is ultimately affecting us and our ability to deliver weather information to the American people, but also to all the businesses that depend on weather, whether it is shippers, whether it is farmers, and public safety officials who are charged with ensuring the safety of their communities in times of earthquakes, hurricanes—or, excuse me, hurricanes and storms.

Let me just say that we are concerned about the funding of the JPSS program. We had asked for about \$1 billion for fiscal year 2011. Under the continuing resolution, we received only about \$382 million.

The request for 2012 is \$687 million for JPSS. We have to have this money. Otherwise, we are going to have to look at other ways of receiving that weather information, whether it is possibly contracting out with other governments around the world to get that information. We are already behind schedule, years and years and years behind schedule with respect to these satellites.

[The information follows:]

National Oceanic and Atmospheric Administration's (NOAA) Joint Polar Satellite System Program (JPSS) is working toward completing the assessment of what can be achieved with the fiscal year 2011 appropriations. NOAA estimates that the level of funding of \$382 million in fiscal year 2011, nearly \$700 million below the fiscal year 2011 budget request, will result in at least an 18-month delay in launching the first JPSS satellite. Specifically, at this funding level NOAA estimates that the first JPSS spacecraft would launch sometime in late fiscal year 2017. This will result in a near certainty of a gap in polar-orbiting satellite coverage. Any gap in satellite coverage would lead to an inability to provide early warnings for severe storms and less accurate forecasts later this decade.

Secretary LOCKE. And we very much run the risk of a gap of weather information coverage, and we run the risk of—if we are not able to figure out how to get that information from other sources, we run the risk of an information gap, which will then degrade the accuracy of our weather forecasts, and we will not be able to give as accurate a forecast many more days out in the future that we are able to do today.

Senator MIKULSKI. I want to come back to the specific project, with the indulgence of Senator Murkowski. But as you transition—I know they are preparing transition documents now. Is this one of the top flashing lights for the next Secretary of Commerce to stand sentry over, working with NOAA and us to make sure this is as on track as we can possibly make it?

Secretary LOCKE. It has to be, and it certainly—

Senator MIKULSKI. No, is it? Do you have this in your transition documents? And when you say “Hi” to the next person who takes over, that you alert them to this being a top priority?

Secretary LOCKE. Yes, it is, because it is such a big driver of the budget.

Senator MIKULSKI. Yes.

Secretary LOCKE. It consumes so much money that any problems, any hiccup, any cost overruns will affect the rest of NOAA to carry out its mission. So it is such a cost, such a huge part of our budget, and for 2012 makes up almost 7 percent of the entire Commerce Department budget.

Senator MIKULSKI. Yes, and that is what we are worried about, and that is why we raised so much hell and pounded the table. Now under JPSS, under the continuing resolution, we give JPSS \$380 million. We understand that the need could be as much as \$900 million. What really is the need to keep this on track?

Secretary LOCKE. Well, we believe that it was close to \$1 billion, \$900 some-odd million just to keep on track. We are going to have to know that we know what the dollar amount is, we are going to have to really go back and see what we can do, what we are able to do with the contractor to see how we can continue to do some work on it at that level. And then, of course, it will depend on how much money we receive in the 2012 appropriation.

[The information follows:]

The Joint Polar Satellite System (JPSS) program requires \$1.07 billion in fiscal year 2012 appropriations to meet the development schedule for a late fiscal year 2017 launch date of JPSS-1. With these funds, the National Oceanic and Atmospheric Administration (NOAA) will resume full development of the instruments that will fly on JPSS-1, initiate development of the JPSS-1 spacecraft, and augment system robustness.

The NOAA Climate Sensor Program has also been impacted due to the funding limitations of the fiscal year 2011 continuing resolution. In the President's fiscal year 2012 budget request, \$30.4 million was requested to continue the development of climate sensors to be incorporated into the JPSS program. The NOAA Climate Sensor Program has received limited funding increasing the risk that the earth radiation budget instrument (CERES) will miss the JPSS-1 flight opportunity. The program continues development of Total and Spectral Solar Irradiance Sensor.

Senator MIKULSKI. Well, I would like very much to talk with you about it. I don't mean to interrupt, Sir. But I am really apprehensive about this, and I don't want a boondoggle in terms of the lack of weather coverage, and I don't want a fiscal boondoggle where, because we are not smart now, we pay huge amounts, either, in a delay in the deployment of a satellite. It is not about the satellite. It is about the product of the satellite could be very significant for our communities.

And then also—so what we want, that, given the continuing resolution and now that you know the number, for there to be this scrub or a meet-up or whatever with the contractor, but then what is it that we really need to do in 2012 to make sure that we keep this on track as much as we can? And follow through, and I really want to follow through on this. And it goes to the delay in weather.

You know, I am really proud of NOAA. I mean, we have our fishing problems. I mean, wherever there is NOAA and fish, there is controversy. But it is like—again, I don't mean to be dismissive when I said the zoning commission. But there is a tension, and the gentlelady from Alaska knows it, over her great Pacific Northwest

fisheries. I have got my crabs and my oysters and all the stuff we do. When NOAA says no, like to rockfish, there is grouchiness and economic hardship.

But my point is that while we look at fish, and we can take that up, NOAA and what NOAA has done on weather, both in our own country and the alerts it does around the world, and the training around the world, particularly of small Pacific islands and so on, I think it is phenomenal. It is truly, truly phenomenal, and we are proud of them.

And as we conclude this hearing, I really want to express both to you and through you during this time of tension around shut-downs how much we value the people who work at the Department of Commerce not only here in Washington, but all over. I am really proud of them. Many are headquartered in Maryland.

When we look at NIST, which we didn't even have a chance to talk about today—there are three Nobel Prize winners who work at NIST.

Senator Murkowski, there are three Nobel Prize winners who are civil servants at NIST. One at NIST headquarters, Dr. Phillips, and two at NIST Colorado. And they are there, working every day to create the standards so that our intellectual property can be turned into products that can be marketed around the world, whether it is the weather or the tsunami alerts and so on.

So we have our ups and downs, and sometimes congressional hearings focus on the dark side. But I want you to know that I certainly appreciate them. And no matter what they said and no matter what the OMB directive is, I think they are essential.

So did you want to wrap up?

Senator MURKOWSKI. I will just make a final comment here, and Madam Chairman, thank you for bringing up the issue of where we are with the satellite JPSS.

We are very concerned about it, having sat down with Jane Lubchenco and talked about this and the timing and the critical aspect to how you ensure that the funding tracks with the deployment so that there is no gap. And from Alaska's perspective, we are a little bit concerned about this because it is my understanding that it will be that weather tracking that is available to us in Alaska that will likely be impacted the most if there is any aspect of the gap because of where that satellite sits.

And I think we all recognize that weather affects all of us, and we pay attention to it here. But when you are a fisherman and your livelihood is out on the water, you need to know about those storms, and what NOAA provides to us in terms of this tracking is critically important.

So I appreciate what you are trying to do. How you thread the needle on this one is going to be difficult. It is going to be a challenge for us. So I would like to work with you, Madam Chairman, and those within the Department in offering up suggestions. But we are paying very close attention to this.

I thank you for the hearing, Madam Chairman.

Secretary, I too wish you well as you go on to, I am assuming, bigger and better things. Again, a great many issues within the Department affect us back home, and we appreciate the leadership that you have provided over these past couple of years.

Thank you.

Secretary LOCKE. Madam Chairman, if I could, I would just like to say that we are very concerned about these satellites because we know that virtually one-third of the U.S. economy is dependent on weather and climate information coming out of the Department of Commerce, specifically NOAA.

We are very concerned that right now we have the capability of predicting weather to fairly accurate levels 5 to 7 days in advance. And without these satellites being in place at the right time, we could have a data gap. We are going to do everything we can to avoid any such data gap.

But our ability to accurately forecast the weather that many days out could be seriously compromised. It could only end up being 3 to 5 days.

Let me just end by saying that I am very, very proud of all the men and women who work at the Department of Commerce. We have only a very small number of political appointees, and an overwhelming 99 percent are career folks, people who are very proud of their work at the Department of Commerce among all the different bureaus.

I am really proud of what they have been able to do, to be as efficient and effective in their processes, to shorten processing times—EDA grants, which are the lifeblood for many communities, as they try to reinvigorate their economies, to be able to give out those grants, make those decisions in, instead of 6 to 7 months, now 18 business days.

What we are doing to try to increase job creation by giving out patents within a year, and everything we are doing through NIST in developing the standards by which smart grid technologies, the products that will help us use electricity and have more electricity and just determine when we turn on our electric clothes dryer, using home computers.

All of these activities are absolutely phenomenal, and we very much thank the support of you, Madam Chair, and the members of the subcommittee for all that we do at the Department of Commerce. And it has been one of the best jobs I have had.

And Senate willing, I may be moving on to another position, but let me just say how proud I am of the great men and women at the Department of Commerce and all the services we provide.

Senator MIKULSKI. We feel the same way. And we wish you God-speed. I look forward to voting for you.

#### ADDITIONAL COMMITTEE QUESTIONS

And if there are no further questions this morning, Senators may submit additional questions for the subcommittee's official record. We ask the Commerce Department 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 BARBARA A. MIKULSKI

##### CENSUS BUREAU

*Question.* The 2010 decennial census cost a total of \$13 billion, which is 20 percent more expensive than the original estimate of \$11 billion and double the cost



of 2000 census of \$6.5 billion. For 2012, the Census Bureau requests \$67 million to start planning the 2020 decennial census. The Census Bureau has already suggested the 2020 census could cost as much as \$22 billion—double the original estimate of the 2010 decennial census “because of population growth and inflation” even though the U.S. population has only increased an average of 11 percent between decennial censuses. If the population of the United States only increases about 11 percent every 10 years, why does each decennial census cost taxpayers almost twice as much money as the last?

Answer. The rising costs of the 2010 census were largely driven by five factors:

- the increasing diversity and geographic distribution of the population;
- the demand for the Census Bureau to strive for improving accuracy over previous censuses;
- the lack of full public participation in the self-response phase of the census, requiring the hiring of a large field staff for nonresponse followup;
- significant challenges with linking major acquisitions, the schedule, and the budget; and
- substantial investments in major, national updating of the address frame just prior to enumeration (2009).

The first two factors—increased diversity and the demand for a very high level of accuracy—are beyond the Census Bureau’s control. As a result, the 2020 census research program is focusing on the other key cost drivers.

*Question.* What lessons did the Census Bureau learn from the 2010 census to ensure the 2020 census is more frugal? Based on your experience, do you think the 2020 census could cost less than the 2010 decennial census?

Answer. The Census Bureau is committed to designing and conducting a 2020 census that costs less per housing unit than the 2010 census while maintaining high-quality results. The Census Bureau has identified four strategic goals for the 2020 census:

- a complete and accurate census;
- embraced and valued results;
- an efficient census; and
- a well-managed census.

To achieve its cost and quality targets and meet its strategic goals, the Census Bureau must make fundamental changes to the design, implementation, and management of the decennial census. Substantial innovation and improvements are necessary to prevent another large increase in costs, while still maintaining high quality. Research on new methods likely to affect costs must be accomplished early enough in the decade to confirm their likely impact on both cost and quality (coverage) to inform timely design decisions. Without early investment in research and innovation, the strategic goals and the ability to stem cost growth will be jeopardized.

At the same time, the 2020 census must incorporate strong risk and program management to avoid the problems encountered during the years leading up to the 2010 census. The final design also must be robust, resilient, and flexible enough to respond to social and technological changes that will undoubtedly occur throughout the decade.

#### NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) SATELLITES

*Question.* It has been more than a year since NOAA proposed the new organizational plan for polar satellites which includes a separation from the Air Force on National Polar-orbiting Operational Environmental Satellite System (NPOESS). What positive outcomes and new challenges have come from the NPOESS/Joint Polar Satellite System (JPSS) reorganization?

Answer. NOAA, in partnership with the National Aeronautics and Space Administration (NASA), has made considerable progress on the transition to the JPSS program since the February 2010 decision was announced. In the past year, 4 of the 5 instrument and ground contracts have transitioned. The spacecraft and associated instruments are being developed to NASA’s stringent mission assurance standards. NOAA and NASA have established program oversight and procedures that will guide continued development of the JPSS program.

However, budget uncertainty continues to challenge the JPSS program. With the decision to restructure NPOESS into JPSS, the President’s fiscal year 2011 budget request for JPSS included increased funding for NOAA since the program would no longer be shared with the Department of Defense (DOD). The reduced amount for the fiscal year 2011 enacted appropriation has caused additional delays to the planned JPSS–1 launch date. Unfortunately, this date will be after the expected life-

time of NPOESS Preparatory Project instruments, and may result in a loss of satellite data coverage.

*Question.* NOAA requested a \$678 million increase in 2011, for a total of \$1 billion for the JPSS satellite. The full year continuing resolution does not fund JPSS's 2011 request. NOAA expects this will result in launch delays that will likely cause a gap in weather forecasting in 2017. Can you please explain what a "gap" in weather coverage means? How is NOAA planning to deal with the satellite gap, if it does occur?

*Answer.* The "gap" means the data is not available because the existing operational polar satellite in the afternoon orbit has failed before a new polar satellite has launched, completed calibration, and started to provide data for operational use. Any gap will cause the degradation of all weather forecasts that are made for 24 hours and longer. The result is a much higher likelihood of forecasts that under or over predict the impact of the strength of severe weather systems by as much as 50 percent in the 2- to 5-day range compared to the weather forecasts that are available today. Ninety-three percent of the data the National Weather Service (NWS) uses in weather forecast models come from polar-orbiting satellites like JPSS.

For example, we have confirmed that if there had been a gap (the equivalent of having no afternoon polar-orbiting data) at the time of the 2010 east coast "Snowmageddon" storm, the weather models would have under-forecast the snowfall accumulation in the Mid-Atlantic by 10 inches, and the 5-7 day forecast for the event would have been displaced by 200-300 miles or not even predicted. The resulting prediction errors (up to 50 percent) would have had enormous impacts. Also, the early heads-up provided days in advance of the recent central U.S. severe storm and flood events would not have been possible without this critical data.

Data from the DOD Defense Meteorological Satellite Program (DMSP) are not of sufficient quality to replace JPSS observations. NOAA has traditionally flown its polar-orbiting satellite in the afternoon orbit and no other nation has flown a satellite that provides the type of data required in that orbit. If NOAA did not have a polar satellite data source, such as the current NOAA-19, which will be replaced by the NPOESS Preparatory Project, and then the JPSS-1 satellite in the afternoon orbit, and since NWS cannot rely on DMSP data, the NWS modeling effort would be based solely on the European Metop data that is only available in the mid-morning orbit. Reliance on this mid-morning orbit would result in a degradation of forecast accuracy by 1 to 2 days. Higher confidence forecasts would only extend out 5 days instead of 7 days as they do currently.

*Question.* NOAA eliminated the hyper-spectral sounder from the Geostationary Operational Environmental Satellite (GOES)-R program due to the fiscal constraints of the revised GOES-R program. However, NOAA has maintained the requirement for sounder data. How does NOAA intend to meet the data requirement over the next decade?

*Answer.* Although the GOES-R and GOES-S satellites will not fly a sounder, the Advanced Baseline Imager will be used to produce most of the sounding products that are currently being produced by legacy sounders on the GOES-N series.

NOAA will work with NASA to continue to explore flying a geostationary sounder on a future GOES platform. GOES-R will provide advancements in imager, space weather, and lightning detection; however, to continue to partially mitigate the lack of soundings from geostationary orbit, NOAA will continue to rely on ground-based radiosonde, profiler, and radar data, aircraft data, as well as polar-orbiting satellite sounding data and lower-resolution geostationary sounder products, as available. With these sources of data, today's weather forecast and warning accuracy will be maintained, but not improved.

U.S. PATENT AND TRADEMARK OFFICE (USPTO)

*Question.* Positive management reforms continue at USPTO and the patent backlog is decreasing but it still takes more than 30 months for USPTO to clear a patent. USPTO's budget is based on the amount of fees collected each year and the estimated 2012 fees will provide \$690 million more in revenue than 2010. How will USPTO use these increased revenues to further decrease the backlog?

*Answer.* USPTO has a multi-year requirements-based budget and plan designed to meet the needs of fee-paying applicants and reduce the backlog to a sustainable level. The operating requirements laid out for fiscal year 2012 will continue to implement this multi-year plan by hiring and training 1,500 patent examiners, authorizing the maximum amount of overtime, and paying for awards and contractual services needed for additional production. These levels were analyzed and modeled to identify the appropriate level of hiring to ensure the desired ramp down of staffing once the application inventory reaches optimal levels.

*Question.* What is USPTO's long-term strategy for better patent planning so that a backlog situation can be avoided in the future?

*Answer.* The backlog has grown due to a number of factors, including significant increases in the number and complexity of patent applications and challenges with sustainable funding. USPTO continues to balance the need to address the growth of the backlog, while improving quality. To address this challenge, USPTO is re-engineering its processes and has implemented significant efficiencies and improvements. In addition, USPTO must continue to hire, train, and retain a highly skilled, diverse examiner workforce. Initiatives in place include:

- Hiring additional patent examiners in fiscal year 2011 and fiscal year 2012.
- Use of the hiring model that focuses on experienced intellectual property professionals.
- Targeting overtime to high-backlog technology areas.
- Developing and implementing a nationwide workforce.
- Improving retention by developing mentoring, best practices, and retention strategies.
- Continue the outsourcing of Patent Cooperation Treaty searching.

USPTO must also continue to increase efficiencies through the implementation of major process improvements in the patent examination workflow, and in optimizing examination capacity. Initiatives in place include:

- A re-engineered patent examiner production count system;
- Prioritization of incoming work;
  - Green technology acceleration;
  - Project exchange; and
  - Multi-track customized examination; and
- Focusing on compact prosecution initiatives;
- Re-engineering efforts;
- Patent classification system; and
- Patent examination process.

#### NATIONAL CYBERSECURITY

*Question.* I proposed \$10 million for a Cybersecurity Center of Excellence at National Institute of Standards and Technology (NIST) in the 2011 omnibus. The center would help the private-sector and larger corporations tackle the issue of cyber attacks. How important would a NIST Cybersecurity Center of Excellence be for helping to protect American businesses?

*Answer.* Cybersecurity is recognized and understood as a critical business enabler as American businesses across all industries are dependent on information technology (IT) in order to be more innovative and more competitive. The President's budget reflects the importance of cybersecurity by proposing an increase of \$43 million for cybersecurity initiatives at NIST.

As proposed, the NIST Cybersecurity Center of Excellence could have an important role in the protection, facilitation and growth of American businesses. The Cybersecurity Center of Excellence would provide a partnership between American businesses and Government to enhance this capability, foster innovation, create commercial opportunities and protect those essential IT and information assets which are critical to our Nation.

*Question.* What do you think the early top priorities should be for such a Center?

*Answer.* Ideally, the Cyber Center of Excellence would be designed to focus on real world cybersecurity problems and solutions for industry, so would work with the private sector to identify early top priorities. A potential model for this public-private design is for NIST to use collaborative and interactive workshops to work with businesses such as manufacturers and cybersecurity experts to identify security requirements, gaps and solution sets for real applications. The Center could also facilitate pilot projects with industry sectors to show how security technologies could be incorporated into business processes. This would help all partners to understand how to address security risks and identify product gaps for security technology providers.

#### CYBERSECURITY AT THE DEPARTMENT OF COMMERCE

*Question.* The Department of Commerce inspector general has rated the Department's IT security as the top management concern this year. For fiscal year 2012, the Department requests \$23 million for internal cybersecurity. How does your request better prepare the Department and its agencies against cyber attacks?

*Answer.* The \$5 million cyber security budget request focuses on enhancing enterprise-level forensics support, cyber security for national security systems, and funding to effectively utilize services available through the Office of Management and

Budget's (OMB) Trusted Internet Connections (TIC) initiative. This forensics capability enhancement is designed to reduce the Department's vulnerability to cyber attacks by quickly and effectively isolating and correcting IT security incidents and providing real-time, enhanced monitoring of critical network segments. Funds are requested to acquire experienced and capable IT Security expertise to develop improved IT forensics and investigative capabilities. The investment in cyber security for national security systems will improve identity management, implement operational security enhancements, and provide additional network defense capabilities for those systems.

Due to classification issues, additional information on this portion of the request can be provided upon request via a (possibly classified) briefing to subcommittee staff. The investment relating to the TIC initiative is aimed at services enhancements as well as supporting centralized department-level monitoring of cyber security-related data generated through the use of TIC telecommunications services.

The \$23 million budget request was the result of a cross-department cyber security strategic planning effort that identifies cyber security priorities for Department of Commerce. This budget request will fund cyber security improvements in enterprise-wide security capabilities and functions. One portion of this request will fund a department-wide continuous monitoring infrastructure to implement and monitor key IT security controls on IT assets across the Department. Security functions provided by this infrastructure include software patch management, security vulnerability identification and remediation, asset management, configuration management, host based intrusion prevention and improved malware protection. A second portion of this request will fund an enterprise cybersecurity operations center that will provide support for Department-level security operations, situational awareness, and response. Together, these critical capabilities will better enable the Department to effectively detect, analyze, respond to, remediate, and manage IT risks.

*Question.* What is the Department doing right now to address the inspector general's concerns ahead of a 2012 budget?

Answer. The Department has been strongly focused on addressing IT security weaknesses identified by the Office of the Inspector General (OIG). The Department developed a Cyber Security Development Program in response to an OIG audit of IT security workforce which was acknowledged in its December 2010 "Top Management Challenges" report. The report not only highlighted the Department's plans for establishing an enterprise-wide continuous monitoring and security operations center capabilities but further acknowledged that these steps should enhance the Department's ability to secure its IT systems. In response to improvements that have been made in the past couple of years, at the recommendation of the inspector general, the Secretary of Commerce lifted the finding of a material weakness in IT security at the beginning of fiscal year 2011 (this finding had been in place since 2001).

The Department is currently working to implement an initial operating capability that will provide automated data feeds to the Department of Homeland Security CyberScope tool as part of our Federal Information Security Management Act reporting requirements. The fiscal year 2012 request will leverage this initial capability.

In addition to the above enhancements, security improvements have been made in the Department's financial systems. Whereas in fiscal year 2009 OIG found that the Department had significant deficiencies in five classes of IT security controls, in 2010 these deficiencies were narrowed to only two classes of IT security controls. The Department's Chief Financial and Information Officers are jointly taking ownership of a commitment to eliminate the significant deficiency findings from those remaining classes of controls, have been consistently monitoring bureau progress toward this goal, and have been providing regular updates to the Department's Deputy Secretary.

Last, the Department has identified several key cyber security metrics based on chronic weaknesses identified by the OIG and has integrated these into bureau-level balanced scorecards, which is the performance management tool used by the Department's Secretary and Deputy Secretary for monitoring and managing bureau performance. Senior bureau leaders are responsible for providing quarterly updates to the Office of the Secretary against these (and other) balanced scorecard performance measures.

#### CLIMATE SERVICE

*Question.* In 2010, the subcommittee requested an independent study from the National Academy of Public Administration to look at what a climate service could look like in NOAA. NOAA has included many of their recommendations in its 2012

proposal. The report focused mainly on the inner-structure of NOAA—what would make the most sense and be the most cost effective. But the report also looked outside NOAA stating: “Strong partner relationships between NOAA and other agencies will be a critical factor in determining the success of the climate service. The Federal Government has existing relationships to build upon to meet climate needs.” In NOAA’s 2012 climate service proposal, how does NOAA continue the development of interagency relationships, particularly other climate research agencies such as NASA?

Answer. NOAA recognizes that no single agency is capable of providing all of the information and services needed to inform decisionmaking. To be successful, this effort will require sustained Federal agency partnerships and collaboration with climate service providers and end users. The proposed climate service will work to integrate NOAA’s existing capabilities and experience with climate-relevant science and services across the agency. By consolidating management of climate activities, NOAA will be better organized to develop the necessary synergies with other agencies and climate service providers, and better able to meet the climate challenges facing the Nation. If the proposed climate service is authorized by the Congress, it would strongly support interagency coordination.

NOAA is committed to continuing and strengthening interagency partnerships and engagement. For example, NOAA will continue to provide leadership for the Subcommittee on Global Change Research and its working groups to facilitate cooperation and collaboration among the climate services activities of the agencies of the U.S. Global Change Research Program (USGCRP). NOAA will also participate in other interagency climate activities, such as the Interagency Climate Change Adaptation Task Force, and the Executive Office of the President’s Climate and Information Service Roundtable.

NOAA currently participates in USGCRP, which coordinates and integrates Federal research on changes in the global environment and their implications for society. USGCRP was mandated by the Congress in the Global Change Research Act of 1990 (Public Law 101–606), which called for “a comprehensive and integrated U.S. research program which will assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change.”

The 13 participating agencies closely coordinate their activities through interagency working groups on a wide variety of topics such as observations, modeling, adaptation research, carbon cycle science, and education and outreach. USGCRP, with oversight from the White House OMB and the Office of Science and Technology Policy, works diligently to coordinate activities and enhance efficiency among Federal climate research portfolios.

The carefully planned scientific strategies formulated by the USGCRP are often implemented in the form of agreements between one or more agencies. For example, NOAA works in collaboration with 15 Government agencies on drought-related issues through the National Integrated Drought Information System (NIDIS). Additionally, the Department of Commerce and NOAA have Memoranda of Understanding with the Department of the Interior, Department of Agriculture, and Department of Energy’s (DOE) Office of Science. NOAA maintains close collaborations with NSF and NASA through quarterly meetings of senior management, as well as numerous coordinated scientific activities.

The NOAA–NASA partnership provides an excellent example of interagency cooperation. NOAA and NASA provide complementary services to the Nation and cooperate closely through both formal agreements and informal collaboration. Though both agencies observe climate-relevant variables from space, they have unique missions and roles. NOAA is committed to the continuation and strengthening of this relationship under the proposed climate service. Some key ways in which NOAA and NASA currently work together are outlined below.

NOAA and NASA collaborated on the development of Climate Data Records, and plan to continue this productive relationship. Climate Data Records enable scientists and users to make use of information from satellites and other observing systems for climate understanding and applications. NASA efforts emphasize the development of fundamental climate data records, while NOAA emphasizes the transition of these fundamental climate data records to informational records that can be used in a variety of applications.

NOAA and NASA extensively share both observational and derived data products, especially climate data sets developed across satellite and in situ observing platforms. Both NOAA and NASA develop and run climate models that contribute to national and international predictions and projections for the overall climate system. NASA focuses its efforts on the utilization of space-based observations to better understand and represent earth system processes in models, including clouds and

radiation, land-use/land change and polar processes. NOAA develops earth system models with a focus on applications, utilizing the advances from other science agencies, including NASA, National Science Foundation, and DOE. NOAA models provide operational prediction at seasonal-to-interannual time scales, and alert the Nation to impending natural events, such as El Niño. These predictions are initialized with both space and in situ observations. NOAA models provide long-term projections of climate change, which have always been part of the U.S. contribution to the Intergovernmental Panel on Climate Change assessments. NOAA utilizes the output from these models to provide valuable products and services for the country's decisionmakers through a variety of directed engagements, such as the NIDIS.

NASA and NOAA plan and implement joint field campaigns using suborbital assets and aircraft instruments from both agencies. These campaigns aim to better understand key physical processes and provide means for satellite data validation and calibration. The work on stratospheric ozone by NASA and NOAA laboratories and academic partners in the 1980s is a well-known example of the benefits of this partnership. Currently, there is collaboration on the Mid-latitude Airborne Cirrus Properties Experiment—an airborne field campaign to investigate cirrus cloud properties and the processes that affect their impact on radiation.

#### DEEPWATER HORIZON

*Question.* NOAA provided significant expertise and operational support during the Deepwater Horizon spill to help gulf coast communities. NOAA's 2012 request increases oil spill research \$2 million more than 2010, and the concern of response to two major spills at any one time still exists. How does Commerce's 2012 request incorporate lessons learned from the Deepwater Horizon spill?

*Answer.* The Deepwater Horizon oil spill was a grave reminder that major oil spills do occur. NOAA has the underlying programming and scientific expertise to coordinate and deliver essential science-based oceanographic, meteorological, biological, and geospatial services efficiently and effectively response. The fiscal year 2012 President's budget request includes an increase of \$2.9 million to develop an oil spill research and development program. The requested funds for research and development will focus on national priority areas, including oil fate and behavior effects from deep water releases, response and mitigation techniques in extreme and remote environments (e.g., outer continental shelf or arctic regions), long-term effects on species and habitats, tools for natural resource damage assessment and restoration, and human dimensions of oil spills. Research in these areas will help address questions and concerns.

*Question.* What NOAA offices receive an increase-to-base in 2012 to allow them to better respond to future oil or chemical spills?

*Answer.* NOAA is a natural resource trustee and NOAA's Office of Response and Restoration (OR&R) is an international scientific leader for oil spill response, assessment, and restoration. The fiscal year 2012 President's budget request includes an increase of \$2.9 million for the OR&R to develop an oil spill research and development (R&D) program. This will be NOAA's first comprehensive oil spill R&D program. As the scientific lead for coastal and marine spills, NOAA's OR&R brings the best available science and tools to improve decisionmaking during responses. Research and development will focus on national priority areas, including oil fate and behavior effects from deep water releases, response and mitigation techniques in extreme and remote environments (e.g., outer continental shelf or arctic regions), long-term effects on species and habitats, tools for natural resource damage assessment and restoration, and human dimensions of oil spills.

NOAA is also requesting an increase of \$5 million for enhanced observations to implement the U.S. Integrated Ocean Observing Systems (IOOS) Surface Current Mapping plan to monitor near-shore currents using High Frequency (HF) Radar. This program will be implemented by the IOOS Regional Coastal Ocean Observing Systems (RCOOS) to deliver real-time surface current data to the national HF Radar surface current monitoring network. The requested resources will support Regional IOOS HF Radar stations with an emphasis on those stations currently operating and delivering data to the national network in regions of offshore oil production and in the vicinity of major ports and harbors. The U.S. IOOS program will award funding via an established merit-based competitive process with RCOOS, and through contracts with Federal partners.

The 2010 Deepwater Horizon oil spill highlighted the utility of HF Radar. NOAA's Office of Response and Restoration relied on real-time data collected from the national HF Radar surface current monitoring network to provide new data for inclusion in trajectory predictions of oil dispersal and to verify models used to assess the likelihood of the oil moving into the Loop Current. HF Radar data was also used

daily by NOAA's OR&R during the Deepwater Horizon oil spill response to create trajectory forecasts (which were used by Federal responders to deploy spill response assets and identify fishery closures). In 2007, HF Radar was used to verify that trajectories of oil from the M/V Cosco Busan spill would not flow into the federally protected National Marine Sanctuaries near the San Francisco Bay, and resources were able to be deployed to other areas under greater threat. With sustained, long-term surface current data sets, NOAA's OR&R will now be able to provide Trajectory Analysis Planner products for threat assessments.

---

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUE

JOINT POLAR SATELLITE SYSTEM (JPSS)

*Question.* In your testimony, you suggested that we face the "risk" of a gap in adequate weather satellite coverage due to the level of funding provided for JPSS in the fiscal year 2011 continuing resolution. My understanding is that a gap in adequate coverage is almost assured under current funding levels. Please describe precisely what the level of risk is for a gap and how long any such gap would last.

*Answer.* At the time the gap occurs, there would be an immediate degradation of all weather forecasts for 24 hours and longer, resulting in forecasts that likely will incorrectly predict the magnitude of storms by as much as 50 percent in the 2- to 5-day range compared to current capability.

If no polar-orbiting data had been available for the 2010 east coast "Snowmageddon" storm, the weather models would have under-forecasted the snowfall accumulation in the Mid-Atlantic by 10 inches, and the 5–7 day maximum snow forecast would have been displaced by 200–300 miles or not have even been predicted. The resulting prediction errors (up to 50 percent) would have had enormous economic and human safety consequences. In the recent Midwest severe storm, tornado and flood events, the early heads up provided days in advance would not have been possible without this critical data from the polar orbiting satellites.

It should be also noted that degradation in forecast accuracy may have an impact on the U.S. economy. Studies have shown that the U.S. economic output varies by up to \$485 billion a year of 2008 gross domestic product—about 3.4 percent—owing to weather variability.<sup>1</sup> A portion of this \$485 billion may be mitigated by improved weather forecasts.

*Question.* What alternatives, if any, are there to data from a NOAA-operated polar satellite for our weather forecasts?

*Answer.* Neither the Department of Defense's (DOD) Meteorological Satellite Program (DMSP) nor the European's MetOp Program flies weather satellites in the afternoon orbit. National Oceanic and Atmospheric Administration's (NOAA) has traditionally flown its polar-orbiting satellite in the afternoon orbit and no other nation has flown a satellite that provides the type of data required in that orbit.

There are other potential sources of data, but of lesser quality and information content. For example, the Chinese may fly an afternoon satellite in the latter part of this decade, but the quality of their newer instruments is uncertain and bilateral agreements would have to be in place that don't currently exist. Their current instruments, which are only in the morning orbit, do not provide appreciable improvements in forecast accuracy.

*Question.* How would forecast accuracy from these alternate data sources differ from forecasts developed under a fully functional JPSS?

*Answer.* Unfortunately, there are no other viable sources of high-quality satellite observations in the afternoon orbit. If NOAA did not have a polar satellite data source (Polar Operational Environmental Satellite [POES], NPOESS Preparatory Project, or JPSS) in the afternoon orbit, the National Weather Service (NWS) modeling effort would be based solely on the European data that is available in the mid-morning orbit and would result in a degradation of forecast accuracy by 1 to 2 days. NWS assessments have found forecast improvements from the early morning DOD satellite as marginal, and currently DOD data are not used operationally. Higher confidence forecasts would only extend out 5 days instead of 7 days as they do currently. This degradation would cause NWS to suffer a loss of a decade's worth of continual improvements in forecast ability until a replacement operational satellite can be launched in the afternoon orbit with the requisite instruments which have been subjected to the necessary calibration and validation.

---

<sup>1</sup>Lazo et al. 2011. U.S. Economic Sensitivity to Weather Variability. Bulletin of the American Meteorological Society <http://journals.ametsoc.org/doi/pdf/10.1175/2011BAMS2928.1>.

NWS operational models are run four times per day on a 6-hour cycle. Data from the MetOp satellite in the mid-morning orbit and the POES satellite in the afternoon orbit are critical to the consistency of these model runs. Decisionmakers and users of this data depend on all of these models throughout the day, not just in the morning. These model runs have skill scores nearly at days 5 through 7 that match days 3-5 from 20 to 25 years ago. Furthermore, the models are now capable of predicting the development and evolution of extreme events (winter storms, severe weather outbreaks including tornadoes and hurricanes) 3, 5, and sometimes 7 to 8 days in advance with remarkable skill and consistency.

## GOVERNMENT REORGANIZATION

*Question.* I understand that the President intends to release his initial proposal for a reorganization of Government capabilities this summer and that the Department of Commerce may be significantly altered. Can you provide more details as to when this proposal may be released?

*Answer.* The President issued a Memorandum tasking the Chief Performance Officer (CPO), Jeff Zients, with reviewing ways in which the administration can streamline Government, cut waste and increase effectiveness so that we can help American businesses better compete globally. This initiative included reviewing the departments, agencies and programs in the trade, exports and competitiveness spheres. Mr. Zients and his team submitted their analysis and potential options for reorganization to the President on June 9. The President will review the options over the summer and discuss them with his team. When he completes his review, we would be happy to discuss the results of this work in more detail.

*Question.* I believe that NOAA continues to play an important role in the Department of Commerce by serving as an operational science agency that generates unique products critical to the day-to-day functioning of our Government and economy. Do you feel that the NOAA should remain a part of the Department of Commerce and, if not, do you have an opinion as to where it should reside?

*Answer.* The Department of Commerce has a long history as a center for housing and managing science and technological programs that provide industry and Government decisionmakers with a reliable base of scientific information from which to spur U.S. competitiveness and future economic growth. NOAA fits uniquely well within this tradition in that its science based information and regulatory activities impact almost every sector of the economy.

NOAA manages the Nation's multi-billion dollar commercial and recreational fishing industries, not just to conserve our Nation's fishery resources, but to ensure the long term economic sustainability of the recreational and commercial fishermen and the communities that depend upon them. NOAA also promotes the advantages of U.S. fishery products to our trading partners in concert with the International Trade Administration.

NOAA's weather prediction and forecasting activities are crucial to the economic efficiency of key U.S. industries. For example, the aviation and marine transportation sectors rely on NOAA's weather information to ensure efficient and safe day-to-day operations. NOAA is working with the Federal Aviation Administration on the next generation of weather radar to improve forecasts and save billions.

NOAA houses the Nation's nautical charting capability, which directly advances marine trade by making our ports and harbors safer and port communities more competitive.

## QUESTIONS SUBMITTED BY SENATOR DIANNE FEINSTEIN

## SALMON

*Question.* Mr. Secretary, the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) issued a biological opinion on the salmon in 2009 which requires the State of California to restrict water flows in California's Sacramento River Delta in order to protect the salmon. Since then, the biological opinion has been criticized by the National Academy of Science (NAS) and is the subject of on-going litigation. U.S. District Court Judge Wanger has also been critical of parts of the biological opinion, but has yet to issue a final ruling.

While heavy snow and rainfall in California have prevented pumping restrictions from being implemented this year, that will not always be the case in the future. Consequently, it is imperative that NOAA work with the Bureau of Reclamation (BOR), U.S. Fish and Wildlife Service (FWS), and State and local water agencies to devise a workable system that provides essential water to farmers and communities south of the delta.



Given that it appears likely that Judge Wanger will overturn at least portions of NOAA's biological opinion on the salmon, what is NOAA doing to proactively come up with both better that is protective of both the salmon and the livelihood of south-of-delta farmers?

Answer. NOAA remains committed to a science-based approach to implementation of the current opinion, which allows for adaptive management as new science becomes available, and to finding ways to minimize impacts on water supply while still ensuring the required protections for the listed species and their critical habitats. NOAA has been and remains open to exploring adjustments in the specific parameters in its opinion that may be warranted to provide equal or better protections to listed fish while bolstering the reliability of water supplies. Reflecting this approach, the NOAA opinion itself calls for a formal adaptive management approach whereby through an annual review of operations it and the other parties may explore adjustments in operations on a routine basis and in response to new information. As a result of NOAA's adaptive management approach, it prepared a joint Federal response to the integrated annual review in November 2010 that included detailed adjustments to the opinion. Following that effort are the 2011 amendments to the opinion that allow more flexibility in implementing the opinion. Please see "Attachment 1 to Questions Submitted by Feinstein" for reference. For example, adjustments included changes to the flow schedule based on different water year types, drought exception procedures, and changes to real-time operations. The Department of Commerce will continue implementation of the adaptive management provisions of the current opinion to protect salmon and the livelihood of both south delta farmers and west coast fishermen who depend on salmon resources.

NOAA is aware of the findings and recommendations of the NAS study. While NAS review was largely supportive of the scientific underpinnings and framework of the biological opinion, it did note uncertainties associated with 2 of the 72 measures within the opinion—both of which pertain to operations in the south delta—and recommended further explanation of the specific metrics utilized in those 2 measures. NOAA has communicated its willingness to explore adjustments or refinements in these parameters if other approaches would provide equivalent or better protections—especially with regard to the so-called "export-inflow ratio"—but thus far none has been identified. While the California Department of Water Resources explored the possibility of resolving these differences, its proposed solution—to drop the measures altogether—is not sufficiently protective of vulnerable, out-migrating juvenile steelhead. In addition, both the California Department of Fish and Game and the California Water Resources Control Board issued reports containing analyses and recommendations similar to the export to inflow ratio in the NOAA opinion. NOAA nevertheless remains actively and genuinely open to exploring the options, and has encouraged those with good ideas to come forward with them.

*Question.* When NOAA comes up with a new biological opinion, what new and hopefully better science will you be relying on to justify your new proposal?

Answer. NOAA continues to incorporate new science through the adaptive management provisions in the current opinion. In addition, the Department of the Interior and the Department of Commerce announced a joint initiative in response to the NAS review and its subsequent March 2010 report. This initiative is an inter-agency study plan for developing a single integrated biological opinion for the Bay-Delta Conservation Plan. The initiative has a two-fold strategy. First, it calls for the development and analysis of additional science that will address issues raised by NAS with regard to the current Department of the Interior's FWS and NOAA biological opinions on water project operations. The goal of this strategy is to incorporate the new science in implementing the biological opinions starting in water year 2011, and beyond. Second, the agencies will develop a single, integrated biological opinion based on a joint science program that encompasses FWS, U.S. Geological Survey, BOR, NOAA, and State scientists to address the Bay-Delta Conservation Plan and water project operations.

The integrated biological opinion will include:

- an outline of analytical tools to assess management of the delta ecosystem and water supply;
- a strategy to obtain new information where uncertainty exists; and
- a general approach to completing the new biological opinion.

Some of the unresolved scientific issues that will be further examined include fish mortality at the export facilities, delta contaminants, food web dynamics, predation, benefits of habitat restoration, and anadromous fish migration studies.

*Question.* Is NOAA open to settling the case with the State of California, and if so, what do you believe would be necessary to achieve such a settlement?

Answer. The short answer is yes. NOAA remains very open and willing to explore settlement of the claims in the current litigation. What terms might be necessary

to achieve settlement are dependent on changing factual circumstances and the views of other litigants. We note, however, that the scope of the contested issues associated with the NOAA opinion are in fact quite narrow, limited to 1 of the 72 measures in its “reasonable and prudent alternative”, and therefore the task should prove correspondingly narrow—although still challenging, given the strength of differing views about the merits of the measure. In this context, NOAA continues to solicit and welcome ideas on adjustments from the parties.

*Question.* I understand NOAA is exploring one option to protect the salmon by putting in a hard barrier along the confluence of the San Joaquin and Old Rivers to prevent the salmon from being diverted into the Old River in the direction of the State pumps.

Please describe the necessary physical infrastructure, its costs, any necessary permitting, and your timeline for completion?

*Answer.* Your question correctly identifies one option of active and substantial interest to NOAA and the other parties. A rock barrier or a “nonphysical barrier” (e.g. “bubble curtain”) has been installed at the head of Old River in most years in accordance with the State-led Vernalis Adaptive Management Program. In conformance with the current opinion, a “nonphysical barrier” has been tested in this location by the California Department of Water Resources and has yielded mixed results in its capacity to reduce juvenile straying into the south delta or juvenile predation. NOAA will discuss the pros and cons of continuing the nonphysical barrier versus the rock barrier with BOR and the California Department of Water Resources as we prepare for water operations next year. Also, within the context of the Bay Delta Conservation Plan, a technical team with representatives from NOAA, BOR, California Department of Water Resources, FWS and the California Department of Fish and Game, has proposed further evaluation of a new option of installing a fully operable gate in this location as part of the longer-term program. Furthermore, just last fall the independent science panel convened under the Vernalis Adaptive Management Program specifically and strongly recommended the targeted pursuit of a physical barrier to reduce straying into the south delta, reinforcing the merits of the concept.

As to the detailed engineering, financial and permitting requirements to execute such a project, NOAA does not have this information and would have to defer to the expertise of both the BOR and the California Department of Water Resources for the information.

*Question.* What results do you expect this to produce in terms of reduced pumping restrictions and benefits to the salmon?

*Answer.* Survival of emigrating San Joaquin River steelhead smolts is extremely low through the lower San Joaquin River and south delta. We estimate survival at between 1 and 9 percent. The Vernalis Adaptive Management Program 2010 science review panel found that mortality in this reach is increasing, and is of significant concern, and for good reason: continuing mortality of more than 90 percent of the juveniles in any population on a year-to-year basis does not bode well for rebuilding that population.

The fundamental objective of a rock barrier or an operable barrier is to reduce significantly the straying of migrating juveniles into Old and Middle Rivers and toward the pumps, where survivals are extremely low. The objective, to state it in the reverse, is to keep the emigrating juveniles in the mainstem of the San Joaquin, and to maintain and improve conditions in the mainstem, in order to boost survivals. There are interactive effects between the rock barrier and the continued San Joaquin Inflow to Export ratio, which provides necessary hydrologic conditions for these smolts to migrate through the delta. Effects on exports could be positive, neutral or negative and would need to be fully evaluated prior to installing a rock barrier.

*Question.* If NOAA believes this would be beneficial to the salmon and the delivery of water to south-of-delta water users, why not move forward with the project immediately rather than waiting for either Judge Wanger to rule or a new biological opinion to be developed?

*Answer.* We concur with the proposition that the parties should proceed to evaluate the project and its implications for both salmon and water supplies, and we share your interest in it. We are currently evaluating installation of a rock barrier in later 2011, coupled with necessary Vernalis inflow and export curtailment relationships, and hope to have the information in order to evaluate the merits and demerits of such an approach on both fish survivals and water supplies. We will keep you apprised of this project as it moves along.

*Question.* Are there any other additional projects or administrative steps NOAA believes could be taken in the near term which could provide additional benefits to the salmon and increase water deliveries south of the delta?

Answer. Yes. NOAA thinks it is critically important to fill near-term science gaps to assist in refining and adaptively managing under the opinion and enabling all of the parties to evaluate trade-offs and make better decisions. We have several studies underway right now with acoustically tagged fish to quantify the relationship between exports and survivals under a variety of hydraulic conditions. This work is vital to improving the understanding of how fish move through the south delta and under what flow and pumping conditions. Further, NOAA is committed to developing a life-cycle model of Central Valley salmon populations, using the results of these acoustic studies and other available information. The need for such a life-cycle model was recently highlighted by the NAS in its report on the scientific foundations of the Bay Delta Conservation Plan. NOAA concurs wholeheartedly with that recommendation. Work is underway, and we anticipate draft life-cycle model products in mid-2012. In addition, while our agency's expertise is limited in this area, we generally support long-term water transfer agreements, conjunctive use programs, and similar mechanisms.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

*Question.* There is a 0.2 percent across the board rescission of funds from all non-Defense accounts that is part of this long-term continuing resolution. By my calculations that totals about \$1.5 million for NIST.

Do you know what programs will be affected as a result of this cut?

Answer. The rescission was distributed across-the-board uniformly throughout all NIST Programs in an effort to minimize adverse programmatic effects to our mission.

*Question.* How will this reduction affect these programs?

Answer. The rescission was distributed across-the-board uniformly throughout all NIST Programs in an effort to minimize adverse programmatic effects to our mission.

*Question.* The Manufacturing Extension Partnership operated by NIST is receiving approximately \$128 million, an increase of \$4 million more than the fiscal year 2010 funding level.

What types of new activities will this program offer to small manufacturers?

Answer. This additional funding received in fiscal year 2011 will allow MEP to build upon a strong foundation and further deploy new services with a specific focus on—

- providing manufacturers with the tools and services that allow for the identification and connection to new technologies that match the manufacturer's capabilities and create opportunities for growth through the development of new products and new markets;
- increasing manufacturers' adoption and application of advanced and clean technologies; and
- reducing manufacturers' environmental impact and the related costs by promoting the development of new, environmentally focused materials, products and processes to gain entry into new markets.

In addition, a portion of the additional funds will support the National Innovation Marketplace (NIM) by accelerating activities such as populating the NIM with product and technology ideas through sessions held with Universities, Federal laboratories, companies, and technology sources and supporting efforts focused on developing the Innovation Engineering Skills of the MEP network and partner organizations.

*Question.* Do you have a sense for the economic impact that these additional funds will have?

Answer. The additional funds will result in higher levels in the measures of economic impacts the NIST MEP collects annually from the manufacturing clients receiving services. These measures include increased and retained sales, new investments in plant, equipment and technology, cost savings, and new and retained jobs. Specifically, the increased funds are being used to support and expand efforts to assist manufacturers exporting activities, expansion into new supply chains, and development of new products. The results of these activities are also measured through the economic impacts reported annually.

CATCH SHARES

*Question.* I understand that the catch shares program instituted on the west coast is enjoying growing support with fishermen, and that we're beginning to see some positive environmental and economic results.

Could you please share with us the latest details?

Answer. NOAA's National Marine Fisheries Service (NMFS) worked with the Pacific Fishery Management Council (Council) and stakeholders for several years to develop the Pacific Coast Trawl Rationalization program (Rationalization program). Development of the Rationalization program has involved many complicated issues and decisions but we believe it will rebuild overfished groundfish stocks, increase the profitability of this fishery, provide sustainable and high-quality jobs, and benefit coastal communities.

The shore-based part of the program now allows fishermen the flexibility to choose when to fish during the year, rather than prescribing a level of fishing early in the season with 2-month trip limit periods. Given this flexibility, it appears that fishermen are choosing to fish at a slower rate in the early months of the year. At the April council meeting, the Council's Groundfish Management Team provided an April status report on the shore-based part of the program that indicates that while the total number of vessels, landings, and dealers receiving landings are lower than during comparable months in 2010, average landings and revenues per vessel are actually higher than in 2010. In early 2011, average total landings per vessel were 137,152 pounds, compared with a range of 77,818–109,578 pounds during the same period in 2006–2010 (average = 97,133 pounds). Average total revenue per vessel for early 2011 was \$88,149, whereas the average total revenue per vessel ranged from \$47,029–\$63,388 for early 2006 through 2010 (average = \$56,391). Although these preliminary data appear positive, NOAA is cautious about drawing any conclusions at this early stage. We will continue tracking the fishery throughout the summer and fall.

With respect to positive environmental results, this catch share program was designed to address bycatch of constraining species, such as yelloweye rockfish, by allowing for flexibility in fishing operations. Yelloweye rockfish is currently overfished and the subject of an 80-year rebuilding plan. It is one of the most constraining overfished species on the Pacific coast and is encountered in commercial groundfish and nongroundfish fisheries, recreational fisheries, tribal fisheries, and in groundfish research activities.

The coastwide bycatch limits in the commercial groundfish fisheries are extremely small and intended to prevent overfishing on this vulnerable stock. Fishermen in the shore-based part of the catch shares program are able to collectively "pool" and manage their risk of having their fishing operations constrained by overfished species, such as yelloweye rockfish, by forming "risk pools". "Risk pools" allow fishermen to combine their allocations of overfished species quota, exchange information to avoid "hot spots" of overfished species, and adopt best fishing practices to reduce bycatch. In addition, if a fisherman were to catch an amount of an overfished species that was higher than his individual quota, the risk pool would cover the amount and allow him to continue fishing. These "risk pools" have proved beneficial to the fishing industry and overfished species such as yelloweye rockfish by keeping catches low and providing a safety valve for fishermen. NMFS is currently working with the fishing industry through the Council to further refine "risk pool" provisions and to evaluate their use to protect overfished species while potentially providing additional stability to fishermen.

In addition, reducing discards is a fisheries issue of economic and biological importance. Under the catch shares program, retention is higher for many species, including arrowtooth flounder, bocaccio rockfish, canary rockfish, darkblotched rockfish, lingcod Pacific Ocean perch, petrale sole, sablefish, starry flounder, and widow rockfish. These higher retention rates (i.e., lower discard rates) indicate decreased waste, and increased efficiency, potentially leading to both healthier fish stocks and fishing communities.

*Question.* Providing adequate funding for catch shares programs to help fishermen make the transition is critical to the long-term recovery of the economic and environmental sustainability of these critically important fisheries. I look forward to working with you to support such funding in fiscal year 2012.

Could you share with us the ways in which these funds help fishermen, and why that is so important?

Answer. Thank you for the question and for your offer of assistance. The fiscal year 2012 President's budget includes a request for \$54 million to support the development and implementation of catch share programs. Catch shares can be an effective tool for preventing overfishing and reducing the negative biological and economic impacts of the race for fish, resulting in safer, more profitable and sustainable fisheries that benefit all Americans. Catch share programs often require increased and improved monitoring, including fisheries observers, which will lead to improved quality and timeliness of the catch data in these fisheries. This improved data collection effort not only ensures the integrity of catch share accounting by individual fishermen, it also increases the quality and quantity of scientific informa-

tion used to conduct stock assessments thus improving the science supporting management decisions including by potentially reducing scientific uncertainty. The bulk of the \$54 million requested in the President's budget will support specific catch share programs that have recently been implemented, including the sector program in the Northeast, the Pacific Coast Groundfish Trawl Rationalization Program, and the Gulf of Mexico grouper and tilefish program; thus assisting fishermen and coastal communities in the transition to sustainability.

Funds will also be used to support establishment and administration of program-specific share requirements such as accounting databases and electronic reporting systems, computation of annual quota for each participant, adjudicating administrative appeals of eligibility and catch share decisions, collection of socio-economic data, and other projects such as the development of performance measures. Support for this infrastructure and additional data collection will improve the efficiency of the programs, thereby reducing the cost to fishermen and NMFS, and provide important information to the Regional Fishery Management Councils (Councils) as they monitor their catch share programs and make modifications as needed.

In addition, since it is the Councils who decide in which fisheries they want to consider and implement catch share programs, the fiscal year 2012 President's budget request includes funding for the Councils in support of catch share-related activities they have identified as important.

The long-term economic and ecological benefit of these investments has been seen in other fisheries that have moved to catch share programs, such as red snapper where the value of the fishery (based on quota prices) has increased by 82 percent and the ex-vessel price of red snapper has increased by 17 percent.

To help ensure fairness and equity for new entrants and small vessel owners, NOAA is also seeking to increase loan authority in fiscal year 2012 from \$16 million to \$24 million under NOAA's Fisheries Finance Program to provide quota share loans in support of existing catch shares programs. The Magnuson-Stevens Fishery Conservation and Management Act (MSA) allows Councils to request NOAA Fisheries Finance Program loans to assist small operators and first time buyers of catch share privileges. These programs, as authorized under the MSA, are limited to entry-level fishermen and fishermen who fish from small boats. These programs provide a mechanism for new entrants to finance acquisition of quota share, part of their start-up needs, thus lowering the threshold for entry. For example, by providing financing to acquire quota share, a new entrant then may have sufficient cash flow to finance acquisition of a boat and permit in that fishery. Currently, only two Councils have taken advantage of these MSA provisions, the North Pacific Council and the Gulf of Mexico Council. The North Pacific Council requested the NOAA Fisheries Finance Program develop loan programs for the Halibut/Sablefish Individual Quota Share and the Crab Individual Fishing Quota programs, which were authorized in 1993 and 2011, respectively. In addition, NOAA has received a request from the Gulf of Mexico Council to initiate an Individual Fishing Quota loan program for Grouper/Tilefish and for Red Snapper, which is planned for implementation in fiscal year 2012. Until 2011 this loan authority has only been used to support loans for quota in the halibut/sablefish fishery. As additional loan programs are coming on line through the Councils, we are seeking additional loan authority to support the new programs.

The additional loan authority in fiscal year 2012 will initially support loans in the Bering Sea and Aleutian Islands King and Tanner Crab fisheries. Once the Grouper/Tilefish and Red Snapper programs are implemented, we would anticipate that these would be accommodated under the additional lending authority as well. Given that roughly 80 percent of the current participants in the Gulf of Mexico fisheries are smaller operators, we expect the loan program would largely be used by these smaller operators. This type of loan program has proven helpful to the industry and coastal communities as they transition to sustainable fisheries.

These loans are and will be usable to purchase or refinance Individual Fishing Quota in these fisheries; the loans may not be used to acquire quota share beyond specific percentages within each fishery (i.e., consistent with existing excessive share caps to limit consolidation). By providing the financing, NOAA supports a more competitive, market-oriented fishery that also helps to preserve sustainable yields in those fisheries over time.

#### MANUFACTURING EXTENSION PARTNERSHIP (MEP)

*Question.* Thank you Mr. Secretary for your focus on domestic manufacturing capabilities, specifically, your request for full funding of the MEP program to continue assisting small- and medium-sized manufacturers. A vibrant manufacturing sector is critical to the economic future of our country. California maintains the largest

manufacturing sector of any State and the MEP program has done a tremendous job in assisting our State's manufacturers by increasing productivity and job creation.

However, it is my understanding that many MEPs are now providing not only their private share of the program's cost-sharing agreement, but also the State's share as well. Many States, including California, face significant budget shortfalls, and as a result are not able to meet their contribution expectations to fund MEP.

Does the Department currently have plans to alter the cost-share requirement in a way that would relieve some of the burden on MEPs?

Answer. As part of the America COMPETES Reauthorization Act of 2010, the Government Accountability Office (GAO) was directed to study the MEP Cost Share structure and to develop recommendations for implementation by the Secretary of Commerce. GAO published its report on April 4, 2011 and the report made no recommendations concerning any adjustment to the current cost share structure. NIST is assessing the report and is evaluating its options going forward.

#### BROADBAND FUNDING

*Question.* In your testimony you talk about the Broadband Technology Opportunity Program (BTOP). The Congress appropriated \$7.2 billion in broadband grant and loan programs under the American Recovery and Reinvestment Act, \$4.2 billion of which was allocated through BTOP. It is my understanding that, as of March 31, 2011, only 7.6 percent has been distributed nationwide.

Can you explain why there is such a lag time in dispersing this funding?

Answer. The vast majority of BTOP funding (approximately \$3.5 billion) is being used for broadband infrastructure projects. These projects typically cannot begin to spend the bulk of their funding immediately due to the legal requirements associated with environmental clearances, historical impact assessments, and other permitting processes associated with construction projects. Further, many BTOP projects require procurement of equipment and services, which take time in terms of both procurement processes and delivery. We have been doing everything we can to facilitate and expedite these processes for our awardees and ensure that BTOP projects are completed on time and within budget.

We expect a significant increase in BTOP fund disbursement as infrastructure projects obtain all of their clearances and heavy construction occurs through this fall. Sixty percent of the infrastructure projects have already been cleared for construction, and we are expecting more than 90 percent of the infrastructure projects to be cleared for construction by the end of June 2011.

Recent first quarter 2011 recipient reporting validates our expectations of significant increases in BTOP fund disbursements. For example, BTOP public computer center project spending increased 77 percent from the last quarter of 2010, sustainable broadband adoption spending increased 80 percent, and infrastructure project spending increased 88 percent. We expect similar increases this quarter.

#### QUESTIONS SUBMITTED BY SENATOR BEN NELSON

##### CURRENT INDUSTRIAL REPORTS (CIR) PROGRAM AND ALTERNATIVES

*Question.* The fiscal year 2012 budget submission for the Department of Commerce proposes to discontinue the economic statistical series, the CIR program.

I have heard from many industries who are concerned about the discontinuance of this program and the impact it would have on their ability to forecast economic climates and make operational decisions, which in turn would limit their production and growth possibilities.

The Department's budget submission indicated that this program is being discontinued to fund higher-priority programs. In light of these concerns and the signs of economic recovery our country continues to show, is discontinuing the CIR program a prudent decision at this time?

Answer. This decision was not taken without consultation with key data users on relative program priorities and specifically about the consequences of the elimination of the CIR program. While few data users wanted to eliminate an existing data source, the availability of manufacturing product class data from the Annual Survey of Manufactures, and the continued collection of detailed product information in the economic census and in our monthly trade statistics program, helps mitigate the loss. Even if the CIR elimination were effected, the Census Bureau continues to measure the manufacturing sector (e.g., new orders, capital and IT investments, research and development, corporate profits, etc.) in far more detail than any other economic sector.

*Question.* In your budget submission, you indicate that instead of using the CIR program, you intend to measure the manufacturing sector through other current program data collection efforts such as the Annual Survey of Manufactures (ASM), the Monthly Manufacturers' Shipments, Inventories, & Orders (M3), the Quarterly Financial Report, the Annual Capital Expenditures Survey, and other products.

I have had manufacturers and producers raise concerns that these listed programs generally only provide a single data point (value of industry-wide sales or shipments) and don't collect key data on such things as unit (quantity) production and shipment information. They do not provide data on sub-segments or product categories of an industry. To give one example, the ASM covering the paint and coatings industry provides only an industry-wide annual shipments number (value only), while the CIR provides details such as volume (gallons) and value (dollars) on categories as diverse and specific as automobile, light truck, van, and sport utility vehicle finishes.

Given these concerns, how do you intend to obtain and disseminate information on such things as product mixes and unit costs that manufacturers and producers need in order to understand market trends and encourage competitiveness, particularly against foreign competition?

*Answer.* The CIR program provides product mixes and unit-cost data for only selected manufacturing industries but not the entire manufacturing sector. The Census Bureau will continue to collect and publish information on detailed manufacturing products on an annual basis at the product class level (rather than the product level) for these 121 categories through ASM. The data in the CIR are consistent with the data in ASM. The consistency of this relationship allows data users to continue to monitor, evaluate, and understand the market. Because ASM does not collect data on quantity, unit-cost data will not be available on an annual basis. However, the economic census for the manufacturing sector collects comparable data (value and quantity) that will allow users to derive unit cost.

The Census Bureau continues to measure the manufacturing sectors in far more detail than any other economic sector. For example, M3, a principle economic indicator, provides monthly trends on economic conditions through measurement of current industrial activity while providing indication of business trends. The Quarterly Plant Capacity Utilization survey provides statistics on the rates of capacity utilization for the manufacturing sector. The Census Bureau produces a "Profile of U.S. Exporting Companies" that provides aggregated data on the U.S. exporting community (i.e., number of exporters, known value of the export trade, employment size, type of company [manufacturers, wholesalers, and others] and major foreign markets). These data, in combination with other surveys covering capital and IT investments, research and development, corporate profits, etc., provide a host of information to examine, evaluate, and monitor the performance of the manufacturing sector against foreign competition.

*Question.* In previous year's budget requests, the Department of Commerce has provided an explanation of the benefits and importance of the CIR program. For example, in past years it has indicated that the Bureau of Economic Analysis (BEA) uses CIR data to prepare the quarterly estimates of Gross National Product (GNP). The Federal Reserve Board prepares the monthly index of industrial production and the Bureau of Labor Statistics (BLS) develops price indexes using this data. The International Trade Administration (ITA) and the International Trade Commission uses this data to monitor the effects of international trade on domestic production.

If this program is discontinued, how will those agencies be able to produce the information currently supported by the CIR program? Has the Department consulted directly with these agencies regarding its plan to terminate the CIR program? If so, was concern expressed regarding the potential impact the loss of this data will have on these agencies abilities to adequately perform their missions?

*Answer.* In deliberations on fiscal year 2012 submission, the Census Bureau did consult with the key data users on relative program priorities and specifically about the consequences of the elimination of the CIR program. Users weighed the loss of the CIR against proposed cuts of other programs and key stakeholders considered the CIR program given the amount of detail statistics the Census Bureau currently provides for the manufacturing sector. While few data users wanted to eliminate an existing data source, the availability of manufacturing product class data from ASM, and the continued collection of detailed product information in the economic census and in our monthly trade statistics program, helped mitigate the loss. Moreover, on balance the Census Bureau continues to measure the manufacturing sector (e.g., new orders, capital and IT investments, research and development, corporate profits, etc.) in far more detail than any other economic sector.

*Question.* The 2011 Census Bureau budget submission indicated that the CIR program covers the Census Bureau's responsibilities under the Trade Act of 1974, in-

cluding section 608 requirements to collect data on imports, exports and domestic production on a comparable basis.

In light of this, how does the Department propose to meet these requirements if the CIR program is discontinued?

Answer. The Census Bureau continues to show on a monthly basis exports of domestic merchandise and imports for consumption based on manufacturers' production. Data in economic census years will show manufacturing production data of these products along with the import and export data. In addition, we are exploring the possibility of publishing annual import and export data at a product class level (i.e., 1,700 product categories) on the ASM.

*Question.* According to the Department's fiscal year 2012 budget submission, eliminating the CIR program will save approximately \$4.012 million. In proposing to discontinue this program has the Department considered off-setting expenses that will be required to develop alternate systems to collect and analyze these data in order to meet the statutory requirements noted above.

Answer. Given the plan to leverage existing data sets from other programs as cited above to meet the statutory requirements of the Trade Act of 1974, we did not consider off-setting expenses.

*Question.* Has the Department identified the costs that will be imposed on other agencies of Government, such as BEA and BLS, should they be required to develop other means of obtaining these data?

Answer. We did not explore the cost of agencies such as BEA or BLS developing other means of obtaining these data. We did provide the National Agriculture Statistics Service (NASS) of the United States Department of Agriculture a reimbursable cost estimate for nine CIR agricultural-related surveys. In addition, a meeting is scheduled in June to discuss these reimbursable cost estimates with NASS and several trade associations to discuss the feasibility to conduct these surveys on a reimbursable basis.

*Question.* Finally, has the Department conducted a formal or informal cost benefit analysis to consider the costs to U.S. manufacturing and agricultural competitiveness as a result of the discontinuation of the CIR and whether it exceeds the \$4 million that will be used for other objectives within the Department?

Answer. We did not conduct a cost-benefit analysis to consider the costs to U.S. manufacturing and agricultural competitiveness resulting from the termination of the CIR program. As stated earlier, the availability of manufacturing product class data from ASM, the continued collection of detailed product information in the economic census and our monthly trade statistics program helps mitigate the loss. Even if the CIR elimination were effected, the Census Bureau continues to measure the manufacturing sector (e.g., new orders, capital and IT investments, research and development, corporate profits, etc.) in far more detail than any other economic sector.

*Question.* Is the Department conducting or implementing at this time any plans to discontinue the CIR program in the absence of action or approval by the relevant appropriations committees, to include reassigning, or planning for the reassignment of, personnel or other resources currently dedicated to this program, discontinuing the development or fielding of surveys to collect data required under this program, or reprogramming any funding currently fenced to or otherwise allocated to the CIR program?

Answer. Within the CIR program, there are 4 monthly, 11 quarterly, and 26 annual surveys. The Census Bureau will continue production of these surveys until the end of fiscal year 2011. However, to complete an orderly shutdown of this program by the end of this fiscal year, the Bureau determined that the last release for 2011 monthly reports will be the July 2011 report, scheduled to be released September 9, 2011. The last release for 2011 quarterly reports will be the second quarter report, scheduled for release September 22, 2011. All 2010 annual reports will be released by July 29, 2011.

*Question.* The Department of Commerce's Strategic Plan for fiscal year 2011-2016 includes as one of its objectives to "Improve understanding of the U.S. economy, society, and environment by providing timely, relevant, trusted and accurate data, standards and services enabling entities to make informed decisions." Additionally, it states, ". . . the Census Bureau assists in fostering economic growth by providing timely, accurate, accessible, and current measures of the population, economy, and governments, which help entrepreneurs and businesses to identify and exploit market opportunities that generate jobs. This information also helps to provide early signals of impending problems in key sectors throughout the economy and effective information to enable communities to build their capacity to attract businesses and sustain economic growth. Data collected from many monthly, quarterly, and annual surveys support effective decisionmaking, in both the public and private sectors,



with the information assets needed to understand social, economic, and demographic trends.”

In light of this, can you explain why you are recommending the elimination of a report that supports this objective identified by your strategic planning?

Answer. While the CIR program collects and publishes information on detailed manufacturing products, slightly more aggregated information on more than 1,700 product class categories are available on an annual basis from ASM. In addition, detail manufacturing product data will continue collection in the quinquennial economic census. Furthermore, the Census Bureau’s monthly, quarterly, and annual survey programs on manufacturing new orders, capital and IT investments, plant capacity, research and development, corporate profits, and trade statistics will continue to provide key measures in the performance of the manufacturing sector.

---

QUESTIONS SUBMITTED BY SENATOR MARK PRYOR

MANUFACTURING

*Question.* Manufacturing directly employs 12 million Americans. Companies operating in the United States have steadily outsourced manufacturing work to specialists abroad and cut their spending on basic research. Sophisticated engineering and manufacturing capabilities that underpin innovation in a wide range of products have been rapidly leaving too. As a result, the United States has lost or is in the process of losing the knowledge, skilled people, and supplier infrastructure needed to manufacture many of the cutting-edge products it invented.

What are the emerging opportunities in advanced manufacturing and how can the Federal Government accelerate their entry and success?

Answer. There are many emerging technologies that can play a role in advanced manufacturing, ranging from vastly improved ways of making products more efficiently and sustainably to entirely new processes that can create previously impossible materials and products. Examples include:

*Smart Manufacturing.*—The dramatically intensified application of intelligent equipment, modeling, and simulation throughout the manufacturing and supply chain enterprise—will increase productivity and efficiency.

—Additive manufacturing (sometimes referred to as 3-D printing) that can build highly complex custom components.

—Next-generation robotics and automation that are rapidly retaskable, adaptive, and flexible.

—Nanomanufacturing that enables the creation of radically new products, such as flexible electronics.

—Biomufacturing advancements that produce higher-quality biologic products (such as pharmaceuticals) and next-generation products such as stem cells and personalized biotherapeutics.

The Federal Government can accelerate their entry and success by:

—Providing the foundational technology infrastructure that lowers the risk of adoption of new technologies involving the development of standards and performance measures.

—Targeting investments in transformational research and development in critical technologies that will advance manufacturing.

—Providing mechanisms to help accelerate the adoption of these technologies by small and medium manufacturers.

National Institute of Standards and Technology’s (NIST) Laboratory research programs, Technology Innovation Program, Advanced Manufacturing Technology Consortia (AMTech) program, and the Hollings Manufacturing Extension Partnership provide a coordinated set of programs to holistically address these challenges.

*Question.* How can Department of Commerce activities best support U.S. leadership in clean-energy technology?

Answer. Clean energy is key to revitalizing and sustaining America’s industrial and manufacturing base. And it can create exactly the types of high-skill, high-wage jobs that we need more of in America.

The Commerce Department has put its resources behind growing clean-energy businesses at every step in the business development process.

In December 2010, I announced the Renewable Energy and Energy Efficiency Initiative, a multi-agency effort to significantly increase renewable energy and energy efficiency exports. This initiative includes 23 commitments from eight separate Government agencies to better tailor financing options, enhance market access, increase trade promotion, and amplify the efficiency of existing export promotion programs for Renewable Energy Efficient companies.

In May 2010, I led a clean-energy trade mission to China—the first Cabinet-level trade mission of the Obama administration. I was joined by representatives from 24 U.S. businesses looking to take advantage of opportunities in the clean-energy market. Overall, exports to China increased 32 percent in 2010 compared to 2009.

Further, USPTO has announced a pilot program that allows inventors who have already submitted patent applications for green technologies to have their submissions receive an expedited review.

Additionally, NIST is playing a significant role in supporting U.S. leadership in clean-energy technologies. In the area of energy efficiency NIST's efforts in developing measurement technologies, standards, and test methods that can support the next generation of higher-efficiency photo-voltaic panels will support an industry that employed 93,000 solar-related positions in the United States in 2010. NIST's research in developing measurement tools and standards for energy efficient buildings will help reduce U.S. energy consumption and will have significant impact, as buildings consume 40 percent of all U.S. electricity production. Furthermore, NIST work on development of standards for the Smart Grid is critical to the actual deployment of the Smart Grid—which will rely on the adoption and production of several new technologies—creating opportunities for U.S. manufacturers, and the potential for new U.S. jobs.

*Question.* How can NIST be more effective at each stage of the innovation chain? What are useful metrics to guide NIST technology activities?

*Answer.* NIST's core mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. To be effective at each stage of the innovation process, NIST must maintain a wide portfolio of programs, from the laboratories to the extramural programs in order to address unique needs and gaps spanning the entire innovation and technology development cycle. From incentivizing and supporting long-term industry-led directed basic research to accelerating technology deployment and adoption by America's manufacturers, the NIST extramural programs along with the NIST laboratories, provide a critical infrastructure that supports the type of high-tech innovation, development, and manufacturing that is critical for our Nation's long-term sustainable economic growth and job creation.

- NIST laboratories provide measurement solutions to innovators and manufacturers that increase efficiency and facilitate the use and adoption of advanced technology. For example, NIST work in advanced sensors, robotics, and modeling and simulation will provide the infrastructure that facilitates the adoption of new technology systems that will help manufacturers:

- transform a new idea into production easily;

- reconfigure a factory to produce multiple types of products using the same facility;

- adapt to changes in production while maintaining high quality and minimizing waste; and

- organize subcontractors, Original Equipment Manufacturers (OEMs), and customers into efficient and dynamic supply chains; and

- The new AMTech will collapse the timescale of technological innovation by including partners that span the innovation life cycle from idea to discovery, from invention to commercialization. Through cost-sharing and a common research agenda, these consortia will support the development of innovative new technologies directed at creating high-wage jobs and economic growth across the industry sector. These consortia will develop road-maps of critical, long-term industrial research needs and provide support for research and equipment at leading universities and Government laboratories directed at meeting these needs. This approach deepens industrial involvement in determining how to best leverage Government resources to promote technological innovation.

- Technology Innovation Program (TIP) funds small companies and consortia of small companies and universities to support high-risk transformational R&D. TIP funding helps small companies develop and demonstrate new high-risk, cutting-edge technologies, when no other sources of funding are available.

- Manufacturing Extension Partnership (MEP) helps small and medium manufacturers strengthen their competitive positions by accelerating the adoption of technological innovations, facilitating the adoption of environmentally sustainable business practices, promoting renewable energy initiatives, fostering market diversification, and connecting domestic suppliers to manufacturers to assist manufacturers in successfully competing over the long term in today's complex global manufacturing environment.

Developing effective metrics for science and technology organizations is a challenge, as the metrics change with each stage of the innovation cycle, and much of

the impact can often lag by several years. As such NIST uses a number of metrics to evaluate its programs, measuring everything from indicators of scientific productivity, like publications and their impact, to tracking measures of technology transfer such as numbers of patents and licenses. Rigorous independent peer-review is also a cornerstone of the NIST evaluation system, with expert panels appointed by the National Research Council reviewing elements of the laboratory programs on an annual basis.

*Question.* What changes do we need to make to trade policies so that more manufacturing can be done in the United States?

*Answer.* The Department of Commerce continues to work, along with other agencies, to enhance the competitiveness of U.S. products and increase U.S. manufacturing exports. The National Export Initiative (NEI), announced by President Obama in his 2010 State of the Union Address, sets the ambitious goal of doubling U.S. exports by the end of 2014 to support millions of jobs here at home. NEI is focused on:

- improving trade advocacy and export promotion efforts;
- increasing access to credit, especially for small and midsize businesses;
- removing barriers to the sale of U.S. goods and services abroad;
- robustly enforcing trade rules; and
- pursuing policies at the global level to promote strong, sustainable and balanced growth.

Through these efforts to empower U.S. businesses and achieve a level playing field, we can provide increased opportunity for U.S. manufacturing.

One of the most powerful ways to encourage more manufacturing in the United States is through the preferential market access which Free Trade Agreements offer to U.S.-origin manufactured products. The Obama administration has been working closely with the Congress to approve pending trade agreements with South Korea, Colombia, and Panama. By expanding access to South Korea, the agreement will eliminate tariffs on 95 percent of United States exports of industrial and consumer goods within 5 years, and could boost annual United States exports to Korea by more than \$10 billion while supporting more than 70,000 American jobs.

*Question.* How do we balance international competitiveness against international cooperation?

*Answer.* There is no question that U.S. companies welcome the opportunity to compete vigorously for sales in the world market. But no matter how competitive U.S. companies are, they may still encounter problems accessing global markets unless the terms of global competition are fair. That is why the United States cooperates with our trading partners to establish a rules-based international trading system in which companies from all countries can compete on a more level playing field. U.S. trade agencies, including the Commerce Department's ITA, work together with counterparts in other countries to do just that. This work ranges from negotiating new trade disciplines and enforcing existing ones in the World Trade Organization and bilateral/regional trade agreements, to focused discussions of regional and bilateral trade issues in such venues as the Asia Pacific Economic Cooperation Forum, the U.S.-China Joint Commission on Commerce and Trade, and the Transatlantic Economic Council.

We also cooperate with key trading partners to exchange views on best practices and help improve the overall business environment through the Organization for Economic Cooperation and Development.

We understand, however, that strict enforcement of trade obligations is key. Accordingly, a priority of the Commerce Department is to ensure foreign country compliance with both U.S. fair trade laws and with these countries' international trade obligations. Ensuring U.S. companies have effective recourse against unfair trade practices such as dumping and subsidization helps companies compete fairly in our own market, as well as markets in third countries.

Monitoring foreign country compliance with trade obligations and actively knocking down foreign government barriers that impede U.S. exports or investments helps American firms and workers take advantage of the trade agreements we have negotiated. All of these activities have proven effective for working to head off market access problems and helping achieve that balance between international competitiveness and international cooperation.

*Question.* How can the incentive to move manufacturing offshore be reduced and the incentive to rebuild our industrial base be increased?

*Answer.* Over time, it has become apparent that many companies moved offshore without a complete understanding of the total costs of such a change. Beyond simply product, wage and transportation costs, there are many more issues to be considered, such as the cost to achieve comparable product quality, to carry higher inventories and to protect intellectual property. The Obama administration and the Com-

merce Department are working to ensure America remains an attractive place to do business.

Earlier this year, the President created the Council on Jobs and Competitiveness (Jobs Council) to provide nonpartisan advice on continuing to strengthen the Nation's economy, ensure the competitiveness of the United States and the creation of jobs, opportunity, and prosperity for the American people.

The Jobs Council is comprised of distinguished citizens from outside the Federal Government, including citizens chosen to serve as representatives of the various sectors of the economy to offer the diverse perspectives of the private sector, employers, and workers on how the Federal Government can best foster growth, competitiveness, innovation, and job creation.

Members of the Jobs Council are currently soliciting ideas from across the country about how to bolster the economy and the prosperity of the American people. They will report directly to the President on the design, implementation, and evaluation of policies to promote the growth of the American economy, enhance the skills and education of Americans, maintain a stable and sound financial and banking system, create stable jobs for American workers, and improve the long-term prosperity and competitiveness of the American people.

The Manufacturing Council, which I lead, is another group of manufacturers from across the country who will be working hand-in-hand with the Jobs Council to develop ideas about how to increase U.S. manufacturing competitiveness and bring more jobs back home. The Jobs Council along with the Manufacturing Council will work collaboratively with all agencies and all offices within the Executive Office of the President toward the fulfillment of these goals.

The Commerce Department is also actively implementing the NEI. NEI aims to double U.S. exports by the end of 2014 to support several million jobs. It enhances the U.S. Government's trade promotion efforts, increases credit to businesses—especially small- and medium-sized businesses—looking to export, and continues to improve efforts to remove trade barriers for U.S. companies in foreign markets. For America to win the future, more small- and medium-sized businesses must export, because the more small businesses export, the more they produce, the more workers they need, and that means good-paying jobs here at home.

U.S. commercial competitiveness can also be thwarted by market distorting unfair trade practices of foreign governments and firms. Ensuring that U.S. companies and workers have the opportunity to compete on a level playing field is thus critical to advancing business competitiveness in the United States and abroad, and is a key component of NEI. Accordingly, a key focus of our efforts in the Department of Commerce is strong enforcement of our unfair trade laws. Foreign government subsidies can also have a debilitating effect on U.S. exporters' competitiveness abroad, including in both the subsidizer's and third-country markets. Our subsidies enforcement activities help by preventing or remedying the harm that foreign government subsidies can cause to U.S. businesses and workers. Commerce also regularly advocates on behalf of U.S. exporters that are subject to foreign trade remedy (antidumping, countervailing duty, or safeguard) actions, in part by ensuring that the nations that pursue these actions do so in accordance with their World Trade Organization commitments.

Another way to encourage U.S. manufacturing is through our Foreign-Trade Zones (FTZ) program, which allows companies to use special customs procedures that provide duty and logistical savings to help to level the playing field with off-shore alternatives. Recently simplified procedures and pending regulatory revisions should make the FTZ program an even better tool to help U.S. companies compete and create or retain jobs in the United States in support of the NEI.

*Question.* Speaking more broadly, what other programs at the Department of Commerce are effective at spurring domestic manufacturers' competitiveness, which would you select and why?

*Answer.* The Commerce Department has focused the work of its bureaus on supporting the needs of manufacturing firms at crucial points in their lifecycle where Government activity can provide added value—helping support innovation, commercialization, and access to global markets.

*Innovation.*—A competitive manufacturing capacity requires creating and deploying new ideas in the form of new products, new business models, and improved production processes. Our USPTO enables these developments through an improved environment for intellectual property creation—driving a more efficient patent system and better protection at home and abroad. Commerce, through investments in NIST, further supports the creation of new ideas directly through critical investments in basic science, measurement capacity, and technical assistance for the establishment of industry standards that enable the development of entire markets for manufactured goods. Without a strong foundation for advanced manufacturing, benefits for

the economy, including long-term job growth, cannot be maximized. This is why our Economic Development Administration's (EDA) leadership on regional innovation clusters is critically important to building the capacity for global competitiveness.

*Commercialization.*—Transforming new ideas into manufactured outputs is a challenge that often confounds entrepreneurs—both start-up and large-businesses alike—in their attempts to take new ideas to market and ensure profitable, sustainable manufacturing businesses. Commerce supports these efforts in multiple ways. EDA's Office of Innovation and Entrepreneurship focuses specifically on the challenges of commercialization. Additionally, the Hollings MEP at NIST is a program that works directly with companies to help them improve production efficiency and identify and enter new markets. This is an effective program with demonstrated success.

Commerce is also able to support commercialization by providing direct information and support to manufacturers in understanding the domestic and global marketplace, areas of growth and opportunity in key sectors through the work of the Economics and Statistics Administration and ITA.

*Global Competitiveness.*—The future of manufacturing will be fundamentally reliant on the ability of U.S. businesses to access and thrive in overseas markets, and the Commerce Department is working to help position these businesses for success through its efforts to drive the NEI. At the heart of the NEI is the basic premise that domestic production is critical: we need to make it here, in order to export it from here. The NEI was established by President Obama in 2010 with a goal of doubling U.S. exports over 5 years. The Department is profoundly focused on ensuring export competitiveness for U.S. manufacturers primarily through the work of the ITA in partnership with other agencies both within and outside the Department.

---

#### QUESTIONS SUBMITTED BY SENATOR SHERROD BROWN

##### NATIONAL EXPORT INITIATIVE (NEI)

*Question.* Mr. Secretary, the Government Accountability Office (GAO) is presently completing two reports I requested.

One examines the foreign commercial service, and the other examines the manufacturing and services division.

In the commercial service (CS) report, one of the conclusions I'm interested in GAO finding is whether our current resources are aligned with the NEI, and whether we are focusing on getting the biggest export bang for each dollar.

Are our U.S. Foreign Commercial Service (FCS) offices properly aligned with the NEI? What questions and issues need to be considered in re-organizing FCS in order to meet goals of the NEI?

*Answer.* As a result of the August 2010 GAO report, "Increases in Commercial Service Workforce Should be Better Planned", the CS has developed methodology to properly align its worldwide footprint with NEI-priority markets and sectors. CS leveraged a resource allocation model to rank export potential of overseas markets, and it incorporated GAO workforce planning "best practices," and input from International Trade Administration and Commerce, to conduct a strategic review of its staffing and worldwide footprint.

As a result of this analysis, in fiscal year 2012, the CS will begin a strategic repositioning of its global footprint to allow it to more effectively serve U.S. exporters, protect U.S. commercial interests in priority markets, and help achieve NEI goals. Over the next several fiscal years, CS will gradually shift its overseas presence by reallocating staff and program resources from low-priority to higher-priority markets and sectors.

##### STATISTICAL AGENCIES AND MEASURING GLOBALIZATION

*Question.* Mr. Secretary, there has been a series of reports concerning how the Government's statistical agencies have adjusted for the price of imported products that are used in manufacturing supply chains. These reports suggest that we may not be truly capturing what is going on in the global economy.

For example, there has been substantial growth in U.S. manufacturers' use of foreign intermediate components, but because price declines of these components are not picked up in Government price indexes, offshoring results in an overstatement of output and productivity growth.

We also do not know how to account for all imports, and whether they are for consumption or whether they go into other manufactured goods and are re-exported.

There's also an issue with Harmonized Tariff System (HTS) not lining up with the North American Industrial Classification System (NAICS), which creates a gap between trade data and employment.

How are the statistical agencies in your Department—the Census Bureau and the Bureau of Economic Analysis (BEA)—addressing these issues? Are resources adequate to truly capture the true effects of globalization on our economy?

Answer. The continued globalization of economic activity has raised significant measurement challenges for statistical agencies around the world, including BEA and the Census Bureau. Shifts in the sourcing of products from domestic to foreign suppliers have raised concerns about the adequacy of the import price and value data used to calculate gross domestic product (GDP) and other key economic measures. These issues were addressed at a conference in November 2009 in Washington, DC, "Measurement Issues Arising from the Growth of Globalization", conducted by the W.E. Upjohn Institute and the National Academy of Public Administration. Because of their interest in learning more about these challenges, BEA contributed funding to this conference.

The findings from this conference will prove valuable for BEA in developing priorities for improving the U.S. economic accounts. Conference-sponsored research concluded that widespread substitution of low-cost imports for domestic products in recent years may have imparted a bias to import and input price indexes and to measures of real value added and productivity growth in certain industries, although the magnitude of the bias is relatively small. In addition, conference research identified new methods that would improve the identification of imported intermediate inputs used directly by industries in their production process.

A proposal by the Bureau of Labor Statistics (BLS) to develop an input cost index would be useful for BEA to evaluate the current methods for calculating real GDP. BEA will work closely with BLS to develop new and improved import and input price indexes. In addition, BEA is conducting research into developing better measures of the use of imported intermediate inputs and will also evaluate the findings of academic researchers who are conducting similar studies.

The HTS is a product-based classification system while the NAICS is an industry-based classification. The Census Bureau maintains a concordance between the HTS and the NAICS system so that each HTS commodity code is correlated to a corresponding NAICS-based classification code. However, in reality, more than one NAICS industry could produce a given HTS code. As a result, products that are produced by establishments in another industry or where there are two similar NAICS classifications within different industries, the NAICS-based data produced by the Census Bureau will not completely align with production data. The Census Bureau continues to explore what would be required to better align trade data with production data.

#### COMMERCE CONNECT

*Question.* Mr. Secretary, you and I have discussed Commerce Connect and the "one-stop-shopping" model for assisting small- and medium-sized businesses.

One of the issues I've heard over the years is that we have regional economic development districts and layers of bureaucracy. I've seen this in Wilmington, Ohio, which has been enduring the loss of DHL.

The biggest issue I see, particularly in rural communities, is navigating the Federal bureaucracy and the need for someone to broker between agencies.

BRAC is a great model, but that is for base closings and not massive private sector job loss.

How is the Commerce Department currently suited to ensure distressed communities have the technical assistance to develop a redevelopment plan, before they even apply for an EDA grant?

Answer. EDA supports a variety of capacity-building programs for rural and economically distressed communities. These include the Partnership Planning program which supports a network of multi-county economic development districts and the University Center program, both of which can assist communities with economic development planning and analysis prior to submission of a more targeted situation specific grant application. In addition, communities can contact the economic development representative assigned to their State, who will work with EDA regional offices and provide network contacts with other Federal agencies to provide planning assistance.

*Question.* In what ways can EDA's role be enhanced in the re-organization of the export agencies? Does this re-organization go beyond trade and exports?

Answer. As part of the administration's overall effort to streamline Government, cut waste and increase effectiveness, the President directed Jeff Zients and his team

to lead an effort to explore how we can reorganize Government to best meet the needs of the 21st century. This initiative includes reviewing the departments, agencies and programs in the trade and exports sphere as well as those impacting business competitiveness more broadly. Mr. Zients and his team reached out broadly to hear what's working, what's not and what we might do better. They submitted their analysis and potential options to the President on June 9 and the administration is currently reviewing the options. We would be happy to discuss the results of this work in more detail once they are finalized.

*Question.* How is CommerceConnect distinct from EDA's role as the "front door" to communities and companies in need of Federal economic development assistance?

*Answer.* CommerceConnect complements EDA's role and the role of other Commerce bureaus and partners. CommerceConnect is focused on streamlining Government bureaucracy to bring services and solutions directly to businesses and entrepreneurs. Most EDA assistance, is focused on creating economic conditions that are conducive to economic growth and expansion through strategic grant investments at the State, regional and local level. CommerceConnect currently focuses on helping businesses, whereas EDA's investments are targeted to private/public partnerships, units of government and nonprofit organizations in order to strengthen an ecosystem in which economic development can occur.

A primary goal of the CommerceConnect initiative is to provide a "no wrong door" consultative approach for information, counseling, and access to the breadth of overall Department of Commerce programs, services and resources that help businesses transform themselves into viable and competitive enterprises. Entrepreneurs and existing businesses can initiate access to Commerce's 70 plus enterprise assistance programs through a toll free number (888-728-4190) or through [www.CommerceConnect.gov](http://www.CommerceConnect.gov). CommerceConnect listens to business owners and puts them in touch with Commerce bureau resources, as well as other Federal, State, and local resource providers for enhanced assistance.

While CommerceConnect is a liaison to resources the initiative is not a direct service provider, unlike EDA and the Department's other bureaus, which service eligible recipients directly through their respective programs. In the coming fiscal year, CommerceConnect will endeavor to build stronger linkages to the Small Business Administration (SBA) and other enterprise assistance providers. The President's fiscal year 2012 budget includes \$3.24 million for CommerceConnect including \$500,000 for customer service integration activities with SBA. SBA's 2012 budget includes \$1 million for these activities. Department Chief Information Officer and staff level meetings are already underway to explore IT system integration opportunities.

---

QUESTIONS SUBMITTED BY SENATOR KAY BAILEY HUTCHISON

GULF OF MEXICO RESOURCES

*Question.* The Deepwater Horizon has cost an estimated \$10 billion. Out of \$8.8 billion, the only budget highlight related to the gulf oil spill is a \$2.9 million increase in the National Oceanic and Atmospheric Administration (NOAA) budget to develop an oil spill research and development program. Tell us about this program.

*Answer.* The fiscal year 2012 President's budget request includes an increase of \$2.9 million to develop an oil spill research and development (R&D) program in NOAA. This will be NOAA's first comprehensive oil spill R&D program. As the scientific lead for coastal and marine spills, NOAA brings the best-available science and tools to improve decisionmaking during oil spill responses. The requested resources will be used to develop strong leadership in oil spill research, response, assessment, and restoration research. The goal of this program will be to conduct research to provide useful information, methods and tools for planners, oil spill responders, and assessment practitioners. The funds would support external grants that are coordinated with the Interagency Coordinating Committee for Oil Pollution Research as well as the National Oceanographic Partnership Program. The grants will be focused on priority oil spill research areas, including:

*Oil Fate and Behavior From Deepwater Releases.*—As the Deepwater Horizon oil spill demonstrated, there is a need to study how oil behaves and disperses within the water column when released at great depths, and to understand the effects of oil on mid-water and deep-water benthic habitat.

*Long-term Effects on Species and Habitats.*—Research is needed to improve our understanding of the long-term effects of oil on sensitive and economically important species and habitats. Continued research is also needed to determine

the effects of oil and dispersants that are suspended in the water column on mid-water and pelagic species, and the effects of oil on deep water corals.

*Research to Improve Tools for Assessment and Restoration.*—As our understanding of complex ecosystems evolves, so should our modeling tools and restoration techniques. Research and tools to better assess and quantify natural resource services—such as water filtration/capture, flood protection, carbon sequestration, recreation, and education—across a range of habitat types can help ensure the public is fully compensated and the environment fully restored.

*Oil in Arctic Environments.*—Research is needed to better understand environmental conditions in the Arctic, which is important for conducting injury assessments and developing restoration strategies. Research is also needed to better understand the challenges of spill response in arctic waters and the most effective tools and techniques to utilize in such environments.

*Human Dimensions.*—Research is needed on how to incorporate impacted communities into the preparedness and response processes to help to address the human dimensions of spills, including social issues, community effects, risk-communication methods, and valuation of natural resources.

*Question.* Can you please tell us about any new initiatives other than this \$2.9 million for the oil spill study?

*Answer.* The fiscal year 2012 President's budget request increase for \$2.9 million for oil spill research and development is the key increase in the NOAA budget for oil spill research. NOAA is requesting an increase of \$5 million for enhanced observations to implement the U.S. Integrated Ocean Observing Systems (IOOS®) Surface Current Mapping plan to monitor near-shore currents using High Frequency (HF) Radar. This program will be implemented by the IOOS® Regional Coastal Ocean Observing Systems (RCOOS) to deliver real-time surface current data to the national HF Radar surface current monitoring network. The requested resources will support Regional IOOS® HF Radar stations with an emphasis on those stations currently operating and delivering data to the national network in regions of offshore oil production and in the vicinity of major ports and harbors. The U.S. IOOS® program will award funding via an established merit-based competitive process with RCOOS, and through contracts with Federal partners.

The 2010 Deepwater Horizon oil spill highlighted the utility of HF Radar. NOAA's Office of Response and Restoration relied on real-time data collected from the national HF Radar surface current monitoring network to provide new data for inclusion in trajectory predictions of oil dispersal and to verify models used to assess the likelihood of the oil moving into the Loop Current. HF Radar data was also used daily by NOAA's Office of Response and Restoration (OR&R) during the Deepwater Horizon oil spill response to create trajectory forecasts (which were used by Federal responders to deploy spill response assets and identify fishery closures). In 2007, HF Radar was used to verify that trajectories of oil from the M/V Cosco Busan spill would not flow into the federally protected National Marine Sanctuaries near the San Francisco Bay, and resources were able to be deployed to other areas under greater threat. With sustained, long-term surface current data sets, NOAA's OR&R will now be able to provide Trajectory Analysis Planner products for threat assessments.

*Question.* Did the Department request additional funding that was denied by Office of Management and Budget (OMB)?

*Answer.* The fiscal year 2012 President's budget request is the result of a rigorous review and prioritization of the Department's programs and activities within the broader context of the Federal community. As a result of this discussion, it was determined that the \$2.9 million request for additional funds to develop an oil spill research and development program was both a suitable funding level and a high-priority initiative.

*Question.* If there are none, why not?

*Answer.* The requested increases plus the base funds in ongoing oil spill activities in NOAA's programs will allow for the continued development of research on oil spills. Increases were requested for only the most critical programs, projects, or activities necessary to meet the growing demand for NOAA's services.

*Question.* Are the Department of Commerce (DOC) and NOAA satisfied that the oil spill has not had, nor will, have any effect on fisheries?

*Answer.* Initially NOAA closed areas in the Gulf of Mexico to fishing due to the oil spill and the impacts to the fisheries in those areas. Testing of seafood taken from this area has not shown elevated levels of polycyclic aromatic hydrocarbons or dioctyl sodium sulfosuccinate in samples taken from the Gulf of Mexico. All Federal waters in the Gulf of Mexico that were closed due to the BP Deepwater Horizon oil spill are now open to all fishing. NOAA has not yet determined the comprehensive



effects of the oil spill and will continue the Natural Resource Damage Assessment process to determine those impacts.

Like the fishing industry, NOAA remains concerned with the public perception issues surrounding seafood from the Gulf of Mexico. NOAA continues to sample seafood from the Gulf of Mexico through the summer and is posting the results publicly so that consumers can make fully informed purchasing decisions. NOAA is also using \$15 million in supplemental funding received for fishery disaster assistance to work with the Gulf States Marine Fisheries Commission—along with their State representatives from Louisiana, Mississippi, Alabama, and Florida—on plans that are intended to help the local seafood industry and the sport fishing community restore national confidence in gulf fishery products.

#### NOAA STEM EDUCATION

*Question.* The America COMPETES Reauthorization of 2010 directs NOAA to strengthen its efforts to provide curriculum support to teachers. What has been done to improve NOAA's curriculum support activities and increase the use of NOAA curriculum support activities by schools across the country?

*Answer.* The America COMPETES Reauthorization Act of 2010 gives NOAA broad authority for educational activities. Based on this statute and other program-specific education mandates, the NOAA education community works collaboratively to advance priorities outlined in NOAA's Education Strategic Plan and meet NOAA's Education Mission: "To advance environmental literacy and promote a diverse workforce in ocean, coastal, Great Lakes, weather, and climate sciences, encouraging stewardship and increasing informed decisionmaking for the Nation." To that end, NOAA sees the importance of supporting teacher professional development and curriculum development by bringing NOAA-based sciences into the classroom. Although America COMPETES Reauthorization was signed into law on January 4, 2011, NOAA did not fund any grants while the fiscal year 2011 appropriation was being determined by the Congress. Grants will be awarded from the Competitive Educational Grants and Programs line in the last quarter of fiscal year 2011.

As part of the Competitive Educational Grants line, NOAA provides Environmental Literacy Grants (ELGs). The ELG Program provides support to improve environmental literacy among our Nation's citizens and promotes a diverse workforce in ocean, coastal, Great Lakes, weather, and climate sciences, with the goal of encouraging stewardship and increasing informed decisionmaking for the Nation. These broad competitive education grants fund a wide range of projects and activities, which include supporting the development of curricula and teacher professional development materials connected to NOAA sciences. Specific examples include:

- The Earth System Science Education Alliance (ESSEA), funded through a 2008 ELG award and implemented by the Institute for Global Environmental Strategies, is designed to improve the quality of geosciences instruction for pre-service and in-service K–12 teachers. Participating institutions offer a series of inquiry-based courses that provide teachers with the content knowledge and tools they need to incorporate Earth systems science into their curricula.
- The Ocean Science Curriculum Sequence, funded through 2007 and 2009 ELG awards and implemented by the Lawrence Hall of Science, is designed to develop ocean science curricula for grades 3–5 and 6–8, respectively. The curriculum provides a major step toward achieving coherent, comprehensive, nationally disseminated K–12 ocean science curriculum. An evaluation study of Ocean Science Curriculum Sequence grades 3–5 from 70 classrooms shows that students using this curriculum made significant gains in understanding key ocean sciences concepts addressed in the curriculum.

#### CENSUS LESSONS

*Question.* As late as 2009, there was a real fear that the costs of the 2010 census would continue to grow. The increased costs of going back to a paper census instead of using hand-held devices raised concern about if the census would even be accomplished. However, the 2010 census was completed and, as you highlight in your testimony, \$1.8 billion was returned because it was not needed.

What lessons is the Department of Commerce taking away from the entire experience of executing the 2010 census—and can they be used in current surveys and in planning for the 2020 census?

*Answer.* The Census Bureau is committed to designing and conducting a 2020 census that costs less per housing unit than the 2010 census while maintaining high-quality results. The Census Bureau has identified four strategic goals for the 2020 census:

- a complete and accurate census;

- embraced and valued results;
- an efficient census; and
- a well-managed census.

To achieve its cost and quality targets and meet its strategic goals, the Census Bureau must make fundamental changes to the design, implementation, and management of the decennial census. Substantial innovation and improvements are necessary to prevent another large increase in costs, while still maintaining high quality. Research on new methods likely to affect costs must be accomplished early enough in the decade to confirm their likely impact on both cost and quality (coverage) to inform timely design decisions. Without early investment in research, and innovation, the strategic goals and the ability to stem cost growth will be jeopardized.

At the same time, the 2020 census must incorporate strong risk and program management to avoid the problems encountered during the years leading up to the 2010 census. The final design also must be robust, resilient, and flexible enough to respond to social and technological changes that will undoubtedly occur throughout the decade.

#### NOAA SATELLITES

*Question.* As I mentioned in my statement, understand that the Joint Polar Satellite System (JPSS) program is at least 14 months behind schedule. We are risking gaps in weather coverage for important observations to inform short- and long-term weather and hurricane forecasts.

What do you see as the biggest challenges facing NOAA's satellite program, and how do you propose NOAA can move forward in spite of those obstacles?

*Answer.* The biggest challenge the JPSS program faces is lack of adequate and stable funding at a critical juncture in the development of the satellite. As a consequence, the JPSS program is behind schedule. Based on an independent analysis conducted by the Aerospace Corporation, there is a high likelihood of a gap in satellite coverage between the end of the NPOESS Preparatory Project (NPP) mission and the date when the JPSS-1 satellite begins providing operational data after the postlaunch calibration and conclusion of validation testing. At the time the gap occurs, there would be an immediate degradation of all weather forecasts that are made for 24 hours and longer, and likely result in forecasts that incorrectly predict the magnitude of storms by as much as 50 percent in the 2- to 5-day range compared to current capability.

NOAA has traditionally flown its polar-orbiting satellite in the afternoon orbit and no other nation has flown a satellite that provides the type of data required in that orbit. If NOAA does not have a polar satellite data source (POES, NPP, or JPSS) in the afternoon orbit, then the NWS modeling effort would be based solely on the European data that is available in the mid-morning orbit. Reliance on this mid-morning orbit would result in a degradation of forecast accuracy by 1 to 2 days. Higher confidence forecasts would only extend out 5 days instead of 7 days as they do currently.

Adequate funding of the JPSS Program remains one of Department's highest priorities. As such, although the NOAA did not receive the \$1.06 billion requested in the President's fiscal year 2011 budget which was needed to launch JPSS-1 in 2015 and given the vital importance of JPSS in maintaining the Nation's weather prediction capabilities, the Department of Commerce has chosen to move funds to JPSS in the fiscal year 2011 spend plan, pursuant to Public Law 112-10. The Department's spend plans submitted on June 15, 2011 provides additional details. These additional funds will provide for a launch of the first JPSS satellite in the first quarter of fiscal year 2017 which will minimize the duration of a gap in afternoon polar satellite coverage should one occur. The first quarter of fiscal year 2017 launch date is predicated on receiving the full President's budget of \$1.07 billion in fiscal year 2012. NOAA estimates that JPSS-1 will begin providing operational data in fiscal year 2017.

*Question.* How would a gap in JPSS or other satellite coverage impact our ability to forecast hurricanes?

*Answer.* We expect that a gap in JPSS data coverage would result in a degradation in forecasting the path and landfall location of hurricanes. Over the past decade there has been a remarkable improvement in predicting the tracks of hurricanes 2-3 days in advance due to having at least two satellites in polar orbit, one in the mid-morning orbit and the other in the afternoon orbit. Currently, the EUMETSAT Metop satellite provides and will continue to provide data in the mid-morning orbit. It is the afternoon orbit that NOAA-19 currently flies in and that NPP and the JPSS satellites will fly in that is in jeopardy. These improvements that we have re-

alized by having this coverage in the two orbits, allow the public and private sectors to better prepare for the impact of a hurricane. With a gap in the afternoon orbit (i.e., lack of JPSS data), forecast information to the public will be degraded and hurricane warning areas will have to be expanded resulting in larger evacuation areas and their associated costs.

NOAA's National Weather Service (NWS) operational models are run four times per day on a 6-hour cycle to support its weather forecasting mission. Data from the Metop satellite and the NOAA POES satellite are critical to the consistency of these model runs. Decisionmakers/users depend on all these models every day and throughout the day to provide the latest information to the public. These model runs have greatly increased accuracy at days 5 through 7 compared to 25 years ago. Forecast models are now capable of predicting the development and evolution of extreme events (winter storms, severe weather outbreaks and hurricanes) 3, 5, and sometimes 7 to 8 days in advance with remarkable skill and consistency.

#### WEATHER MODIFICATION

*Question.* Previous versions of my legislation on weather modification directed NOAA to conduct this research. The National Academy of Sciences recommended in 2003 that this country needs a coordinated, national program to study weather modification. Many States have weather modification programs, and private firms are providing weather modification services, but we lack basic science to explain whether these activities work, or how modification activities in one region may impact another region. For example, how does cloud seeding to increase snowfall over a ski resort in the Rockies impact precipitation in the Great Plains?

*Answer.* Before the efficacy of weather mitigation or modification can be understood, more research into the underlying physical processes of weather phenomena needs to be done. Our current state of understanding of the physics of hurricane, cloud, and precipitation formation makes it almost impossible to separate the effects of proposed mitigation or modification strategies from natural changes.

*Question.* Do you think that it is worthwhile to collect data on the impacts of weather modification technologies?

*Answer.* As mentioned above, before the efficacy of weather mitigation or modification can be understood, more research into the underlying physical processes of weather phenomena needs to be done. Our current state of understanding of the physics of hurricane, cloud, and precipitation formation makes it almost impossible to separate the effects of proposed mitigation or modification strategies from natural changes. In addition, weather modification applications involving artificially modified precipitation patterns must be evaluated in the context of potential political and legal issues including local and/or regional liability, foreign policy, and national security.

*Question.* Are there existing programs within NWS that study the physical processes that create clouds and precipitation, and which could help us better understand weather modification technologies?

*Answer.* A number of research efforts are currently underway at NOAA to better understand the fundamental physical aspects of weather phenomena such as cloud and precipitation formation, including:

*NOAA's Hurricane Forecast Improvement Program (HFIP).*—HFIP is a joint program focused on aligning NOAA's research and operations to improve hurricane forecasts. HFIP also provides the basis for NOAA and other agencies to coordinate hurricane research needed to significantly improve hurricane track, intensity, and storm surge forecasts. It also engages and aligns the inter-agency and larger scientific community efforts toward addressing the challenges posed to improve hurricane forecasts. The goals of the HFIP are to improve the accuracy and reliability of hurricane forecasts; to extend lead time for hurricane forecasts with increased certainty; and to increase confidence in hurricane forecasts. Preliminary results are showing greater than 10 percent improvement in track and intensity forecast accuracy. Increased track and intensity accuracy is critical to evaluating any hurricane modification approach.

*Warn-on-Forecast (WoF).*—NOAA's WoF research project aims to create computer forecasts that accurately predict when and where severe weather will occur in the next hour. Today, NOAA's NWS forecasters rely heavily on observation tools such as radar to detect severe weather so they can issue warnings. WoF has a modeling component to it that will require NOAA to investigate cloud processes in detail.

*VORTEX-2 Field Research.*—To help gain better knowledge of cloud processes, NOAA partnered with the National Science Foundation (NSF) to execute the Verification of the Origins of Rotation in Tornadoes Experiment (VORTEX-

2) in the springs of 2009 and 2010. The experiment used multiple sensors (e.g., mobile radars) to get a high-resolution data set of developing and decaying storms. After the analysis phase of these storms is completed over the coming months and years, it will give clues on how to refine the cloud physics parameters needed for WoF models.

*Dual-polarized Radars.*—The NWS is currently upgrading all of their 122 radars to dual polarization capabilities. Next generation radar technology options such as phased array radar are several years away from being used operationally, but NOAA has a working prototype that scans the storms more quickly giving researchers a better picture of the structure of storms in greater detail than available from conventional radar.

*Improvement in Monitoring Meteorological Conditions.*—Why some conditions thought to be favorable to precipitation turn out to yield little or no rain, and others considered generally unfavorable do the opposite can be partially attributed to poorly observed atmospheric conditions. NOAA researchers helped pioneer the use of advanced atmospheric moisture sensing systems such as Global Positioning System (GPS) Meteorology and weather radar to monitor the moisture of the atmosphere and assimilate the information into numerical weather prediction models, and continue to develop higher resolution meteorological tools and techniques to improve local area weather analysis and prediction.

#### COMMERCE—TRADE REORGANIZATION

*Question.* In the President's State of the Union Address he mentioned the fact that multiple agencies have responsibilities over trade (U.S. Trade Representative [USTR], Export/Import Bank, International Trade Commission, International Trade Administration, etc). I understand one of the proposals includes moving the USTR into the Department of Commerce, which has concerns about doing this. OMB is currently conducting a high-level review of programs at the Department of Commerce, specifically examining its trade policy responsibilities. This effort is being lead by Jeffrey Zients, OMB Deputy Director.

Mr. Secretary, it is our understanding that OMB is currently conducting a review of Commerce programs. What is the purpose of this review?

Answer. As the President said in his State of the Union Address, winning the future will require taking steps now to prepare America to compete in a global economy for decades to come. That means out-educating, out-innovating, and out-building our competition; restoring fiscal responsibility to remove the burden of deficits and debt; and reforming our Government so that it is more effective, efficient, and open to the American people. As the President put it, "We cannot win the future with a Government of the past."

The President believes that we need to reform our Government in order to make it better organized and better equipped to support American competitiveness. Particularly during these challenging economic times, we want to ensure that we put all of our resources to best use in order to negotiate the best agreements, enforce our trade rights, support U.S. businesses and promote their products and exports.

That is why the President has asked our Nation's first Chief Performance Officer (CPO), Jeff Zients, to lead a review of the departments, agencies, and programs in the trade, exports, and competitiveness spheres to explore how we can cut waste and increase effectiveness so that we can help American businesses better compete globally and organize our Government to meet the needs of the 21st century.

Over the last few months, the team at OMB has been hard at work gathering ideas, input, and advice from owners of small and large businesses, Federal employees, outside experts, current and former agency heads, and Members of Congress and their staffs on ways to make Government more efficient, streamline key functions, and make Government work better for the American people and the economy.

*Question.* When will the review be completed and will a set of recommendations be forthcoming?

Answer. The President issued a memorandum tasking the CPO, Jeff Zients, with developing recommendations. Mr. Zients and his team submitted their analysis and potential options to the President on June 9. The President will review the options over the summer and discuss them with his team. When he completes his review, we would be happy to discuss the results of this work in more detail.

#### ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

*Question.* The Commerce Department's EDA and its Office of Innovation and Entrepreneurship announced on March 12, the availability of \$12 million in i6 Green Challenge. This grant solicitation is in partnership with the Departments of Agriculture, Energy (DOE), Environmental Protection Agency, NSF, and Commerce's

National Institute of Standards and Technology (NIST), and U.S. Patent and Trademark Office.

EDA will award up to \$1 million to each of six teams around the country with the most innovative ideas to drive technology commercialization and entrepreneurship in support of a green innovation economy, increased U.S. competitiveness and new jobs. Its partner agencies will award more than \$6 million in additional funding to i6 Green winners.

The i6 Green is a follow on to last year's inaugural i6 Challenge and is designed to encourage and reward innovative approaches to accelerating technology commercialization, new venture formation, job. This year's \$12 million challenge rewards communities that utilize a Proof of Concept Center model, to accelerate technology led economic development.

A Proof of Concept Center supports all aspects of the entrepreneurship process, from supporting technology demonstration and business plan development, to providing early stage access to capital and other resources to help innovators bring their ideas to the marketplace. Centers allow emerging technologies to mature and demonstrate their market potential, making them more attractive to investors and helping entrepreneurs turn their idea or technology into a business.

Since the fiscal year 2011 continuing resolution reduces EDA's budget by \$9 million below fiscal year 2010 level, does it make sense to continue with the new i6 initiative?

Answer. Yes. The i6 Challenge Series helps communities build the essential 21st century innovation infrastructure that supports entrepreneurs and high-growth business start ups.

In the inaugural i6 Challenge Series, EDA working with NSF and the National Institutes of Health in a new collaborative capacity-building effort, furthered the process of maximizing the effectiveness of Federal dollars by leveraging the resources, talent, and expertise of other Federal agencies.

Examples of i6 winners:

—The Austen BioInnovation Institute in Akron and the University of Akron Research Foundation, Akron, Ohio, supporting the Innovative Solutions for Invention Xceleration which will increase innovation and minimize the time from ideation to commercialization of new technologies by bringing together world-class scientists, physicians, engineers, researchers, and entrepreneurs in the biomedical device/product and polymer science industries of northeast Ohio. EDA's \$1 million investment is part of a \$2.2 million project that the grantees estimate will create 2,400 jobs and generate \$800 million in private investment.

—The Technology Ventures Corporation, Albuquerque, New Mexico, supporting the work of the New Mexico Technology Ventures Corporation, which will create an infrastructure for the successful maturation of technologies developed under the Small Business Innovation Research program into commercially viable enterprises. EDA's \$1 million investment is part of a \$1.5 million project.

EDA's ability to coordinate investments across multiple Federal agencies is particularly important in today's fiscal environment.

*Question.* Given the tight budgets next year and the need to prioritize within the programs, the i6 initiative seems to be beyond the scope of EDA's core mission. If the EDA goes forward with this new program how will the other programs within EDA be impacted?

Answer. The i6 Challenge Series is well within the scope of EDA's core mission, "To lead the Federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy." Both the inaugural i6 and the i6 Green highlight the tremendous economic growth potential that exists in our communities across the country by leveraging research to create new companies and high-wage, high-skill, sustainable jobs.

Since the i6 initiative is a multiagency competition with each agency contributing funds to the successful applicants the financial burden on each agency is reduced. Additionally, it is not anticipated that current or future i6 Challenges will have any significant impact on other EDA programs.

#### NIST—MANUFACTURING

*Question.* Over the past few years, numerous reports have underscored the importance of a robust Federal presence in the sciences to advance technological innovation. The "Rising Above the Gathering Storm" report and its follow-on, "The Gathering Storm, Revisited", were a call to action that helped to shape the America COMPETES Reauthorization Act that pushed for Innovation in the United States.

In addition, in February of this year, the White House Office of Science and Technology Policy, National Economic Council, and Council of Economic Advisers jointly released an update to the 2009 “Strategy for American Innovation” that “focuses on critical areas where sensible, balanced government policies can lay the foundation for innovation that leads to quality jobs and shared prosperity.”

NIST’s mission is to promote U.S. innovation and industrial competitiveness through measurement science, standards, and technology focuses this year on a number of manufacturing initiatives. In its request NIST has proposed \$85.3 million in fiscal year 2012 supporting manufacturing related research.

With programs administered by the International Trade Administration, NIST, and EDA the Department of Commerce has several programmatic tools at its disposal to help address the needs of manufacturers. As the Secretary of Commerce what are you doing to provide assistance to U.S. manufacturers?

Answer. NIST has a long-standing and multi-faceted role in providing technological assistance to manufacturers in the United States:

- NIST is responsible for producing measurements and standards that manufacturers rely on. NIST laboratories develop new measurements and standards that are essential for adoption of advanced technologies that make U.S. manufacturers able to more effectively compete globally in technology-intensive product markets.
- Through targeted programs aimed at addressing critical national needs, NIST’s Technology Innovation Program (TIP) and the proposed Advanced Manufacturing Technology Consortia (AMTech) program support research by industry in high-risk innovations in manufacturing.
- NIST’s Hollings Manufacturing Extension Partnership (MEP) is a program that works directly with companies to help them improve production efficiency and identify and enter new markets. This is an effective program with demonstrated success, including helping firms increase and retain sales by more than \$8.4 billion, generate cost savings of more than \$1.3 billion, and create and retain more than 72,000 jobs in fiscal year 2009 alone.

*Question.* The needs of U.S. manufacturer companies is immediate, they cannot wait for a research program to produce benefits that are 10 to 15 years down the road. When do you expect to see the manufacturing research programs proposed at NIST in this budget to actually yield results? In other words, when and how will we know that the taxpayer’s money has been well-spent?

Answer. NIST’s role as the national laboratory for promoting industrial competitiveness enables the development and dissemination of measurement technologies and standards to help U.S. industry compete effectively in an increasingly global market. These measurement technologies and standards address both immediate tactical needs, and also long-term needs that reflect strategic investments for U.S. industry.

There are various components of the manufacturing research programs proposed in the NIST fiscal year 2012 budget that will have almost immediate impacts. These components include measurement and standards—focused deliverables that are readily accessible to, and are developed in close collaboration with, U.S. industry.

NIST is responding to near-term industry needs by developing standards for measuring the performance of nontraditional manufacturing processes so that manufacturers can deploy these new tools with confidence. Performance test methods are entering the standards process for additive manufacturing equipment (also referred to as 3D printing), advanced robots that can operate safely in the vicinity of humans, and five-axis machine tools. Through validated performance measures, users can dramatically improve their manufacturing capabilities, quality, and flexibility in producing a dynamic variety of products and make entirely new types of products possible.

NIST staff participation in development of documentary standards codifies the knowledge developed through NIST programs into practices that are internationally recognized and used. Using these technical standards, U.S. exporters are able to streamline compliance with regulations around the world with the immediate impact that U.S. exports can be competitive in other parts of the world. Another example of the impact of NIST research includes standardizing ways of representing models of entire products in computer files with sufficient detail for approvals and certifications, a development that allows manufacturers to increase efficiency and reduce costs. A U.S. aircraft manufacturer successfully used these new standards not only to improve their manufacturing processes but also to obtain airworthiness approval without needing to build a physical model.

## NIST—ADVANCED MANUFACTURING TECHNOLOGY CONSORTIA (AMTECH)

*Question.* NIST is requesting \$12.3 million for the AMTECH program in fiscal year 2012. AMTECH is a new public-private partnership that will broadly benefit the Nation's industrial base by providing grants to form and fund industrial consortia to address industrial driven technological challenges that no one company can address alone. AMTECH is modeled upon NIST's partnership, the Nanoelectronics Research Initiative, which in collaboration with industry, funds research consortia targeting the nanoelectronics technology sector.

AMTECH is designed to decrease the timescale of technological innovation by including partners that span the innovation life-cycle from idea to discovery, from invention to commercialization. Through cost-sharing and a common research agenda, these consortia would support the development of innovative new technologies directed at creating high-wage jobs and economic growth across the industry sector. These consortia will develop road-maps of critical long-term industrial research needs and provide support for research and equipment at leading universities and government laboratories directed at meeting these needs.

What is AMTech and why do you believe this is a good model to fund research?

*Answer.* The Advanced Manufacturing Technology Consortia (AMTech) program will establish and support industry-led consortia to pursue research needs in support of a long-term, industry-wide vision. The AMTech program will issue two types of awards. Small planning awards are intended for the establishment of multi-partner consortia and development of a shared vision of industry's critical long-term research needs via a technology roadmap. Implementation awards are intended for consortia with defined partnerships and a developed roadmap. The consortia will award implementation grants for directed basic research at universities in pursuit of roadmap targets. The partnership model to identify needs, develop roadmaps, and generate knowledge creates an incentive for private and non-Federal funding agencies to fully develop and commercialize the innovations developed through AMTech.

NIST developed AMTech based on its own experience with technology consortia and a thorough review of evaluation of past Federal consortia efforts. AMTech is designed to avoid features that have limited the impact of past public/private partnerships and build upon those features that have proven beneficial. Further, the Federal role within AMTech—funding of university-based directed basic research—is widely recognized as appropriate. Further, NIST began testing this public/private partnership model in 2007 and has seen promising results. In the pilot program (the Nanoelectronics Research Initiative), NIST has been able to leverage Federal investment with key technology stakeholders in order to help address long-term research challenges aligned with the needs of industry. These challenges, articulated in the form of an industry roadmap, present untenable resource and intellectual demands for any single industry player. Targeting combined resources against these challenges is a concrete economic benefit to all participants in the consortia: the leveraged resources that come together under this kind of model are a substantial benefit to the commercial sector, both in terms of minimizing their individual investments and providing an opportunity for new technological discoveries, as well as to the Federal research enterprise, in terms of providing a basis for use-inspired research. By convening the key players across the innovation life cycle, the AMTech consortia eliminates critical barriers to innovation, increases the efficiency of domestic innovation efforts, alleviates barriers to private capital investment, and collapses the timescale to deliver new products and services based on scientific and technological advance. This strategy will ultimately drive economic growth, enhance competitiveness and spur the creation of jobs in high value-added sectors.

*Question.* Isn't the AMTech proposal just a reinvention of the Advanced Technology Program, or TIP?

*Answer.* No, the proposed AMTech is not a reinvention of the Advanced Technology Program or TIP. While AMTech does aim at meeting industry's critical long-term research needs, it seeks to do so in a manner that is different from TIP. In particular, all Federal money in the AMTech consortia funds precompetitive research to support an industry-directed roadmap of research needs. TIP funding, in contrast, supports early-stage, use-directed R&D performed by businesses or business/university partnerships, on a short-term project basis. By forming an industry-led consortia, AMTech is able to develop a consensus regarding industry's long-term needs, attract industry funds to leverage Federal investment, ensure that all investments in university-performed research are directed at meeting industry's long-term needs, and attract other private and State investments to support commercialization and deployment.

*Question.* If funded, this program will only have minimal impact since it is only \$12.5 million? Please provide the rationale for creating another new grant program versus putting the funding in an existing program like TIP or the NIST labs.

*Answer.* The AMTech program is designed so that a minimal investment is heavily leveraged by concurrent investment of industry and State resources directed at a common set of technological challenges. The NIST interaction with the Nanoelectronics Research Initiative (NRI), upon which AMTech is based, is illustrative of the significant impact that even a small investment can have. Currently NIST funding of research in the NRI (\$2.75 million per year) has been leveraged by \$5 million per year from industry partners and \$15 million/year from States to support projects at 30 universities to work in four regional centers. The NIST/NRI partnership has attracted \$110 million over 5 years in State and private funding to support business development and commercialization. Furthermore, George Scalise, former president of the Semiconductor Industry Association highlighted the importance of this effort:

“The Nanoelectronics Research Initiative and the regional research centers exemplify what can be done when industry, government and academia work together. This investment is likely to pay substantial dividends in the future. Leading-edge university research centers have proved to be powerful magnets for investment by technology companies and will help build the high-tech ecosystem for high-value jobs in the future.”

NIST has modeled the proposed AMTech initiative on the successful NRI. By bringing together multiple components of the innovation cycle, under a single consortium, to accelerate the pace of innovation in a particular industry sector, AMTech will serve as a mechanism to accelerate the development, transition, adoption, and manufacture of new technologies. This in turn will create the opportunity for job creation and economic growth, as illustrated by the NRI example. The AMTech program compliments but is not the same as TIP's focus on small and medium-sized businesses and the role of the labs in addressing the measurement and standards challenges that stand in the way of technological advancement.

#### NIST—CYBERSECURITY

*Question.* NIST's overall cybersecurity portfolio is responsible for cybersecurity research, development of Federal cybersecurity standards, establishment of methods and metrics for determining the effectiveness of security controls, and providing technical support to public and private sector implementation of security standards and controls. The fiscal year 2012 budget request contains \$43.4 million in new funding for cybersecurity-related programs and activities that will strengthen NIST's contribution to the development and promulgation of effective and usable cybersecurity standards.

NIST's budget request includes an increase of \$43 million (a total of \$72 million) for an initiative to improve the security and interoperability of the Nation's cyberinfrastructure. Can you elaborate on the efforts occurring under this initiative and how NIST's coordinates its activities with the Department of Homeland Security (DHS), the National Security Agency (NSA), and other agencies?

*Answer.* A secure cyber infrastructure is vital to the economic vitality and national security interests of the United States. In addition to enabling more than \$200 billion in annual e-commerce, interconnected networks of computers are essential for critical functions such as air traffic control, electric power distribution and the GPS in our cars. The Nation's cyber infrastructure is central to maintaining the timely delivery and quality of public services that are part of everyday life. Our Nation's computers face ever-increasing threats from malicious individuals, organizations, and nation states. Currently, our computer security tools are manually implemented, too complex to be effectively used, and too static to respond to rapid changes in the threat environment. This allows many attacks to succeed, causing significant damage and undermining confidence in vital commercial and public information systems. The result is a large, direct economic impact—estimates show that Americans lose billions of dollars each year to cyber crime.

NIST is responsible for cybersecurity research, development of Federal cybersecurity standards, establishment of methods and metrics for determining the effectiveness of security controls, and providing technical support to public and private sector implementation of security standards and controls. The fiscal year 2012 budget request contains \$43.4 million for cybersecurity-related programs and activities that will strengthen NIST's contribution to the development and promulgation of effective and usable cybersecurity standards. The cybersecurity infrastructure request has three initiatives.



*Scalable Cybersecurity for Emerging Technologies and Threats (\$14.9 million).*—The request would provide improvements to NIST's core cybersecurity work in support of the Comprehensive National Cybersecurity Initiative, the Federal Information Security Management Act, and other national priorities. NIST will develop improved security techniques, support the creation of consensus security standards, increase the interoperability and usability of security technologies, and expedite the secure adoption of emerging information technologies.

*National Program Office (NPO) for the National Strategy for Trusted Identities in Cyberspace (NSTIC) and NSTIC Grant Program (\$24.5 million).*—The request for NSTIC would support the development of a vibrant Identity Ecosystem where individuals, businesses, and other organizations enjoy greater trust, privacy, and security as they conduct sensitive transactions online. This initiative is in direct response to the recommendations of the White House Cyberspace Policy Review and will raise the level of trust associated with the identities of individuals, organizations, services, and devices involved in online transactions. The request would support an NPO to coordinate Federal activities needed to implement NSTIC. NIST will be responsible for day-to-day and overall operation of the NPO. NIST will work with the private sector to identify potential funding opportunities for the delivery of NSTIC solutions. Of the \$24.5 million for NSTIC, \$7 million will support the NPO and \$17.5 million will fund the pilot grants.

*National Initiative for Cybersecurity Education (NICE) (\$4 million).*—NICE has evolved from the Comprehensive National Cybersecurity Initiative, and extends its scope beyond the Federal workplace to include civilians and students in kindergarten through postgraduate school. The goal of NICE is to establish an operational, sustainable, and continually improving cybersecurity education program for the Nation to use sound cyber practices that will enhance the Nation's security. NIST is leading the NICE initiative to ensure coordination, cooperation, focus, public engagement, technology transfer and sustainability. The \$4 million request for NICE will support development of a cybersecurity education framework that addresses:

- national cybersecurity awareness;
- formal cybersecurity education;
- Federal cybersecurity workforce structure; and
- cybersecurity workforce training and professional development.

Collaborations with both government and industry are essential for the success of our mission. We work closely with partners across the government, industry and the world. NIST is an active member in the interagency groups that coordinate the cybersecurity research and development agenda for Federal agencies:

- The Networking and Information Technology Research and Development Cyber Security and Information Assurance Interagency Working Group (CSIA IWG), co-chaired by NIST, coordinates research and development to prevent, resist, detect, respond to, and/or recover from actions that compromise or threaten to compromise the availability, integrity, or confidentiality of computer- and network-based systems.
- The Special Cyber Operations Research and Engineering Interagency Working Group works in parallel to the CSIA IWG to coordinate classified cybersecurity R&D.
- Representatives from both of these groups participate together in the Senior Steering Group for CSIA R&D, to actively share cybersecurity R&D information across the policy, fiscal, and research levels of the Government.

Active participation in these groups ensures coordination of NIST efforts with other agencies, including NSA and DHS.

*Question.* The administration has promised to send to the Congress a draft legislative proposal as input into a comprehensive rewrite of governmentwide cybersecurity authorization. What is the status of that draft proposal? Will this proposal impact your responsibilities as Secretary of Commerce to establish Federal Information Processing Standards (FIPS)?

*Answer.* OMB sent the administration's cybersecurity legislative proposal to the Congress on May 12, 2011. Under the administration's proposal, the Secretary of Commerce will maintain the responsibility for promulgating cybersecurity standards and guidelines including FIPS, which will continue to be developed by NIST.

*Question.* The NPO for NSTIC is a new administration initiative announced in January that will be lead by NIST. How will NIST fund this effort in fiscal year 2011?

*Answer.* The request for NSTIC would support the development of a vibrant Identity Ecosystem where individuals, businesses, and other organizations enjoy greater trust, privacy and security as they conduct sensitive transactions online.

For fiscal year 2011, NIST is utilizing \$1.5 million in staff and resources to lay the ground work for the establishment of a NPO for NSTIC. The NPO, to be estab-

lished within the Department of Commerce, will be responsible for bringing the public and private sectors together to meet this challenge. Specific responsibilities will include:

- Building consensus on legal, technical, and policy frameworks necessary to achieve the NSTIC vision, including ways to enhance privacy, free expression and open markets;
- Working with industry to identify where new standards or collaborative efforts may be needed to enable Americans to use—and businesses and other entities to accept—stronger, more secure online authentication technologies;
- Coordinating collaboration across Government stakeholders, including agencies such as the General Services Administration and Department of Homeland Security, as well as State and local governments; and
- Guiding NSTIC pilot projects and other NSTIC-related implementations.

This initiative was established in direct response to the recommendations of the White House Cyberspace Policy Review to raise the level of trust associated with the identities of individuals, organizations, services, and devices involved in online transactions.

#### NIST—BUDGET INCREASE

*Question.* The NIST increase is part of the administration's commitment to maintain a doubling path for three science agencies for future competitiveness—NSF, DOE's Office of Science, and NIST laboratories, providing a total of \$13.9 billion, up \$1.5 billion or 12.2 percent.

The fiscal year 2012 budget request for NIST reflects the administration's recognition of the important role that NIST plays in innovation and the impact that the research and services NIST provides can have on moving the Nation forward by laying the foundation for long-term job creation and prosperity.

The administration believes that by sustaining investments in fundamental research, we can ensure that America remains at the forefront of scientific capability, thereby enhancing the ability to shape and improve our Nation's future and that of the world around us.

The NIST fiscal year 2012 budget request assumed that the fiscal year 2011 request would be fully funded. At present the NIST request is 33 percent above the fiscal year 2011 continuing resolution level. Given that this amount of increase is not realistic, and couldn't be absorbed into the agency, could you offer an opinion on what a realistic funding request for NIST should be?

*Answer.* The increase requested for NIST in the fiscal year 2012 President's budget recognizes the importance of science and innovation for the Nation's long-term economic growth and competitiveness. The administration's request level for NIST is executable. When the fiscal year 2012 President's budget was formulated, it already assumed that a full-year fiscal year 2011 continuing resolution would be enacted, and we used a fiscal year 2011 continuing resolution level as a baseline to develop the NIST budget. Thus, the request already reflects program adjustments, such as milestones and deliverables, so that the budget is executable. Moreover, NIST's fiscal year 2012 request is spread out among multiple programs, two of which contain large grant components. Roughly one-half of the \$43.4 million requested for cybersecurity-related activities is for grants. More importantly, a large portion of the 33 percent increase cited includes the \$100 million in mandatory appropriations for the Public Safety Innovation Fund, of which about \$84 million would be for grants.

*Question.* Since we will not be able to fund this request in its entirety, what are the top budget priorities at NIST?

*Answer.* The fiscal year 2012 President's budget request is the result of a rigorous review and prioritization of the agency's programs and activities. Core functions and services are sustained, and increases are requested to support critical national needs, including the areas of advanced manufacturing and cybersecurity, and to build and maintain state-of-the-art laboratory facilities essential to delivering quality standards research.

#### NIST—HOLLINGS MEP

*Question.* The President's 2012 budget requests \$142.6 million for the MEP program. This request is a \$17.9 million increase more than the fiscal year 2010 enacted level. The MEP is a Federal-State partnership which requires a two-thirds financial match from non-Federal sources. Through its national network of MEP Centers located in every State, 1,400 technical experts help small- and medium-sized manufacturers navigate economic and business challenges and connect to public and private resources essential for increased competitiveness and profitability.

Through competitively awarded cooperative agreements, NIST MEP will expand the capabilities of its nationwide network of centers to accelerate commercialization of technological innovations, adopt environmentally sustainable business practices, promote renewable energy initiatives, foster market diversification, and connect domestic suppliers to manufacturers to assist manufacturers in successfully competing over the long term in today's complex global manufacturing environment.

ExporTech helps companies enter or expand in global markets. The program assists your company in developing an international growth plan, provides experts who will vet your plan, and connects you with organizations that will help you move quickly beyond planning to actual export sales.

Can you explain how the additional resources included in the fiscal year 2012 request for the MEP will be used to increase the competitiveness of small- and medium-sized manufacturers in the United States?

Answer. Building on competitions started in fiscal year 2010, additional funding will be competitively awarded to MEP Centers and other not-for-profit organizations to focus on the development and expansion of next generation services to respond to manufacturers' challenges and position them to respond to new business opportunities. These services include technology innovation and commercialization, market diversification, supplier development, export opportunities for domestic manufacturers, and environmentally sustainable business practices.

*Question.* The MEP is a partnership that requires the States to match Federal funding. Is this funding increase realistic when you consider all the belt tightening that is taking place at the State level? In other words, will the State be able to provide additional cost matching associated with the requested increase?

Answer. NIST MEP is planning to use the authority under the 2007 America COMPETES Act to run a competition within the MEP system of centers for new services and tools to respond to manufacturers needs. Under this competitive grant program, NIST MEP has the authority to issue up to \$4 million without a cost-share requirement. Any competitive awards made above this amount would require a 50-percent cost share.

*Question.* The MEP program and the EDA's Trade Adjustment Centers seem to have similar missions, i.e., to assist small manufacturers and improve their global competitiveness. As part of OMB's review of the Department, has there been any discussion on combining these two programs which would generate administrative savings?

Answer. Earlier this year, the President directed Jeff Zients, CPO at OMB, to conduct a review of the Federal agencies and programs involved in trade, exports and competitiveness, including analyzing their scope and effectiveness, areas of overlap and duplication, unmet needs, and possible cost savings. When this review process is complete, the administration will share its findings and recommendations with the Congress.

I agree with the President that we should examine options to reorganize the Federal Government to make it more efficient and responsive to support American competitiveness. I would look forward to working with you to address any questions or concerns you may have regarding this matter.

#### FISHERIES

*Question.* I remain concerned that the Department's priorities in the fisheries area remain out of line with the actual needs of the fisheries and the billions of dollars in economic impact it represents. The fiscal year 2012 budget as did the fiscal year 2011 place a focus on implementing new management programs, specifically catch shares, while failing to take the steps needed in data collection to ensure we actually know how many fish there are to manage. I appreciate that your budget increases stock assessment and data collection lines to \$91.5 million, but I am confident this is merely a drop in the bucket toward addressing the problem. I am also concerned that Texas and the gulf as a whole have historically been low on the Departments priority list when dedicating funds to fisheries. The recreational fishery in the gulf alone represents \$41 billion in commerce each year and 300,000 jobs, yet year after year the gulf fisheries are largely ignored by your Department.

Can I get your assurance that the Department will make data collection and updating stock assessments a top priority in fiscal year 2012?

Answer. NOAA's National Marine Fisheries Service (NMFS) considers data collection, for the purpose of updating stock assessments, a top priority in fiscal year 2012. The \$15 million requested increase to the Expand Annual Stock Assessment line is slated to be used to:

- improve assessments for high-priority stocks;
- update assessments for stocks more frequently; and

—conduct fishery-independent surveys to enable assessment of more stocks, including data poor stocks, 3–5 years from now.

NMFS also proposes to use a portion of these funds, \$3 million, to invest in advanced technologies for fishery-independent surveys. Among the projects that will be supported with these funds will be near real-time processing of survey data as it is collected at sea and more rapid delivery of these data to shore-based analysts conducting the stock assessments. Therefore, both data collection and completion of adequate stock assessments for fishery management will remain a priority in fiscal year 2012.

*Question.* Can you also assure me that the fisheries in the gulf will be given the attention their economic impact demands of the Department of Commerce?

*Answer.* The economic importance of the fisheries in the gulf is recognized at a national level and needs are addressed at a regional level in order to promote sustainable fisheries throughout the region. NOAA's NMFS is well aware of the economic value and impact of the Gulf of Mexico fisheries and is giving significant and focused attention to improve data collection and to more regularly update stock assessments. The following are steps in progress for addressing these issues:

- NMFS Southeast Fisheries Science Center (SEFSC) added six FTE stock assessment scientists in fiscal year 2011. They will contribute to increasing the number of assessments conducted on Gulf of Mexico, south Atlantic, and Caribbean stocks in future years.
- The SEFSC dedicated the \$10 million of supplemental funds received from the Congress in August 2010 to support of stock assessments for Gulf of Mexico stocks.
- NMFS is testing a new dockside intercept survey design for the recreational fishery that will provide a more statistically sound sampling method. If the field testing is successful, implementation of the design will replace current Marine Recreational Fishing Statistics Survey methodology in the Gulf of Mexico in fiscal year 2012.
- A pilot of an electronic logbook and dockside validation for the for-hire sector in the Gulf of Mexico is underway. The success of this pilot program will result in improved timeliness of the data.
- The fiscal year 2012 President's budget includes a \$15 million increase to expand annual stock assessments, some of which is intended for stocks in the Gulf of Mexico.

---

#### QUESTIONS SUBMITTED BY SENATOR LISA MURKOWSKI

##### CATCH LIMITS

*Question.* The President's fiscal year 2012 funding request of \$67 million for enhanced stock assessments is an increase over the fiscal year 2010 and 2011 requests to ensure that annual catch limits are based on the best available science. I am concerned, however, that because of budget limitations in 2011 we won't be able to perform all the crucial fishery surveys in Alaska this summer.

What assurance can you give me that the National Oceanographic and Atmospheric Administration (NOAA) will perform all of the fishery stock assessment surveys this summer? NOAA recently cancelled a Gulf of Alaska seismic survey and we absolutely can't lose the two other Gulf of Alaska ground fish surveys planned for this summer.

*Answer.* As a result of the fiscal year 2011 continuing resolution, there were delays in the scheduled repairs to the NOAA Ship *Oscar Dyson*, which forced the Alaska Fisheries Science Center (AFSC) to cancel acoustic surveys for Pollock in areas off the Shumagin/Sanak and Bogoslof Island, and in Shelikof Strait. However, the AFSC will conduct the summer surveys in the Gulf of Alaska and Bering Sea as scheduled. Surveys include an acoustic Pollock stock assessment survey in the Gulf of Alaska and groundfish surveys aboard chartered vessels in both the Gulf of Alaska and eastern Bering Sea. These activities are funded from the Expand Annual Stock Assessments budget line.

##### PACIFIC SALMON TREATY FUNDING

*Question.* When the Pacific Salmon Treaty was signed in 1985, the Congress provided the States of Alaska, Washington, Oregon, and Idaho, as well as the NOAA Fisheries, a combined total of \$5.2 million to carry out the increased salmon management, research, evaluation, and fishery monitoring required to implement the provisions of the Treaty. This annual funding has barely increased over the intervening 25 years. Thus, the purchasing power of the original Federal appropriation

made in 1985 has declined significantly by fiscal year 2010. This has required the agencies and the States to find other funding sources to backfill the costs of implementing the provisions of this international Treaty.

With flat funding for 25 years, combined with recent losses of other State and Federal funding sources, it raises a serious question whether the United States is meeting its international obligations under the Treaty. Is NOAA aware of the crisis in Treaty funding? Can you help to make sure the United States does meet its Treaty obligations?

Answer. The fiscal year 2012 President's request includes \$5.7 million for the base programs necessary to continue implementation of the Pacific Salmon Treaty and \$3 million to implement specific provisions of the 2008 Chinook agreement for a total of \$8.7 million to satisfy the mandates agreed to with Canada. The funds for the 2008 Chinook agreement include \$1.5 million for the Puget Sound Critical Stocks program and \$1.5 million for improvements to the Coded Wire Tagging Program. Funding for base programs supports research projects conducted by NMFS and the States of Alaska, Washington, Oregon, and Idaho including personnel support to the Pacific Salmon Commission's panels and technical committees to conduct a broad range of salmon stock assessment and fishery monitoring programs to implement provisions of the Pacific Salmon Treaty.

The requested decrease of \$13.5 million for the Pacific Salmon Treaty is a result of fulfilling many of the commitments under the 2008 Chinook agreement. The fiscal year 2010 and fiscal year 2011 budgets each included \$7.5 million to partially mitigate the economic consequences for Alaska of reductions in allowable salmon catch, for a total of \$15 million. As planned, the fiscal year 2012 request does not continue this \$7.5 million for Alaska mitigation. The 2012 request also includes a planned reduction of \$6 million in the Puget Sound Critical Stocks Augmentation program. That funding was utilized for the start up costs of hatchery and habitat projects. The Augmentation program will continue to support projects to assist in recovery of critical stocks in a manner that complements the harvest reductions provided by the Treaty.

#### STELLER SEA LIONS IN THE ALEUTIAN ISLANDS

*Question.* NOAA recently issued a final interim rule to reduce commercial fishing for ground fish in the Aleutian Islands in order to decrease competition with the endangered western Steller sea lion. This action, which is now the subject of multiple lawsuits, will likely result in a loss of up to \$66 million in revenues annually. One of the major issues is lack of conclusive scientific evidence showing that fisheries are affecting the recovery of this population.

Given the substantial economic impacts of this action, do you believe that NOAA should prioritize research on the Western Population of Steller Sea Lions? How will the agency allocate funds to make sure the research is focused in the Western Aleutian Islands, which is the only area where the population is still declining?

Answer. Steller Sea Lion research in the western Aleutian Islands will be a NOAA priority in 2011 and 2012. Several research efforts will further our understanding of the population dynamics of the Steller sea lions and the effects of interactions with fisheries. Direct fishing impacts are largely due to the incidental take of sea lions in fishing gear (drift and set gillnets, longlines, trawls, etc.). Steller sea lions are also indirectly threatened by fisheries because they have to compete for food resources and critical habitat that may be modified by fishing activities. Additional research on where the western population of Steller sea lions (SSL) breed and forage will allow NOAA to make more informed decisions about protective zones, catch/harvest limits, and other measures to ensure survival.

Specifically in 2011, NOAA will conduct the following research that will support the following activities:

- Branding pups at Agatu, western Aleutians;
- Scouting western Aleutian sites for potential field camps to be used in the 2012 breeding season;
- Capture and satellite tagging of adult females (with pups) in western Aleutians for foraging ecology;
- Aerial surveys of SSL sites in all areas of the western SSL stock (including the western Aleutians);
- SSL brand resighting cruise between Seward and Dutch Harbor;
- NOAA will assist Alaska Department of Fish and Game in conducting extensive brand resighting at Sugarloaf Island; and
- Brand resights from field camps at Marmot Island and Ugamak Island.

In addition, NOAA is expecting that the North Pacific Research Board will likely fund our proposed food habitats study in the western Aleutians; and two scat collec-

tions would be compared to samples taken at two additional times of the year from the same area:

- June–July 2011 samples from Agatu and western Aleutians during the Tiglax cruise; and
- October–November 2011 samples from the western Aleutian adult female capture and tagging. This research will further our understanding of the dynamics of the western Steller Sea Lion population.

COASTAL AND MARINE SPATIAL PLANNING (CMSP)

*Question.* One of the administration's priorities is the implementation of the National Ocean Policy and framework for CMSP. While I recognize that there are regions of the country that have user conflicts and want this planning tool, Alaska is not one of those regions and there is minimal support for this in the State. What we do need is environmental data collection, mapping, and integration.

Given the small amount of funding providing for CMSP nationally, do you believe the agency should prioritize data collection first and only implement planning when there is sufficient data? Given the existing political opposition to this initiative, doesn't it make sense for NOAA to implement CMSP in regions where there is an identified need and support from the States, elected officials, and stakeholders?

*Answer.* The CMSP Framework was designed to provide great flexibility with respect to implementation and allows for States, tribes, and stakeholders at a local level to focus on those issues that are highest priority in their regions.

The foundation of CMSP is science and data. By working with stakeholders in the States and regions we will be able to consolidate data from numerous sources and present it in a geospatial context that is useful to decisionmakers. These new tools and data will be designed to inform a range of uses (including CMSP). Better access to data and an inclusive planning process can create transparency and predictability for all involved—developers, industry, coastal communities, and citizens.

NOAA is committed to working with States—including the State of Alaska—to provide the maps, data, and science that the States and stakeholders need most.

MILLER FREEMAN FISHERY SURVEY VESSEL

*Question.* The NOAA Fishery Survey vessel *Miller Freeman* is 44 years old and has suffered numerous mechanical failures and loss of sea time in recent years. Although the agency has planned to refurbish the vessel and extend its life, NOAA has not received adequate funds to do so.

Is NOAA planning on decommissioning the *Miller Freeman*? Why hasn't the *Miller Freeman* received the funding to repair it? What is the plan to replace the *Miller Freeman* and the *John Cobb*, another research vessel that was primarily used in Alaska and recently decommissioned?

*Answer.* NOAA is not ready to decide on decommissioning the *Miller Freeman* until the Material Condition Assessment (MCA) is conducted.

NOAA has requested funding in both the fiscal year 2011 and fiscal year 2012 President's budget to fund high-priority repairs for *Miller Freeman*. The amount requested in the fiscal year 2012 President's budget is \$11.6 million for repairs to the *Miller Freeman* and *Ka'imimoana*.

The fiscal year 2010–fiscal year 2024 NOAA Ship Recapitalization Plan approved in fiscal year 2008 includes plans to replace the current capacity of *Miller Freeman* with the FSV 7. Per the Recapitalization Plan, FSV 7 would be delivered in fiscal year 2017, with full operations in fiscal year 2018. This would support Alaska Fisheries Science Center protected species surveys (45 days/year) and enable expanded "adequate" stock assessments for four stocks by fiscal year 2025 and an additional four stocks by fiscal year 2030. The loss of the *Miller Freeman* days at sea in fiscal year 2011 has necessitated reallocation of \$1.74 million from the Expand Annual Stock Assessment Budget Line for 118 charter vessel days at sea (50 percent of lost *Freeman* support) to meet the minimum survey requirement of the Southwest and Northwest Fisheries Science Centers on the west coast. NOAA currently has no other available assets capable of extending surveys into high latitude waters. FSV 7 will have higher endurance that will maximize time in the areas of interest and enhance multi-mission capabilities to better understand climate change, loss of sea ice, and the resulting impact on the regional ecosystem.

The NOAA Ship *John Cobb*, which was decommissioned in 2008, served NOAA for more than 35 years and provided a valued service to the Nation and our fishery and living marine resource research in southeast Alaska and in U.S. Pacific coastal waters. In lieu of a replacement vessel, NOAA opted to provide funding for charter vessels to meet at-sea data collection requirements. The fiscal year 2010 budget provided \$1.6 million for the Alaska Fisheries Science Center to charter commercial

vessels to support research needs in southeast Alaska. With the addition of the advanced, acoustically quiet NOAA ship *Bell M. Shimada* in 2010, and our other west coast assets and chartering, NOAA is able to meet the primary mission that the Cobb did in the past. Therefore, NOAA does not intend to replace the *John Cobb* with a vessel of similar capabilities.

#### ARCTIC RESEARCH

*Question.* The Arctic is a priority for me and Alaska, and obviously, for the administration, as you identified the region one of the nine priority objectives in the national ocean policy. It is critical as we move forward with energy production in the Arctic that we have adequate baseline information to understand the Arctic environment, inform management, and minimize the impacts of development and human activity.

Do you feel the fiscal year 2012 budget adequately funds research in the Arctic? Does the Department of Commerce support the outside funding to fill in gaps and shortfalls in Federal funding?

*Answer.* The Arctic is seeing rapid and dramatic changes that have national and global implications. Understanding and effectively managing the changing ecosystems, expectations, and opportunities in the Arctic requires a solid foundation of physical, atmospheric, ecological and socioeconomic, and other information. Yet despite the wealth of traditional ecological knowledge, exploration, and research to date, even the most basic data are lacking.

In fiscal year 2012 and beyond, NOAA aims to strengthen its arctic science and stewardship, by collecting critical data to better inform policy options and management responses to the unique challenges in this fragile region. NOAA's Arctic Vision and Strategy aligns our capabilities in support of the efforts of our international, Federal, State and local partners, and within the broader context of our Nation's arctic policies and research goals. The strategy recognizes that NOAA can make the highest positive impact to arctic communities and sustainable economic growth by providing products and services for safe navigation and maritime security, oil spill response readiness, and environmental protection, among other things.

The fiscal year 2012 President's budget builds upon and complements NOAA's existing arctic-related activities, and represents an investment needed to work toward implementing the framework and six strategic goals identified in the strategy. For example, NOAA requests an increase of \$2.5 million to conduct 15 protected species stock assessments in the Arctic (harbor porpoise, and minke, beaked, and northern Pacific right whales) and the western Pacific (marine turtles, sperm, blue, false killer, and sei whales) as a way to improve NOAA's stewardship and management of Arctic Ocean and coastal resources. This information will be used to determine the impact of human activities, including oil and gas exploration in the Arctic, defense readiness training and operations in the Arctic and western Pacific, and commercial fishing activities in Alaska and western Pacific, on protected species and provide baseline data to inform management, and minimize the impacts of development and human activity.

Across arctic-related activities proposed in fiscal year 2012, NOAA would leverage existing resources and partnerships to protect and understand this fragile and economically important region. Coordinating the myriad of international, Federal, State, and local efforts to understand environmental change in the Arctic, improve the stewardship of Arctic resources, and advance resilient Arctic communities and ecosystems will allow NOAA resources and capabilities to be used across multiple efforts. By strategically investing in its Arctic presence in fiscal year 2012, NOAA would improve its ability to assess and effectively respond to emerging changes in the Arctic environment and to continue efforts to identify information and data gaps requiring attention to further our Nation's Arctic policies and research goals.

To access NOAA's Arctic and Vision Strategy visit: [http://www.arctic.noaa.gov/docs/NOAAArctic\\_V\\_S\\_2011.pdf](http://www.arctic.noaa.gov/docs/NOAAArctic_V_S_2011.pdf).

#### CATCH SHARES

*Question.* Another of the administration's priorities is catch shares. Alaska has the majority of catch share programs in the United States and they have been very successful in maintaining healthy stocks and increasing the economics of our fisheries. Because Alaska has most of the catch share programs, we will not receive much of the new catch share funding that is increased in the fiscal year 2012 budget.

Since Alaska has most of the existing catch share programs, how can NOAA make sure Alaska still benefits from the new catch share funds?

Answer. The North Pacific Regional Fishery Management Council has been on the cutting edge for a long time with respect to catch share programs. One of the recent actions the Council has approved and NMFS is in the process of implementing is a catch sharing plan between commercial and charter halibut fishermen, the Alaska Halibut Guided Sportfish Individual Fishing Quota (IFQ). This program would allow charter operators, on an annual basis, to lease halibut quota from the commercial sector. The fiscal year 2012 President's budget request includes funding to support this new program. Funding to support program-specific share accounting databases, electronic reporting systems and other infrastructure and operational needs are also part of the fiscal year 2012 President's budget request and will be used to support both the development of new and existing catch share programs in Alaska. Further, since the Councils decide in which fisheries they want to consider and implement catch share programs, the fiscal year 2012 President's budget request includes funding for the Councils in support of catch share-related activities they have identified as important.

In addition to the National Catch Share program, NOAA is also seeking to increase loan authority in fiscal year 2012 from \$16 million to \$24 million under NOAA's Fisheries Finance Program to provide quota share loans in support of existing catch shares program, some of which are in Alaska. The Magnuson-Stevens Fishery Conservation and Management Act (MSA) allows Councils to specify NOAA Fisheries Finance Program loans to assist small operators and first time buyers of catch share privileges. The North Pacific Council requested that the NOAA Fisheries Finance Program develop loan programs for the Halibut/Sablefish Individual Quota Share and the Crab IFQ programs, which were authorized in 1993 and 2011, respectively. Until 2011, this loan authority has only been used to support loans for quota in the halibut/sablefish fishery. The additional loan authority in fiscal year 2012 will initially support loans in the Bering Sea and Aleutian Islands King and Tanner Crab fisheries. These programs, as authorized under the MSA, are limited to entry-level fishermen and fishermen who fish from small boats. These programs provide a mechanism for new entrants to finance acquisition of quota share, part of their start-up needs, thus lowering the threshold for entry. For example, by providing financing to acquire quota share, a new entrant then may have sufficient cash flow to finance acquisition of a boat and permit in that fishery.

---

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

*Question.* Please explain what actions the agency has taken to involve research institutions in Mississippi in research projects regarding the health of the marine ecosystem in Mississippi Sound and the northern Gulf of Mexico?

Answer. The National Oceanographic and Atmospheric Administration's (NOAA) National Centers for Coastal Ocean Science (NCCOS), funds Mississippi State University to provide a suite of methods that will predict the path and fate of sediment and mercury in Grand Bay (a National Estuarine Research Reserve), from entry points to fish stocks. The models and data resulting from this project will enable managers and environmental regulators to better address mercury problems in the northern Gulf of Mexico by providing tools to simulate and evaluate alternate mitigation and mercury source reduction scenarios at sites throughout the gulf.

As part of the NOAA Sea Grant, the Mississippi-Alabama Sea Grant Consortium (MASGC) members include the following Mississippi research institutions: Dauphin Island Sea Lab, Jackson State University, Mississippi State University, The University of Mississippi, and The University of Southern Mississippi. Current research projects include a Mississippi State University project focused on decreasing nitrate-N loads to coastal ecosystems in agricultural landscapes; a University of Southern Mississippi project focused on characterizing stormwater nitrogen inputs to Mississippi's coastal waters; and, a Jackson State University project focused on developing a habitat suitability index for submerged aquatic vegetation of the Mississippi coast.

The Mississippi-Alabama Sea Grant Legal Program and the National Sea Grant Law Center both operate out of the University of Mississippi. They contribute to the field of ocean and coastal law and policy through research on marine laws and policies, coordinating ocean and coastal law researchers, and disseminating information to coastal and ocean policy-makers.

In addition, NOAA provided funds to the University of Southern Mississippi (USM) to develop the next generation of molecular indicators that detect environmental stress responses in fish, determine population differences in stress responses, and link these indicators in individuals to responses at the population



level. By the time such effects are observed, conditions may have deteriorated to levels that are difficult or expensive to remedy.

In a related project, NOAA provided funds to USM to characterize species- and life stage-specific responses of fish to natural and human-caused stressors at the molecular, physiological, and organism levels. This information will be integrated with results from the previous phases of this project (such as the one above) to estimate possible higher-level (i.e., population and ecosystem) effects of exposure to common environmental stressors.

*Question.* The Institute for Marine Mammal Studies (IMMS) in Gulfport, Mississippi, our region's leading marine mammal research, rescue, and public display facility, applied for a permit to take stranded sea lions that was published in the Federal Register 11 months ago. The permit has not yet been issued even though the law requires a decision 60 days after Federal Register publication. What is the status of the permit?

*Answer.* Under the National Environmental Policy Act, NOAA's NMFS determined that the appropriate level of analysis for this application for take of marine mammals in accordance with the Endangered Species Act was an Environmental Assessment. An Environmental Assessment was drafted and the availability of the document was published in the Federal Register on April 11, 2011. The public comment period ended on May 11, 2011 during which 37 comments were submitted on the draft Environmental Assessment. These comments were compiled and posted online at <http://www.nmfs.noaa.gov/pr/permits/review.htm>. The comments are being reviewed and analyzed for incorporation into the final Environmental Assessment and a decision will be made on the application after thorough NOAA legal review. Members of the animal welfare community have already notified NOAA of their opposition to issuance of the permit and have indicated that litigation may be pursued against the agency; therefore the final processing of the application will require additional scrutiny, therefore timing is unknown.

*Question.* Additionally, IMMS has a stranding agreement with NMFS to assist in the rescue and rehabilitation of stranded marine mammals and has been an active participant in stranding response and rescue operations, at its own expense, for more than 25 years. This agreement allows IMMS to send animal tissues to other facilities for diagnostic work. In October 2010, IMMS filed a full report on these activities with NMFS. On April 7, 2011, NMFS advised IMMS that they had no idea the Institute was sending samples despite the October report and that they could no longer send samples to other research institutions for diagnostic analysis. Can you explain this change in policy?

*Answer.* NMFS has a Stranding Agreement in place with IMMS. The policies under that Agreement have not changed. Articles 2 and 3 of the Stranding Agreement that NMFS issued to the IMMS allows for marine mammal parts to be sent to laboratories for medical diagnostic work (e.g., disease screening) without additional authorization. However, transferring marine mammal parts for research projects (e.g., genetics for stock assessments) requires by law:

- prior notification to NMFS; and
- assurance the researcher is authorized to receive those parts (see 50 CFR 216.22 and 216.37).

In addition, the Department of Justice is pursuing civil and criminal cases related to the Deepwater Horizon BP oil spill, so samples and all records/data collected from marine mammal strandings that occurred in the northern Gulf of Mexico are considered potential evidence in these cases. NMFS is currently reviewing the IMMS' numerous sample transfers to determine the type of samples and purpose of the transfers to understand if they are categorized within the agreement or require prior notification. NMFS will follow up with the IMMS with additional information after the review is complete. Due to review by multiple NOAA policy and legal offices, timing is currently unknown.

#### CONCLUSION OF HEARINGS

Senator MIKULSKI. The subcommittee stands in recess, subject to the call of the Chair.

[Whereupon, at 11:38 a.m., Thursday, April 14, the hearings were concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]



## **MATERIAL SUBMITTED SUBSEQUENT TO THE HEARING**

[CLERK'S NOTE.—The following testimony was received subsequent to the hearing for inclusion in the record.]

PREPARED STATEMENT OF DAVID KREBS, COMMERCIAL FISHERMAN FROM DESTIN, FLORIDA, PRESIDENT OF THE GULF OF MEXICO REEF FISH SHAREHOLDERS' ALLIANCE

My name is David Krebs. I am honored to testify on the National Oceanic and Atmospheric Administration's budget, specifically in support of the \$54 million in funding for the National Catch Share Program in fiscal year 2012 and in opposition to any provision that would prohibit funding for catch shares programs in the United States.

I started fishing in 1969 as a teenage boy on Florida's gulf coast. Boats were mostly constructed of wood and commercial captains had an extraordinary ability to follow the contours of the sea floor with a paper bottom machine. The snapper boats were scattered along the gulf coast, mostly owned by the bigger fish houses that could afford them. Things started changing in the late 1970s with fiberglass boats starting to replace the aging wooden boats, with even a few carrying a Loran-A machine to navigate back to rich fishing grounds. By 1980, Loran-C arrived, with a much more user-friendly display that could be coupled to video plotters and digital fish finders. In 1981, I captained my first fiberglass longline vessel fishing for deep-water grouper and golden tilefish out of Destin, Florida. Fishing was easy in this new frontier of setting a longline across the bottom in 600–1,200 feet of water; so easy that I remarked to an elder captain how easy it would be to capture all the fish to which he replied, "That's right. That's why we must fish harder to get our share."

### AND SO GOES THE SAGA OF MODERN-DAY FISHING

Catch up one species and move on to the next, an endless cycle of boom and bust. When the grouper and tile fish played out in my area I switched to surface longline for tuna and swordfish, eventually leaving the gulf to fish in South and Central America looking for the next rich area.

An early strategy by the Government was to issue permits, yet there was no restriction on how many or what size boat the permit was on. In fact, it was well into the 1990s before any permit moratorium started to go into place to try to govern a fiberglass fleet that wasn't wearing out, and that had even better technology such as GPS. So then came overall catch limits for the entire fleet of fishing vessels to try to protect the stocks. However, the fleet had been growing for nearly 20 years. So even with catch limits in place there was still a race to get your share of the resource. To address the fact that there were too many vessels and too few fish, there were calls for Government buyouts to reduce this oversized fleet. But that didn't happen, and the fleet just kept fishing. Today, fishermen in the Gulf of Mexico, like those in the Gulf of Mexico Reef Fish Shareholders' Alliance, are working diligently to correct this situation and improve the economics of the fishery and the conservation of the resource using catch shares.

### THE GULF RED SNAPPER STORY

To explain the benefits of catch shares, let me tell you the story about gulf red snapper, a fishery that has historically been overfished.

The management plan for red snapper in the Gulf of Mexico began in 1991. It started as a pure derby fishery with an overall catch limit and a season that opened and closed when that quota was met. Under this system, each individual fisherman would race to catch as many fish as possible during the season. This was similar to the old halibut and salmon derbies in the Northwest and had about the same outcome—short season (less than 3 months), low prices, and a market void of domestic red snapper the remainder of the year. It was an unsafe, inefficient, and un-

economic way to manage the fishery. It also did little to improve the conservation of the resource.

The next attempt was a 14-day mini-season with a 2,000-pound trip limit that began at the beginning of each month. This method extended the season to around 5 months, and was later abandoned to a 10-day mini-season, which included size limits. The boats would try to make a trip every day, regardless of weather, to get their share. The result was always the same: too much fish at the beginning of the month and none in the last 2 weeks. Fishermen were increasingly discarding smaller fish that did not meet the size limits and had died. When coupled with closed-season discards that also did not survive, the resource was being depleted. Again, it was an unsafe, inefficient, and uneconomic way to manage the fishery, and it did little to improve the conservation of the resource.

As early as 2001, the increasing number of discarded fish associated with the size limits and closed seasons from both the recreational and commercial fleets began to take its toll on the fishery. This was due to the fact that discards that were assumed to have lived had not. We had to have a better system.

The stakeholders in the fishery, at the Council level, began the process of developing a red snapper individual fishing quota (IFQ)—a form of catch share or limited access privilege program. The stakeholders voted on the program by referendum, and it was implemented in January 2007.

The red snapper fishery is better now than I have seen in my lifetime. It has a longer season. It is better economically. And we are seeing a resurgence of red snappers. The difference was that by, assigning an individual his own quota, the collateral damage was reduced since he could now keep fish that he was discarding while he was fishing for other reef fish species during the other 20-day closures. It is my belief that an IFQ designed by the stakeholders is a very important tool in the fishery management strategy. It is the only tool that allows fishermen the individual flexibility to meet their needs. And since individual fishing quotas are considered a form of catch share, I feel that it is imperative that this tool remain in the budget for future consideration.

#### IMPORTANCE OF FUNDING CATCH SHARE PROGRAMS SUCH AS THE RED SNAPPER IFQ

The Red Snapper IFQ and other catch share programs have been proven to improve the management and conservation of the fishery, which was the intended result of such programs when the Congress authorized them in 2007. Both the Bush administration and the Obama administration have recognized the value of catch share programs, and have increasingly provided funding to NOAA so that the stakeholders in the fishery can develop and implement such programs. In fiscal years 2011 and 2012, \$54 million in funding has been requested for the National Catch Share Program. That funding is not only crucial to programs that are already on the water, such as the red snapper IFQ, but also to the development of new programs to further improve the management of our Nation's fisheries.

Well-designed catch share programs feature improved monitoring systems and improved and collaborative science, so that catch shares quickly outperform traditional approaches, both scientifically and in terms of access to fish for fishermen. As discussed in the President's budget request, an investment in the National Catch Share Program represents an investment in "improvements in fishery-dependent data collection systems, fishery data management, social and economic data collection or analysis . . . [and] stock assessments." These help improve the scientific data necessary to analyze and better manage fisheries.

I urge the subcommittee to oppose provisions that would limit the ability of the regional fishery management councils to consider the use of catch share programs, and to support funding for the National Catch Share Program.

Thank you again for the opportunity to testify on this important issue.

# COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2012

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

## NONDEPARTMENTAL WITNESSES

[CLERK'S NOTE.—The subcommittee was unable to hold hearings on nondepartmental witnesses. The statements and letters of those submitting written testimony are as follows:]

### PREPARED STATEMENT OF THE AMERICAN GEOLOGICAL INSTITUTE

To the chairwoman and members of the subcommittee: The American Geological Institute (AGI) supports 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 the Earth, energy, and the environment has fueled economic growth, mitigated losses and sustained our quality of life. The subcommittee's leadership in supporting geoscience-based 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 the President's budget request of \$7.767 billion for NSF; \$1.101 billion for NIST, \$5.498 billion for NOAA, and \$1.797 billion for Earth science at NASA.

AGI is a nonprofit federation of 49 geoscientific and professional societies representing more than 120,000 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.*—AGI supports an overall budget of \$7.767 billion for NSF. AGI greatly appreciates the Congress' support for science and technology in recent appropriations and through the America COMPETES Reauthorization Act of 2010. The forward-looking investments in NSF are fiscally responsible and will pay important dividends in future development that drives economic growth, especially in critical areas of sustainable and economic natural resources and reduced risks from natural hazards. Support for science will save jobs, create new jobs, support students, and provide training for a 21st century workforce.

*NSF Geosciences Directorate.*—The Geosciences Directorate (GEO) is the principal source of Federal support for academic Earth scientists and their students who are seeking to understand the processes that sustain and transform life on this planet. About 63 percent of support for university-based geosciences research comes from this directorate and more than 14,300 people will be directly supported through GEO in fiscal year 2012 with thousands of others deriving support indirectly.

The President's request for fiscal year 2012 asks for \$286 million for Atmospheric and geospace sciences; \$207 million for Earth sciences; \$385 million for Ocean sciences; and \$101 million for integrative and collaborative education and research within GEO. Much of the geosciences research budget is for understanding that is critical for current national needs, such as water and mineral resources, energy re-

sources, environmental issues, climate change, and mitigation of natural hazards. AGI asks the subcommittee to strongly support these funding levels.

GEO supports infrastructure and operation and maintenance costs for cutting-edge facilities that are essential for basic and applied research. Ultimately the observations and data provide knowledge that is used by researchers and professionals in the public, government, and private sector. GEO research and infrastructure helps drive economic growth in a sustainable manner. Geoscience-based research tools and academic expertise helped to end the BP Deepwater Horizon oil spill, saving billions of dollars for industry and untold costs to the environment. Research funding continues to help the gulf coast recover environmentally and economically.

Among the major facilities that NSF supports, the Academic Research Fleet would receive \$69 million; EarthScope Operations would receive \$26 million; Incorporated Research Institutions for Seismology would receive \$12 million; Ocean Drilling Activities would receive \$45 million; the Ocean Observatories Initiative would receive \$36 million; and the National Center for Atmospheric Research would receive \$100 million. AGI strongly supports robust and steady funding for infrastructure and operation and maintenance of these major facilities.

NSF's Office of Polar Programs (OPP) funds basic research in the Arctic and Antarctica that helps the United States maintain strategic plans, international efforts, security goals, natural resource assessments, cutting-edge polar technology developments and environmental stewardship of extreme environs. OPP's funding helps support researchers and students, the U.S. military, and the private sector. OPP is estimated to directly support almost 3,000 people in fiscal year 2012 and thousands of others indirectly. AGI supports the President's budget request of \$477.4 million for this important program.

Now is the time to boost geosciences research and education to fill the draining pipeline of skilled geoscientists and geo-engineers working in the energy and mining industries; the construction industry; the environmental industry; the risk management and insurance industries; the academic community; K-12 education; the Federal, State and local governments; and the communications and tourism industries.

*NSF Support for Earth Science Education.*—The Congress can grow the depleted geosciences workforce; stimulate economic growth in the energy, natural resources, and environmental sectors; and improve natural resource literacy by supporting the full integration of Earth science information into mainstream science education at the K-12 and higher education levels. AGI strongly supports the Math and Science Partnerships, the Graduate Research Fellowships and the Research Experiences for Undergraduates within NSF's Education and Human Resources Division. These programs are effective in building a science and engineering workforce for the 21st century.

Improving geoscience education, one of the goals of NSF-EHR, to levels of recognition similar to other scientific disciplines is important in the following ways:

- Geoscience offers students subject matter that has direct application to their lives and the world around them, including energy, minerals, water, and environmental stewardship. All students should be required to take a geoscience course in primary and secondary school.
- Geoscience exposes students to a range of interrelated scientific disciplines. It is an excellent vehicle for integrating the theories and methods of chemistry, physics, biology, and mathematics. A robust geoscience course would make an excellent capstone for applying lessons learned from earlier class work.
- Geoscience awareness is a key element in reducing the impact of natural hazards on citizens—hazards that include earthquakes, volcanic eruptions, hurricanes, tornadoes, and floods. Informal geoscience education that leads to reducing risks and preparing for natural events should be a life-long goal.
- Geoscience provides the foundation for tomorrow's leaders in research, education, utilization and policymaking for Earth's resources and our Nation's strategic, economic, sustainable, and environmentally sound natural resources development. There are not enough U.S.-trained geoscientists to meet current demand and the gap is growing. Support for geoscience research and education is necessary to stay competitive and to wisely manage our natural resources.

*NOAA.*—AGI supports the President's request for a budget of \$5.498 billion for NOAA. We hope the subcommittee will continue to support the National Weather Service; the Oceanic and Atmospheric Research program; the National Climate Service; and the National Environment Satellite, Data and Information Service. All four programs are critical for understanding and mitigating natural and human-induced hazards in the Earth system while sustaining our natural resources. These four programs at NOAA prevent billions of dollars of losses, keep the private and public sectors growing and save lives. For example, drought forecasts are worth up to \$8 billion to the farming, transportation, tourism, and energy sectors while

NexRad radar has prevented more than 330 fatalities and 7,800 injuries from tornadoes since the early 1990s.

*NIST.*—We support the President’s request of \$1.101 billion for NIST in fiscal year 2012. Basic research at NIST is conducted by Earth scientists and geotechnical engineers and used by the public and private sector on a daily basis. The research conducted and the information gained is essential for understanding climate change and natural hazards in order to build resilient communities and stimulate economic growth with reduced impact from risk. In particular, we support Measurements and Standards to Support Increased Energy Efficiency and Reduced Environmental Impact and Measurements and Standards to Support Advanced Infrastructure Delivery and Resilience. Energy efficiency and reduced environmental impact research will improve the health of our planet and reduce energy costs. The advanced infrastructure 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 the National Earthquake Hazard Reduction Program (NEHRP), but has received only a small portion of authorized and essential funding in the past. AGI strongly supports the reauthorization of NEHRP in 2012. We hope the appropriations subcommittee will continue to support this effective and cohesive program, even if the authorizing legislation takes more time to complete. NEHRP is an excellent example of how to coordinate different entities for the safety and security of all. NEHRP develops effective practices and policies for earthquake loss reduction and accelerates their implementation; improves techniques for reducing earthquake vulnerabilities of facilities and systems; improves earthquake hazards identification and risk assessment methods and their use; and improves the understanding of earthquakes and their effects.

*NASA.*—AGI supports the vital Earth-observing programs within NASA. AGI strongly supports the President’s request of \$1.797 billion for Earth Science programs within the Science Mission Directorate at NASA. The investments are needed to implement the priorities of the National Academies Earth Science and Applications from Space Decadal Survey. NASA needs to maintain its current fleet of Earth-observing satellites, launch the next tier and accelerate development of the subsequent tier of missions. The observations and understanding about our dynamic Earth gained from these missions is critical and needed as soon as possible. Earth observations are used every day, not just for research, but for critical information to aid society in mundane tasks, like weather forecasting and emergency services, such as tracking volcanic ash plumes or oil spills that disrupt the economy and the environment. The requested increase for fiscal 2012 and proposed increases for future years are wise and well-planned investments that affect everyone.

We 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.

---

PREPARED STATEMENT OF THE AMERICAN GEOPHYSICAL UNION

The American Geophysical Union (AGU), a nonprofit, nonpartisan scientific society, appreciates the opportunity to submit testimony regarding the President’s fiscal year 2012 budget request for the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), and the National Science Foundation (NSF). The AGU, on behalf of its more than 60,000 Earth and space scientist members, would like to respectfully requests that the Congress appropriates at least \$1.797 billion for earth science at NASA, \$5.498 billion overall for NOAA, and \$7.767 billion overall for NSF.

NASA

*Earth Science*

AGU supports the vital Earth-observing programs within NASA. AGU strongly supports the President’s request of \$1.797 billion for Earth science programs within the Science Mission Directorate at NASA. The investments are needed to implement the priorities of the National Academies Earth Science and Applications from Space Decadal Survey. NASA needs to maintain its current fleet of Earth-observing satellites, launch the next tier, and accelerate development of the subsequent tier of missions. The observations and understanding about our dynamic Earth gained from these missions is critical and needed as soon as possible. Earth observations are used every day, not just for research, but for critical information to aid society in routine tasks, such as weather forecasting, emergency services, and tracking volcanic ash plumes or oil spills that disrupt the economy and the environment. The

requested increase for fiscal year 2012 and proposed increases for future years are wise and well-planned investments.

#### *Planetary Science*

AGU supports the President's request for fiscal year 2012 of \$1.54 billion for the Planetary Science programs within the Science Mission Directorate at NASA. Planetary science examines the origin, content, and evolution of the solar system and the potential for life elsewhere. There are more practical applications for planetary sciences as well. The science data from many planetary missions provides scientists with critical information for future human spaceflight missions, which furthers NASA's exploration agenda. Additionally, Robotic Mars orbiters are mapping natural resources such as water and minerals on Mars.

#### *Plutonium-238*

AGU is concerned about the absence of past funding for restarting production of Plutonium-238 (Pu-238) and how it will negatively impact NASA's planetary sciences missions. We request production of Pu-238 be restarted immediately, as there is no viable alternative method to power deep space missions (solar panels cannot produce enough electricity far from the Sun). Currently, NASA's only option for obtaining Pu-238 is to purchase it from Russia. Without Pu-238, NASA cannot carry out future planetary missions.

If Pu-238 production starts immediately, there will still be a 5-year delay before enough Pu-238 is produced to power a spacecraft. Full scale Pu-238 production is unlikely until 2018, which is too late to meet all of NASA's needs. The delay will push back 12 proposed planetary space missions. This delay could cause missions to reach prohibitively high costs, which in turn could cause job losses, diminish the United States leadership role in planetary science, and prevent us from expanding human knowledge of the universe. Given the magnitude of the funds necessary to regain our production capability, AGU strongly asks that restart production of Pu-238 be funded fully at the President's requested level of \$10 million. AGU also supports the Department of Energy Office of Science request for \$5.416 billion and the Office of Nuclear Energy Pu-238 production restart for \$10 million.

#### *Heliophysics*

AGU supports the President's request for fiscal year 2012 of \$622 million for the Heliophysics Science programs within the Science Mission Directorate at NASA. Heliophysics research is critical because it results in a better understanding of the Sun and how its activities affect Earth. Not only do solar activities affect Earth's climate, they also account for space weather, which impacts satellites, radio and radar transmission, gas and oil pipelines, and electrical power grids.

#### *Joint Polar Satellite System (JPSS)*

AGU supports the President's request of \$1.07 billion for JPSS in fiscal year 2012. Because the fiscal year 2011 funds that were necessary to launch JPSS on time were not appropriated, there will be a data gap beginning in 2017. It is critical that the Congress appropriate the President's request for JPSS in fiscal year 2012 in order to minimize the length of that gap.

Polar satellites provide the only weather and climate information for large portions of the planet and are particularly important for a whole host of end users. For military planners, overseas U.S. military operations will be greatly affected by the data gap. JPSS will provide critical information for long-term forecasts, which are imperative for troop deployments and planning operations. Additionally, weather forecasts for oil and gas companies doing work in Alaska, as well as cargo and cruise ships carrying billions of dollars worth of goods and millions of passengers, will be compromised. Furthermore, our ability to forecast weather in Alaska will be severely compromised. Others impacted by a data gap include the aviation industry, as JPSS will observe volcanic eruptions and track the movement of ash clouds; agriculture, as farmers rely on polar satellites for drought, extreme temperature, and length of growing season information; the fishing industry, as fishermen check sea-surface data from polar satellites to find fish stocks before heading out for their daily catch; and finally weather forecasting, as forecasters' ability to accurately project the intensity and trajectory of severe weather events, such as hurricanes, will be greatly diminished.

#### *National Weather Service (NWS)*

AGU hopes the subcommittee will continue to support NWS and will fund it at the President's request for \$988 million in fiscal year 2012. NWS is critical to protecting American lives, property, and commerce. Weather observations provide information that is vital for weather modeling and functions like accurate tornado watch-



es and warnings and storm forecasting must be preserved. Furthermore, buoy and surface weather observations are the backbone of most of the weather warning systems. Because at least one-third of U.S. GDP is concentrated in weather-sensitive industries, it is critical that the Congress maintains the United States' robust weather forecasting infrastructure.

#### *Climate Service*

AGU supports the formation of a Climate Service within NOAA and supports the President's request in fiscal year 2012 for \$346.2 million. The Climate Service is a budget-neutral reorganization within NOAA that will better integrate its functionalities in order to improve NOAA's ability to provide data and information to those communities affected by climate. As the Nation struggles to address the economic and national security-related impacts of climate on everything from agriculture to energy and transportation, it is now more important than ever that we leverage and coordinate our efforts to provide related information and scientific data. NOAA's proposed Climate Service would create the necessary framework to provide such support. The potential impacts of climate change and its influence on extreme weather events are pervasive and considerable. Climate change forecasts have the potential to provide a \$507–\$959 million per year benefit to the U.S. agriculture industry alone.

Due to this widespread impact, there has been exponential growth in the demand for climate information from business, industry, agriculture, government, and the public. This need can only be addressed with easily accessible and timely scientific data and information about climate that helps people make informed decisions in their lives, businesses, and communities. While NOAA already responds to millions of requests annually, its distributed network of laboratories, data centers and programs limits the agency's ability to fully anticipate, develop, and deliver the needed services.

#### NSF

AGU supports the President's request of an overall budget of \$7.767 billion for NSF. AGU greatly appreciates the Congress' support for science and technology in past appropriations and through the America COMPETES Reauthorization Act of 2010. Investments in NSF provide for America's future in a responsible manner. These investments pay out vitally important dividends in future development that drives economic growth, especially in critical areas of sustainable and economic natural resources and reduced risks from natural hazards. Support for science will maintain our economic and industrial leadership in the global marketplace, ensure economic progress, grow jobs, and uphold society's advancement.

#### *Geosciences Directorate*

The Geosciences Directorate (GEO) is the principal source of Federal support for academic Earth scientists and their students who are seeking to understand the processes that sustain and transform life on this planet. Approximately 63 percent of support for university-based geosciences research comes from this directorate and more than 14,300 people will be directly supported through GEO in fiscal year 2012 with thousands of others deriving support indirectly.

The President's request for fiscal year 2012 asks for \$286 million for Atmospheric and Geospace Sciences; \$207 million for Earth Sciences; \$385 million for Ocean Sciences; and \$101 million for Integrative and Collaborative Education and Research (ICER) within GEO. Much of the geosciences research budget leads to a better understanding of critical national needs, such as water and mineral resources, energy resources, environmental issues, climate change, and mitigation of natural hazards. AGU asks the subcommittee to strongly support these funding levels.

GEO supports infrastructure, operation, and maintenance costs for cutting-edge facilities that are essential for basic and applied research. Geoscience-based research tools and academic expertise helped to end the BP Deepwater Horizon oil spill, saving billions of dollars for industry and untold costs to the environment. Among the major facilities that NSF supports, the Academic Research Fleet would receive \$69 million; EarthScope Operations would receive \$26 million; Incorporated Research Institutions for Seismology would receive \$12 million, Ocean Drilling Activities would receive \$45 million; the Ocean Observatories Initiative would receive \$36 million; and the National Center for Atmospheric Research would receive \$100 million. AGU strongly supports robust and steady funding for this infrastructure as well as operation and maintenance of these major facilities.

*Office of Polar Programs (OPP)*

NSF's OPP funds basic research in the Arctic and Antarctica that helps the United States maintain strategic plans, international efforts, security goals, natural resource assessments, cutting-edge polar technology developments, and environmental stewardship of extreme environs. OPP's funding helps support researchers and students, the U.S. military, and the private sector. OPP is estimated to directly support almost 3,000 people in fiscal year 2012 and thousands of others indirectly. AGU supports the President's request of \$477.4 million for this important program.

*Earth Science Education*

The geosciences workforce is aging and being quickly depleted. The Congress can grow this workforce, stimulate economic growth in the energy, natural resources and environmental sectors, and improve natural resource literacy by supporting the full integration of Earth science information into mainstream science education at the K-12 and higher education levels. AGU strongly supports the Math and Science Partnerships, the Graduate Research Fellowships and the Research Experiences for Undergraduates within NSF's Education and Human Resources (EHR) Division. These programs are effective in building a science and engineering workforce for the 21st century. Improving geoscience education, one of the goals of NSF-EHR, to levels of recognition similar to other scientific disciplines is critical.

AGU appreciates this opportunity to provide testimony to the subcommittee and would be pleased to answer any questions or to provide additional information for the record. We thank you for your thoughtful consideration of our request.

## PREPARED STATEMENT OF THE AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

The American Institute of Biological Sciences (AIBS) appreciates the opportunity to provide testimony in support of fiscal year 2012 appropriations for the National Science Foundation (NSF). We encourage the Congress to provide the \$7.767 billion requested by the administration.

AIBS is a nonprofit 501(c)(3) 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 200 professional societies and scientific organizations whose combined individual membership exceeds 250,000. AIBS advances its mission through coalition activities in research, education, and public policy; publishing the peer-reviewed journal *BioScience* and the education Web site [ActionBioscience.org](http://ActionBioscience.org); providing scientific peer-review and advisory services to government agencies and other clients; convening meetings; and managing scientific programs.

NSF is a vital engine that can help drive our Nation's economic growth. The agency's support for scientific research and education programs fosters innovation, improves science education, and maintains our scientific infrastructure. Through its competitive, peer-reviewed research grants, NSF is leading the development of new knowledge that will help to solve the most challenging problems facing society. The agency's education programs are preparing the next generation of skilled workers in science, technology, engineering, and math (STEM). NSF's investments in research equipment and facilities will enable our Nation to continue to innovate and compete globally. These efforts, however, require a sustained and predictable Federal investment. Unpredictable swings in Federal funding can disrupt research programs, create uncertainty in the research community, and stall the development of the next great idea.

NSF is a sound investment that pays dividends. The use of peer-review to evaluate and select the best research proposals means that NSF is funding the most promising research. Recent discoveries that stem from NSF-funded research include the development of a faster and less expensive method for identifying bacteria in water and food samples; the identification of a high-yielding biofuel that can grow on degraded lands; the creation of tomatoes that provide increased levels of the essential nutrient folate; and insight into the spread of the West Nile virus.

As the primary Federal funding agency for fundamental research in the nonmedical sciences at our Nation's universities and colleges, NSF is responsible for generating new scientific discoveries, patents, and jobs. For many scientific disciplines, NSF is the primary funding source for basic research. For instance, NSF provides approximately 68 percent of extramural Federal grant support for fundamental research in the areas of nonmedical and environmental biology.

Importantly, the fiscal year 2012 budget request would allow NSF to fund nearly 2,000 additional research grants, thereby supporting more than 6,000 additional re-

searchers and students. This added support would build upon the agency's central role in science and STEM education. In fiscal year 2010, NSF programs reached almost 300,000 scientists, teachers, and students across the Nation. NSF provides vitally important research support to early career scientists, helping them to initiate their research programs. Support for the scientific training of undergraduate and graduate students is also critically important to our research enterprise. Students recruited into science through NSF programs and research experiences are our next generation of innovators and educators. In short, NSF grants are essential to the Nation's goal of sustaining our global leadership in science, technology, engineering and mathematics, and reigniting our economic engines.

The Biological Sciences Directorate (BIO) funds research in the foundational disciplines within biology. These fields of study further our understanding of how organisms and ecosystems function. Additionally, BIO supports innovative interdisciplinary research that improves our understanding of how human social systems influence—or are influenced by—the environment, such as the NSF-wide Science, Engineering, and Education for Sustainability program. In collaboration with NSF's engineering and math and physical science directorates, BIO is working to develop new, cutting-edge research fields. For example, the BioMaPS program is accelerating understanding of biological systems, and applying that knowledge to new technologies in clean energy.

The fiscal year 2012 budget request for NSF would enable the agency to continue to fund highly competitive grant proposals in BIO's five core programmatic areas:

- molecular and cellular biosciences;
- integrative organismal systems;
- environmental biology;
- biological infrastructure; and
- emerging frontiers.

Equally important, BIO provides essential support for our Nation's place-based biological research, such as field stations and natural science collections. Each of BIO's program areas also contribute to the education and training of undergraduate, graduate, and postdoctoral students.

The budget includes a request for \$10 million to support the digitization of high-priority U.S. specimen collections. We strongly encourage the Congress to provide at least this level of funding. This investment would help the scientific community ensure access to and appropriate curation of irreplaceable biological specimens and associated data, and would stimulate the development of new computer hardware and software, digitization technologies, and database management tools. For example, this effort is bringing together biologists, computer and information scientists, and engineers in multidisciplinary teams to develop innovative imaging, robotics, and data storage and retrieval methods. These tools will expedite the digitization of collections and, more than likely, contribute to the development of new products or services of value to other industries.

The fiscal year 2012 budget request includes funding in the Major Research Equipment and Facilities Construction account for the continued construction of the National Ecological Observatory Network (NEON). Once completed, NEON will collect data across the United States on the effects of climate change, land use change, and invasive species on natural resources and biodiversity. This information will be valuable to scientists, resource managers, and government decisionmakers as they seek to better understand and manage natural resources.

We encourage the subcommittee to provide the requested funding for the successful Graduate Research Fellowship program. The budget request would provide 2,000 new fellowships, which are important to our national effort to recruit and retain the best and brightest STEM students. The budget would also provide a needed \$1,500 increase to the fellowship's education allowance, which has not changed since 1998.

Thank you for your thoughtful consideration of this request and for your prior efforts on behalf of science and the National Science Foundation.

---

PREPARED STATEMENT OF THE ASSOCIATION OF PUBLIC AND LAND-GRANT  
UNIVERSITIES

On behalf of the Association of Public and Land-grant Universities' (APLU) Board on Oceans, Atmosphere, and Climate (BOAC), and the national constellation of institutions of higher learning that it represents, we thank you for the opportunity to provide support of and recommendations for the proposed fiscal year 2012 budgets for the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautic and Space Administration (NASA) and the National Science Foundation (NSF). NOAA, NASA, and NSF each play unique roles in a number of high-priority

U.S. and international initiatives. All three agencies also support research at our member institutions that provides critical information to policymakers and communities across the country. That is why we strongly support the administration's request of \$5.498 billion for NOAA; \$7.8 billion for NSF; and \$5.016 billion for NASA's science account.

"Although basic science can have colossal economic rewards, they are totally unpredictable. And therefore the rewards cannot be judged by immediate results. Nevertheless, the value of [Michael] Faraday's work today must be higher than the capitalization of all shares on the stock exchange."——Margaret Thatcher, Speech to the Royal Society, September 27, 1988.

"America has been consuming its seed corn: From 1970 to 1995, Federal support for research in the physical sciences, as a fraction of gross domestic product, declined 54 percent; in engineering, 51 percent. Annual Federal spending on mathematics, the physical sciences and engineering now equals only the increase in healthcare costs every 9 weeks."——George F. Will: "Rev the Scientific Engine", The Washington Post, January 2, 2011.

In the late 1930s, at a time when the Federal Government did not fund basic research, Alfred Loomis, a wealthy New York industrialist and science enthusiast was the benefactor of basic research pursuits of the world's foremost scientists and mathematicians at his mansion, which was partially converted into a laboratory in Tuxedo Park, New York. One of the scientific breakthroughs that he fostered led to the development of microwave radar. Via his cousin, Mr. Simpson, the Secretary of War, Mr. Loomis contacted President Roosevelt who contacted Mr. Churchill. An enormous mismatch in aircraft and vessel detection capabilities resulted between the Allies and the Axis, and this helped to win the war. This is an example of a basic scientific breakthrough that to great measure is responsible for the position in the world order that the United States has enjoyed since World War II.

In 1946, given the radar breakthrough and given the fact that the United States did not know when to cross the English Channel to stage D-Day, the Congress realized that the Nation needed federally funded weather and ocean related research and development (R&D) and created the Office of Naval Research; which was so successful that the federally funded NSF was created in 1949. Subsequently, the United States became the world leader in R&D, its universities and industries became the most advanced in the world and thus the United States became the leading economic power of the world. This was not happenstance. This was the Congress building enabling capacity for the U.S. economy through the aggressive funding of advanced, innovative research and development. Advances derived from solar, atmospheric, oceanic, hydrologic, environmental, and data and information harvesting have and will drive expansion of the U.S. economic enterprise.

Space weather research and forecasting is a jewel at the NOAA Space Environment Center. Sun storms interfere with the normal operation of communications, can cause large-scale blackouts and could shut down the Nation's GPS satellite system and thus the U.S. spatial referencing network. Without research advances in Space Weather, the Nation's military defenses and security, transportation systems, commerce, and competitiveness will be severely compromised.

Recently, a NASA scientist developed a new mathematical method to process non-linear and nonstationary data in his basic research and opened up an entire new field of data analysis and information harvesting. He was elected to the U.S. National Academy. However, the scientist has chosen to retire from NASA and has joined a university in Taiwan where the success rate for research proposals is 80–90 percent versus United States rates of 10 percent. The United States has lost a National Academy member to a foreign country because of scarce U.S. research dollars.

While recognizing that difficult budget decisions that must be made for the Nation's fiscal health, the President's proposed budget for these three agencies will serve the Nation well in advancing science and technology which will subsequently undergird the economy, security and well-being of the citizenry of the United States. Outlays in the natural and earth systems' science and technology programs of NOAA, NSF, and NASA will serve to improve and make the Nation's surface, air and marine transportation safer and more efficient, advance energy technology, provide the scientific and technological advances to help the defense industry better meet its technology needs, contribute to advances in public health, make the country more resilient to environmental hazards, provide agricultural, energy, and transportation sectors with seasonal outlooks, and create the knowledge base upon which society can make wise environmental management decisions. Environmental data collected and distributed by NASA, NSF, and NOAA represent a national resource and

are used by universities for research, education, and outreach and especially by private industry to produce products and services.

Ensuring homeland security, maintaining global communications, and informing the public of atmospheric and marine ecological health threats depend upon reliable science. Forecasting the onset, duration and effects of solar storms, atmospheric weather events, coastal storms, sea-level variability, toxic blooms, and seasonal climate conditions are dependent on sustainable growth of the science and technology that NOAA, NSF, and NASA sponsor and conduct. In addition, the fiscal year 2012 budget request will lead to the expansion of the private sector weather and seasonal and annual climate derivatives industry and thus create new jobs.

We next comment on aspects of the agency budgets and needs of the scientific community.

#### NOAA

NOAA provides important services to all Americans, services that are vital to our economy, national security, surface, marine and air transportation, human safety, and the health of human and marine ecological systems. Extreme weather events, like tornadoes, hurricanes, oppressive heat, heavy precipitation both wet and frozen, dust storms and drought, clearly demonstrate both the immediate and long-term impacts that weather and seasonal climate can have on a region. About \$3 trillion or one-third of the U.S. economy, including industries as diverse as agriculture, finance, energy, insurance, transportation, real estate and outdoor recreation, is highly weather and seasonal-climate sensitive. We support the establishment of the NOAA Climate Service as an economic imperative as private enterprise, public agencies, decisionmakers, and society require seasonal and annual climate outlooks based on solid science.

NOAA's support of environmental research and education via Cooperative Institutes and programs such as the Oceanic and Atmospheric Research's Sea Grant and the Center for Sponsored Coastal Ocean Research are critical to university research, education and outreach. Similarly, NOAA's role in understanding the oceans and coastal areas and oceanic resources under-gird coastal economies.

We do raise a major concern, the need for increased and sustained support of satellite and in situ environmental observing systems. As reported in several prior and recent National Research Council studies, (Observing Weather and Climate from the Ground Up, a Nationwide Network of Networks, NRC, 2009), the needs are particularly acute for urbanized areas as well as mountain, ocean, and coastal regions. Vertical profiles of variables such as water vapor, winds, and temperatures are virtually nonexistent over land and are nonexistent over water. Over land, the primary recommendation is for the placement of vertical profilers, vertically pointing radars, acoustic sounders, and LIDARs that collect vertical observations of wind and temperature from the ground up through the lower atmosphere.

For the oceans, the Argo network needs attention and support as it begins to seriously age. In the case of coastal ocean regions, estuaries and the Great Lakes, a key recommendation is for the build-out and major enhancement of the existing NOAA National Data Buoy Center (NDBC) atmospheric and coastal ocean-observing network and the Joint Polar Satellite System. The data collected are critical to many other NOAA missions, such as understanding supply of larvae of commercially important fisheries and trajectories of oil spills. A national network of profilers would greatly improve skill scores for forecasts, particularly for forecasts of heavy precipitation events and atmospheric chemistry conditions. Likewise, an enhanced and expanded NDBC network would address NOAA's proposed development of an ecological forecasting capability and also will greatly improve the skill scores of forecasting ocean and coastal weather-related phenomena such as precipitation amounts, types, and durations of gulf and Atlantic Nor'easters and west coast cyclones and rogue waves. Coastal ocean observing, via the existing NDBC network, is challenged to keep operations at present levels and cannot be enhanced with modern observing sensors without major capitalization.

#### NASA

In 2007, the NRC issued the report, "Earth and Science Applications from Space: National Imperatives for the Next Decade and Beyond". The report found that between 2000 and 2009, funding for Earth Sciences (ES) had fallen substantially. ES research is absolutely critical to understanding climate change, such as the decline of Earth's ice sheets and the health of the global oceans. Thus, BOAC is heartened by the administration's request for NASA's expanded and enhanced science mission. Past investments in NASA's science mission have funded university research, re-

sulting in the development of new instruments and technologies and in valuable advances in weather forecasting, climate projections, and understanding of ecosystems.

Without the tools developed at NASA or with agency support, scientists and the Nation would have only a fragmentary picture of the interconnected functioning of the planet's oceans, atmosphere, and land. The NASA data archive is a trove of environmental information that researchers have come to depend upon. Through its support for young scientists and graduate students, the NASA science mission supports innovation. BOAC supports the NASA budget and applauds the special attention that the White House has paid to the restoration of NASA science.

We also hope that the Congress will fund NASA to lead in developing and implementing a scatterometer mission; with fast community access to the data, capability to distinguish between wind and rain and a higher orbit for coverage of Alaskan waters.

#### NSF

BOAC supports funding of NSF, which is critical to U.S. basic research. NSF supplies almost two-thirds of all Federal funding for university-based, fundamental research in the geosciences. Geosciences Directorate supported research increases our ability to understand, forecast, and respond to and prepare for environmental events and changes. Through facilities such as the Oceans Observatory Initiative, the Integrated Ocean Drilling Program, and National Center for Atmospheric Research/Wyoming supercomputer, NSF provides the academic community with advanced capabilities that it would not be able to afford if conducted through individual institutions.

#### About APLU

APLU (formerly National Association for State Universities and Land Grant Colleges) is the Nation's oldest higher education association. Currently, the association has more than 200 member institutions located in all 50 States. APLU's overriding mission is to support affordable, high-quality public education through efforts that enhance the capacity of member institutions to perform traditional and innovative roles in teaching, research, and public service.

#### About BOAC

BOAC's primary responsibility is to advance research and education in the oceanic/marine and atmospheric sciences through engaging scholars from its member institutions and through a robust Federal relations program. BOAC has approximately 200 regionally distributed members, including some of the Nation's most eminent research scientists, chief executive officers of universities, oceanic, atmospheric and hydrologic scientists, academic deans, and directors of Sea Grant programs.

Thank you for taking time to review our recommendations.

---

#### PREPARED STATEMENT OF THE AMERICAN PUBLIC POWER ASSOCIATION

The American Public Power Association (APPA) supports adequate funding for staffing antitrust enforcement and oversight at the Department of Justice (DOJ). For the DOJ Antitrust Division we support the President's fiscal year 2012 request of \$166 million.

APPA is the national service organization representing the interests of more than 2,000 municipal and other State and locally owned utilities in 49 States (all but Hawaii). Collectively, public power utilities deliver electricity to 1 of every 7 electric consumers (approximately 46 million people), serving some of the Nation's largest cities. However, the vast majority of APPA's members serve communities with populations of 10,000 people or less.

The DOJ Antitrust Division plays a critical role in monitoring and enforcing antitrust laws affecting the electric utility industry. With the repeal of the Public Utility Holding Company Act (PUHCA) included in the Energy Policy Act of 2005, the electric utility industry has experienced an increase in mergers that could result in increased market power in certain regions. This development, coupled with the volatility and uncertainty continuing to occur in wholesale electricity markets run by regional transmission organizations, makes the oversight provided by DOJ more critical than ever.

We appreciate the opportunity to submit this statement outlining our fiscal year 2012 funding priority within the Commerce, Justice, Science, and Related Agencies Subcommittee's jurisdiction.

## PREPARED STATEMENT OF THE AMERICAN SOCIETY FOR MICROBIOLOGY

The American Society for Microbiology (ASM) wishes to submit the following testimony on the fiscal year 2012 appropriation for the National Science Foundation (NSF). ASM is the largest single life science organization in the world with more than 38,000 members. ASM's mission is to enhance the science of microbiology, to better understand life processes and to promote the application of this knowledge for improved health and environmental well-being.

ASM strongly supports the administration's fiscal year 2012 NSF budget proposal of nearly \$7.8 billion, a 13 percent increase more than the fiscal year 2010 level of spending. ASM thanks Members of Congress for their support of NSF and asks that the Congress continue to recognize NSF's contributions to U.S. research and development (R&D) in science and engineering, by approving the President's proposed fiscal year 2012 budget for the agency.

ASM recognizes the many challenges ahead in the Federal budgeting process. However, ASM maintains that strong investment in science and technology will continue to show substantial returns on Federal investments. Moreover, strong investments in science are essential for the long-term vigor and vitality of the U.S. economy.

For more than 60 years, NSF funding has stimulated innovation in the United States by providing support to researchers across the breadth of scientific and engineering disciplines. Approximately 95 percent of the agency's budget goes directly to support research, research infrastructure, and STEM education (science, technology, engineering, and mathematics). Importantly, three-fourths of NSF funding is distributed each year to U.S. colleges, universities and academic consortia, through merit based, competitive grants that engage more than 210,000 people participating in funded research and education programs.

The increased budget proposed for NSF programs will strengthen the American Competitiveness Initiative, the President's Plan for Science and Innovation and the NSF's 2011–2016 strategic plan that “envisions a Nation that capitalizes on new concepts in science and engineering and provides global leadership in advancing research and education.” NSF plays a unique role in building U.S. R&D capabilities and global competitiveness at a time when support from other sectors is shrinking. The NSF is the Nation's largest source of nonmedical academic research funding, providing 21 percent of the total Federal budget for basic research.

NSF sponsors fundamental and transformative research that supports new, economically critical disciplines, such as nanotechnology, genomics, and information technology. For some vitally important fields, such as computer science and environmental science, NSF is the dominant funding source. NSF grants catalyze scientific inquiry by a diverse set of recipients ranging from more than 190 Nobel laureates to elementary school students participating in NSF-sponsored STEM activities. The agency estimates that in fiscal year 2012 more than 302,000 people will be directly involved in NSF programs, including a large percentage of the Nation's female and underrepresented minority scientists and students.

## NSF DIRECTORATE FOR BIOLOGICAL SCIENCES

ASM endorses the fiscal year 2012 request of \$794.5 million for NSF's Directorate of Biological Sciences (BIO), roughly 11 percent more than the enacted fiscal year 2010 funding level. This request includes support for the Directorate's Emerging Frontiers Initiative, which recognizes high-risk, cutting-edge research with the potential to transform U.S. science and technology. Through Emerging Frontiers and its core BIO programs, NSF provides about 68 percent of Federal funding for basic research in life sciences at the Nation's academic institutions.

Understanding living organisms and systems directly contributes to improving our economy, agriculture, environment, and public health. Recent National Research Council reports have urged creative applications of “the new biology” to solve recalcitrant problems, such as balancing food security with clean energy needs and environmental impacts. BIO-supported research is uniquely positioned to provide answers, and to address national priorities, including climate science, biotechnology and sustainable energy, as well as control of infectious diseases. BIO also maintains a capacity to respond rapidly to urgent research needs as they arise. In the past year, for example, NSF provided \$20 million for critically needed research on the biological impacts of the Gulf of Mexico oil spill. The fiscal year 2012 budget request also highlights the Directorate's research portfolio within the NSF-wide Science, Engineering and Education for Sustainability (SEES) initiative, particularly clean-energy projects and cross-cutting projects within the research at the interface of the Biological, Mathematical and Physical Sciences (BioMaPS) program.

The fiscal year 2012 BIO appropriation will help realize two of NSF's strategic goals, "Transform the Frontiers" and "Innovate for Society." To illustrate, BioMaPS research areas will include advanced manufacturing techniques related to biosensors; new nanoscale technologies that collect data in real time; and the use of chemistry and engineering to build cellular systems for more efficient computational networks. Also in fiscal year 2012, BIO will begin operations of its new National Ecological Observatory Network (NEON), which will collect data across the United States on the impacts of climate change, land use change and invasive species. NEON will be the first observatory of its kind, able to forecast ecological change nationwide over multiple decades.

Investments in the BIO Directorate consistently advance scientific knowledge with potential societal or economic benefits. BIO supported discoveries reported in the past year include:

- soil microbes release less than expected carbon dioxide into the atmosphere during climate warming;
- bacteria communicate with chemical signals and when a critical number of signaling molecules are detected on the bacteria cell surface (quorum sensing), the collective bacteria coordinate their attack on an infected host (suggesting new drug regimens); and
- certain methane-metabolizing bacteria can leech copper out of the environment, thereby both cleaning up toxic waste and breaking down the greenhouse gas methane.

The NSF contributes to the fields of medical, agricultural, and environmental microbiology, which are important to public health, food security, biotechnology, and much more. An example is the Ecology of Infectious Disease (EID) Initiative managed jointly by NSF and the National Institutes of Health, which supports research that combines ecological and biomedical methods to study interactions between human caused changes in the environment and the emergence and transmission of infectious diseases. The most recently funded EID projects include livestock movement in Central Africa as related to transmission of foot and mouth disease virus, how climate and human behavior influence the spread of dengue fever-carrying mosquitoes, and biological and environmental factors that affect the spread of wheat stripe rust disease. In the past year, EID-supported investigators reported results from studies that examined, for instance:

- the cross-species transmission of infectious diseases using a rabies model; and
- floating aggregates of organic material (called "marine snow") as protective transports for pathogenic microorganisms, affecting water sampling outcomes and the transmission of waterborne diseases.

Annual NSF investments deliver a steady stream of discoveries that help fight costly infectious diseases of humans, other animals, and plants. Recent NSF supported research findings include:

- Stress-response genes in tuberculosis bacteria switch the pathogen into its dormant state within an infected host, increasing resistance to antibiotics and host immunity.
- The corkscrew-shape of the bacterium *Helicobacter pylori*, linked to ulcers and gastric cancer, is specifically tied to the microbe's ability to colonize the acid-laden stomach.
- Microbial pathogens can hijack nutrient pathways in rice plants by using previously undiscovered plant cell pores that transport sugar out of the plant. Other researchers found a genetic mutation that allows plants to better withstand drought.
- A nanotechnology based diagnostic test for *Mycoplasma pneumoniae* can diagnose this common type of pneumonia within minutes, versus current tests that take several days.
- An international team will use a new technology called Major Histocompatibility Complexes tetramers to develop novel vaccines against cattle diseases that cause estimated annual losses of \$40 billion in sub-Saharan Africa, to quickly screen potential vaccines in the laboratory.

#### NSF DIRECTORATES FOR GEOSCIENCES, ENGINEERING, MATHEMATICAL, AND PHYSICAL SCIENCES

ASM supports the administration's fiscal year 2012 proposed NSF funding for research activities at the Engineering Directorate (ENG), the Geosciences Directorate (GEO) and the Mathematical and Physical Sciences Directorate (MPS).

The ENG Directorate recognizes the centrality of engineering principles and multidisciplinary research to national priorities, including sustainability, the U.S. cyberinfrastructure, next-generation manufacturing practices and technologies that



mitigate environmental threats. ENG programs in clean energy and advanced manufacturing will also contribute to the fiscal year 2012 activities in the NSF-wide BioMaPS investment. Within the ENG request, the Division of Chemical, Bioengineering, Environmental and Transport Systems (CBET) will support sustainability research and education related to climate, water and energy as part of the agency wide SEES initiative.

Increasingly, biology, and engineering are collaborating to find solutions to societal, environmental, and economic challenges. Recent NSF funded examples are:

- computer modeling to predict how bacteria would respond to different drug doses and which doses are most effective in patients, to radically shorten drug development; and
- potential drugs against HIV identified by combining optimization theory from mathematics with computational biology, with a formula based on statistical thermodynamics that predicts which drug structure would be most effective.

The Geosciences Directorate provides about 68 percent of Federal support for basic geosciences at the Nation's academic institutions, and is clearly a decisive player in research and education often ignored by other funding sources. GEO funds studies of the atmosphere and the oceans that increase our understanding of climate change, improve water quality and offer potential prediction of natural disasters, such as drought and earthquakes. Major fiscal year 2012 GEO investments will include continued participation in the SEES initiative, with the Division of Earth Sciences (EAR) leading GEO efforts toward clean energy and contributing to sustainability research networks. Current EAR funding opportunities also include paleobiology studies of past changes in the Earth's environments that might inform present-day challenges. In the past year, as examples, EAR supported studies concluded that cyanobacteria producing oxygen helped create a breathable atmosphere on Earth some 2.5 billion years ago; while comparisons of modern microbial mats with fossilized bacterial colonies provide clues to ancient cell biology.

Many of today's innovations in science and technology are powered by increasingly complex mathematical and statistical capabilities. The modest fiscal year 2012 increase proposed, however, for the MPS Directorate is barely adequate to sustain MPS efforts that reach across NSF, for example, SEES and BioMaPS programs as well as the new Cyberinfrastructure Framework for 21st Century Science and Engineering. There have been extraordinary changes in how science is done:

- explosions of data, the mandate for faster and larger networks among researchers; and
- rapidly advancing technologies, many of which rely upon MPS-funded discoveries.

NSF provides more than 60 percent of Federal support for basic mathematics at U.S. colleges and universities; in certain specialties, the percentage is much higher. In addition, MPS frequently coordinates with other NSF directorates in activities such as the quest for renewable fuels, biosensors, and advanced imaging. MPS and BIO recently issued a joint solicitation for grant proposals involving collaborations among investigators from the biological, mathematical and physical sciences that "foster new interactions that span interfaces between MPS and BIO."

#### CONCLUSION

ASM recommends that the Congress approve the administration's fiscal year 2012 budget for the NSF which is the only Federal agency that supports all fields of science and engineering. As the principal sponsor of research and education in multiple disciplines, NSF investment undoubtedly catalyzes innovation essential our society and economy. The agency's focus on high-risk, interdisciplinary research clearly traverses the frontiers of discovery. NSF programs, such as the new Integrated NSF Support Promoting Interdisciplinary Research and Education, uniquely encourage emerging fields, including synthetic biology. For decades, the NSF has helped train the next generation of scientists, engineers and mathematicians, and partnered industry and academia to generate a long list of new technologies and patented products. Congressional approval of the fiscal year 2012 budget would sustain the NSF's many contributions to the Nation's scientific achievements.

#### PREPARED STATEMENT OF THE AMERICAN SOCIETY OF PLANT BIOLOGISTS

On behalf of the American Society of Plant Biologists (ASPB), we submit this testimony for the official record to support the requested level of \$7.767 billion for the National Science Foundation (NSF) for fiscal year 2012. ASPB and its members recognize the difficult fiscal environment our Nation faces, but believe that investments in scientific research will be a critical step toward economic recovery.

ASPB would like to thank the subcommittee for its consideration of this testimony and for its strong support for the research mission of the NSF.

Our testimony will discuss:

- Plant biology research as a foundation for addressing food, fuel, environment, and health concerns;
- The rationale for robust funding for NSF to maintain a well-proportioned science portfolio with support for all core science disciplines, including biology; and
- The rationale for continued support for NSF education and workforce development programs that provide support for the future science and technical expertise critical to America's competitiveness.

ASPB is an organization of approximately 5,000 professional plant biology researchers, educators, graduate students, and postdoctoral scientists with members in all 50 States and throughout the world. A strong voice for the global plant science community, our mission—achieved through work in the realms of research, education, and public policy—is to promote the growth and development of plant biology, to encourage and communicate research in plant biology, and to promote the interests and growth of plant scientists in general.

#### FOOD, FUEL, ENVIRONMENT, AND HEALTH—PLANT BIOLOGY RESEARCH AND AMERICA'S FUTURE

Plants are vital to our very existence. They harvest sunlight, converting it to chemical energy for food and feed; they take up carbon dioxide and produce oxygen; and they are the primary producers on which all life depends. Indeed, plant biology research is making many fundamental contributions in the areas of energy security and environmental stewardship; the continued and sustainable development of better foods, fabrics, and building materials; and in the understanding of biological principles that underpin improvements in the health and nutrition of all Americans.

In particular, plant biology is at the interface of numerous scientific breakthroughs. For example, with the increase in plant genome sequencing and functional genomics supported by the NSF, plant biologists are using computer science applications to make tremendous strides in understanding complex biological systems ranging from single cells to entire ecosystems. Understanding how plants work will ultimately result in better and more productive crops, new sources of fuel, and the development of better medicines to treat diseases like cancer.

Despite the fact that basic plant biology research—the kind of research funded by the NSF—underpins so many vital practical considerations, the amount invested in understanding the basic function and mechanisms of plants is relatively small when compared with the impact plants have on our economy and in addressing some of the Nation's most urgent challenges such as food and energy security.

#### ROBUST FUNDING FOR THE NSF

ASPB encourages the subcommittee to fund NSF at robust levels that would keep NSF's budget on a doubling path over the next several years.

The fiscal year 2012 NSF budget request would fund NSF at \$7.767 billion, keeping NSF budget on a path for doubling. ASPB supports this request and encourages proportional funding increases across all of the science disciplines supported by NSF. As scientific research becomes increasingly interdisciplinary with permeable boundaries, a diverse portfolio at NSF is needed to maintain transformational research and innovation.

NSF funding for plant biology specifically enables the scientific community to address cross-cutting research questions that could ultimately solve grand challenges related to a sustainable food supply, energy security, and improved health. The idea that support for research in one area will impact a variety of applications is reflected in the National Research Council's report "A New Biology for the 21st Century".

The NSF Directorate for Biological Sciences is a critical source of funding for scientific research, providing 68 percent of the Federal support for nonmedical basic life sciences research at U.S. academic institutions. The Biological Sciences Directorate supports research ranging from the molecular and cellular levels to the organismal, ecosystem, and even biosphere levels. These investments continue to have significant payoffs, both in terms of the knowledge directly generated and in deepening collaborations and fostering innovation among communities of scientists.

The Biological Sciences Directorate's Plant Genome Research Program (PGRP) is an excellent example of a high-impact program, which has laid a strong scientific research foundation for understanding plant genomics as it relates to energy (biofuels), health (nutrition and functional foods), agriculture (impact of changing

climates on agronomic ecosystems), and the environment (plants' roles as primary producers in ecosystems). ASPB asks that the PGRP be restored as a separate funding line within the NSF budget, as in years past, and that the PGRP have sustained funding growth over multiple years to address 21st century challenges. For fiscal year 2012 ASPB asks that PGRP be funded at the highest-possible level.

Without significant and increased support for the Biological Sciences Directorate and NSF as a whole, promising fundamental research discoveries will be delayed and vital collaborations around the edges of scientific disciplines will be postponed, thus limiting the ability to respond to the pressing scientific problems that exist today and the new challenges on the horizon. Addressing these scientific priorities also helps improve the competitive position of the United States in a global marketplace.

#### CONTINUED SUPPORT FOR NSF EDUCATION AND WORKFORCE DEVELOPMENT PROGRAMS

NSF is a major source of funding for the education and training of the American scientific workforce and for understanding how educational innovations can be most effectively implemented. NSF's education portfolio impacts students at all levels, including K–12, undergraduate, graduate, and postgraduate. Importantly, the Foundation also offers programs focused on outreach to and engagement of underrepresented groups and of the general public.

The Integrative Graduate Education and Research Traineeship (IGERT) program is just one example of NSF's commitment to education. IGERT is successful in fostering the development of novel programs that provide multidisciplinary graduate training. As discussed above, it is at the intersections of traditional disciplines that the greatest opportunities for scientific advancement can be found. ASPB encourages expansion of the IGERT program in order to foster the development of a greater number of innovative science leaders for the future.

Furthermore, ASPB urges the subcommittee to expand NSF's fellowship and career development programs—such as the Postdoctoral Research Fellowships in Biology, the Graduate Research Fellowship (GRF) and the Faculty Early Career Development (CAREER) programs—and, thereby, to provide continuity in funding opportunities for the country's most promising early career scientists. Additionally, such continuity and the broader availability of prestigious and well-supported fellowships may help retain underrepresented groups in the science, technology, engineering, and mathematics (STEM) fields. ASPB further encourages NSF to develop “transition” awards that will support the most promising scientists in their transition from postdoctoral research to full-time, independent, tenure-track positions in America's universities. NSF might model such awards after those offered by the National Institutes of Health and initially championed by private philanthropies such as the Burroughs Wellcome Fund.

ASPB urges NSF to further develop programs aimed at increasing the diversity of the scientific workforce by leveraging professional scientific societies' commitment to provide a professional home for scientists throughout their education and careers and to help promote and sustain broad participation in the sciences. Discreet focused training and infrastructure support programs for Hispanic Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities remain vitally important, as they foster a scientific workforce that reflects the U.S. population. These institutions are key producers of members of the STEM workforce; therefore, ASPB recommends that distinct funding amounts be specified for Hispanic Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities.

ASPB urges support for education research that enhances our understanding of how educational innovations can be sustainably implemented most effectively in a variety of settings. NSF programs such as Transforming Undergraduate Education in STEM, Discovery Research K–12, and Research and Evaluation on Education in Science and Education provide opportunities to expand NSF's research and evaluation efforts to address scale-up and sustainability. Increasingly, the challenge is not only to understand what works but to determine how it can be best put into practice. ASPB encourages continued support for education research programs within NSF's Education and Human Resources portfolio with a focus on understanding how previous investments in educational strategies can be made most effective. ASPB also encourages support for implementation of the recommendations made in the recent NSF-sponsored report on “Vision and Change in Undergraduate Biology Education: A Call to Action”.

The National Research Council report “A New Biology for the 21st Century” has been cited numerous times in its first year in publication as a model of societal needs and describes our continuing need to press ahead. These challenges will not

be resolved in a year, an administration, or a generation, but will take continued attention and investment at Federal research agencies, such as the NSF, over decades.

Thank you for your consideration of our testimony on behalf of ASPB. Please do not hesitate to contact us if we can be of any assistance in the future.

---

PREPARED STATEMENT OF THE AMERICAN SOCIETY FOR QUALITY

Ms. Chairwoman and distinguished members of this subcommittee, my name is David Spong. I represent the Foundation for the Malcolm Baldrige National Quality Award, Inc., and I am a lifetime member as well as past chair of the Board of this Foundation. I am also the president of the American Society for Quality (ASQ) and would like to make you aware of a program that may seem small in size and funding but is very large in the way it affects our country, its citizens, companies, customers, and right now maybe most importantly, jobs.

The Baldrige Performance Excellence Program is currently funded at \$9.6 million annually based on the enacted fiscal year 2010 budget. President Obama's fiscal year 2012 budget recommends reducing funding for the program by \$2.2 million from his fiscal year 2011 proposed level of \$9.9 million or \$1.9 million less than the fiscal year 2010 enacted level. He further recommends a study during 2012 to explore alternative funding for the program. I am hopeful that the Congress doesn't make the same mistake in its budget. I will stress today how well the Baldrige program addresses the urgent need to make U.S. organizations stronger at the lowest-possible cost as well as the extent to which taxpayer's dollars are leveraged toward that goal in a way that is truly exemplary. So, my goal is to impress upon you that the Baldrige Program's funding should not be cut, and it should continue to be managed by National Institute of Standards and Technology (NIST).

The Baldrige Performance Excellence Program was established in 1987 as a result of Public Law 100-107 with the purpose of strengthening U.S. competitiveness. To show the importance of strengthening our competitiveness, the Baldrige Program was set up within NIST, an agency of the Department of Commerce, which, for more than a century, has helped lay the foundation for innovation, economic development, and quality of life in America. Although the Baldrige office guides the overall program, the program involves a public-private partnership where significant contributions for the program come from the Foundation for the Malcolm Baldrige National Quality Award, leveraging current Government funding.

The Federal funding is in fact, only a small measure of the total amount of hours, funding, and value contributing to the Program. Yet the Government support is significant as it provides the integrity, consistency, and continuity the program needs and without an efficient and effectively managed program, the entire stakeholder system would collapse.

As our country continues to discuss ways to meet the economic challenges and global competition facing our Nation and the necessity to make some concessions to help solve our national debt and deficit problems, we already have a program that benefits the United States by driving economic development through increasing business productivity, workforce efficiency, and job creation.

The Baldrige Program was established to promote the awareness of performance excellence as an important element in competitiveness. It was envisioned as a standard of excellence that would help U.S. companies achieve world-class quality. From the outset, the Congress anticipated how applicable the Baldrige concepts would be for organizations beyond the business sector, and it since has expanded the Award to include the education, healthcare, and nonprofit sectors. The reach of the Program now expands to all sectors of the U.S. economy including Government, which I emphasize. I know our Government could improve and work more efficiently by using the Baldrige criteria. Baldrige is now accepted as a proven methodology to manage all types of organizations.

It's the only U.S. public-private partnership dedicated to improving U.S. organizations so they can compete globally. It educates business, education, healthcare, and nonprofit organizations on best practices in performance excellence. In fact, studies by NIST, universities, business organizations, and the Government Accountability Office have found that the benefits to organizations using performance excellence approaches, such as the Baldrige Criteria, include increased productivity, improved profitability and competitiveness, and satisfied employees and customers. Award recipients have found that by applying the Baldrige Criteria they created a culture for change and excellence within their organizations that ultimately improved customer service, workforce morale, increased growth, profitability, and institutionalized a process for continuous learning and improvement.

There is a misconception that the Baldrige Performance Excellence Program is primarily an awards program. While the Baldrige Performance Excellence Program is widely known for managing the Malcolm Baldrige National Quality Award, its main mission is to provide education and global leadership in promoting performance excellence. In fact, the awards are only the culmination of the evaluation process that scores of organizations undertake each year, both at the national level through the Baldrige Performance Excellence Program and through many non-funded parallel State and local programs. These evaluations are supported by the efforts of thousands of volunteer experts who help these organizations improve their performance and competitiveness. It is estimated that these volunteers, leaders from all sectors of our economy, contribute more than 120 hours each annually, collectively 149,000 hours, at a conservative estimate of value at \$8.8 million, to improving U.S. organizations, as an act of patriotic service to their country. So, the Award may be the most visible part of the Program, but the intention was not to simply give out awards, but to establish role model organizations that would share their successful strategies with other U.S. businesses.

The Baldrige is far more than just an awards program; it's a culture of performance excellence. While the Program has touched hundreds of thousands of American citizens in overwhelmingly beneficial ways, it directly provides a significant economic payback to America far in excess of the underlying cost of the program. An October 2001 study of the economic impact of the Baldrige Program, prepared for NIST by economists Albert N. Link and John T. Scott, conservatively estimated the net private benefits associated with the Program to the economy as a whole at \$24.65 billion. When compared to the social costs of the Program of \$119 million, the Baldrige Program's social benefit-to-cost ratio is 207-to-1 (Economic Evaluation of the Baldrige National Quality Program). In another 2004 study, "Building on Baldrige: American Quality for the 21st Century" it states, "more than any other program, the Baldrige Award is responsible for making quality a national priority and disseminating best practices across the United States." The Baldrige Foundation has commissioned a reprise of the social benefit-to-cost ratio study this year, and it is expected that the return on investment will be even significantly higher since the last time the study was done.

The Baldrige Program is a very strong example of an appropriate use of taxpayer dollars, and has a long-term track record of excellent return on taxpayer investment for the greater good of our Nation. The Foundation would not be financially capable of achieving the goals and mission of the effort. Currently, the Foundation leverages the total program funding by providing to the NIST and the Federal Government funding on average of \$1.2 million to \$1.5 million annually for the training of examiners, printing of the criteria, the award crystals, and award ceremony. The Foundation cannot financially support the day-to-day staffing required to administer all the educational benefits this program provides and still maintain the integrity and patriotic element of the program if it were privatized.

Beyond this, countless other organizations use the Baldrige Performance Excellence Criteria as a framework for improving their operations. The program has been emulated by numerous national award programs throughout the world, which use the Baldrige Criteria for their own national quality programs. Criteria are distributed at the rate of more than 2 million downloads per year on the Baldrige Program Web site. With that in mind, the Government is contributing just \$5 per user of the Criteria. With the network of State and local programs reaching thousands of organizations at the local level and the Award recipients sharing their best practices all across the country, the small Government investment is leveraged into a national network that helps U.S. organizations improve performance, increase innovation, and ensure sustainability.

Baldrige recipients serve as model organizations from which everyone else can learn and emulate. Through Baldrige, "best practice" becomes something more than "I like your idea." It becomes documented, data driven, evidence-based examples of performance excellence. These examples reach every sector of the economy—manufacturing, small business, service, healthcare, education, and the nonprofit sector (including public service).

The Malcolm Baldrige National Quality Award and the Baldrige Award recipients constitute the visible centerpiece of the Baldrige Program. However, the Program's enabling legislation designates it as an outreach and education program designed to encourage performance excellence not only in applicants for the Award but also in a much broader base of organizations that do not apply for the Award.

The Alliance for Performance Excellence, a 501(c)(3) nonprofit that represents 33 Baldrige-based State quality award programs nationwide, strongly supports the mission and continuity of the Baldrige Performance Excellence Program. The number of State and local, regional, and sector-specific award programs has grown tremen-

dously. In 1991, only eight State and local award programs existed. Today, there are 37 State and local, regional, and sector-specific quality award programs. These programs have been especially successful in reaching out to locally based small- and medium-size organizations. The State and local programs have become a feeder system to the Baldrige Award. In the last 14 years, 45 out of the 60 Baldrige Award recipients also have won their State's highest-level quality award. The State and local programs greatly extend the reach and impact of the Baldrige Program. State and local programs have distributed tens of thousands of paper and electronic copies of the Baldrige Criteria, including 20,788 paper copies in 2009 alone. The criteria at the State level are Baldrige-based, with most being word-for-word copies. This has helped the Baldrige Performance Excellence Program reach a widespread audience.

In addition to the State and local network, an international network has evolved and as of January 2010, there were 95 international quality/performance excellence awards (besides the Baldrige Program), most of which either use the Baldrige Criteria or some derivative of the Criteria.

In keeping with the continuous improvement philosophy of the Baldrige Program, the Criteria are updated every 2 years through a consensus process to stay at the leading edge of validated management practice. The Criteria have evolved significantly over time to help organizations address a dynamic environment, focus on strategy-driven performance, and address concerns about customer and workforce engagement, governance and ethics, societal responsibilities, and long-term organizational sustainability. The Criteria have continually progressed toward a comprehensive, integrated systems perspective of organizational performance management.

It would send an unfortunate and misguided signal if we eliminated or reduced a program that our Government has supported for over two decades as the model in performance excellence. Certainly this is not the right message to our U.S. business organizations, educational institutions, healthcare organizations, and nonprofit/government agencies that have learned firsthand how beneficial the Program is. And, with the popularity the Program has gained globally, it would not be a positive message to other countries.

I respectfully urge that you vote to invest in the Baldrige Program. The net return on the annual investment in the Program cannot only be measured in positive payback dollars, but in the sustainability of organizational performance excellence. Once you review the facts, I'm sure you will agree that the \$10 million appropriation for the program is one of the best investments taxpayers can make to promote economic growth, improve America's competitiveness, and contribute to the goal of reducing our national debt and deficit.

---

PREPARED STATEMENT OF THE ANIMAL WELFARE INSTITUTE

The Animal Welfare Institute very much appreciates this opportunity to offer testimony as the subcommittee considers fiscal year 2012 funding priorities under the Commerce, Justice, Science, and Related Agencies Appropriations bill. This statement addresses activities under the Office of Justice Programs (OJP) of the Department of Justice (DOJ).

We commend the DOJ's OJP for awarding, through its Bureau of Justice Assistance (BJA), a grant to the Association of Prosecuting Attorneys (APA) for its new program of training, technical support, and other assistance for prosecutors, members of the law enforcement community, and other involved parties to enhance the prosecution of animal abuse and animal fighting crimes. This is a very exciting development and we are proud to support APA in this new effort and to have been active participants in the two training conferences it has run so far. We respectfully urge the subcommittee to continue funding the BJA's National Animal Cruelty and Fighting Initiative and to encourage the Department's ongoing interest in addressing animal-related crimes.

The connection between animal abuse and other forms of violence has been firmly established through experience and through scientific studies. Among the most well-documented relationships is the one that exists between animal cruelty and domestic violence, child abuse, and elder abuse. For example, up to 71 percent of victims entering domestic violence shelters have reported that their abusers threatened, injured, or killed the family pet; batterers do this to control, intimidate, and retaliate against their victims. In just one recent case in Florida, a son brutally beat his elderly mother's dog in order to intimidate and manipulate her. Batterers threaten,

harm, or kill their children's pets in order to coerce them into allowing sexual abuse or to force them into silence about abuse.<sup>1</sup>

It has also been shown that criminals and troubled youth have high rates of animal cruelty during their childhoods, perpetrators were often victims of child abuse themselves,<sup>2</sup> and animal abusers move on to other crimes:

—In 1997, the Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA) released the results of a review of animal cruelty cases it had prosecuted between 1975 and 1996. Seventy percent of the individuals involved in those cases had been involved in other crimes, and animal abusers were five times more likely to commit a violent offense against other people.

—Researchers have found that pet abuse is 1 of 4 significant predictors of intimate partner violence.<sup>3</sup>

—In a 2010 study commissioned by the American Society for the Prevention of Cruelty to Animals (ASPCA),<sup>4</sup> 78 percent of the law enforcement officers surveyed “believe that animal abusers are more likely to be involved in interpersonal violence and other violent crimes.”

Another all-too-common connection is the one between animal fighting (which includes both dog fighting and cockfighting) and gangs, drugs, illegal guns, and other offenses. The Animal Legal and Historical Center at the Michigan State University College of Law describes dog fighting in these stark terms:

“The notion that dogfighting is simply an animal welfare issue is clearly erroneous. Until the past decade, few law enforcement officials or government agencies understood the scope or gravity of dogfighting. As these departments have become more educated about the epidemic of dogfighting and its nexus with gang activity, drug distribution rings, and gambling networks, many have implemented well-designed, sophisticated task forces. The magnitude of criminal activity concurrently taking place at the average dogfight is of such a scope as to warrant the involvement of a wide range of agencies, including local, regional, and Federal law enforcement agencies and their specialized divisions such as organized crime units, SWAT teams, and vice squads, as well as animal control agencies and child protective services.”

It is also worth noting that, as part of its initiative, BJA will be publishing a monograph that will address prosecutors' interest in animal fighting, and will report the results of two End Dogfighting programs run by the Humane Society of the United States. Based on the premise that the early identification of and intervention in animal fighting can help prosecutors and law enforcement reduce crime and interrupt the cycle of violence, the End Dogfighting program seeks to identify and reduce animal fighting and gang influences in at-risk communities by fostering more positive relationships between at-risk youth (many of whom are already gang members) and their dogs.

Animal fighting, whether involving dogs, roosters, or other animals, is barbaric and is a violent crime in the truest sense of the term. It causes immense suffering to countless numbers of innocent animals and its presence threatens the safety of the entire community. It is illegal under both State and Federal law, so it well serves the entire community for law enforcement to have the most powerful tools possible to eradicate it.

At the same time, it must be remembered that animal abuse is more than a “gateway” behavior. It is also a crime in its own right. It is a crime everywhere in the United States, and certain egregious acts are felonies in 46 States and the District of Columbia. But not all laws are created equal; activity that constitutes a felony in one State may still only be a misdemeanor in another. In some States, cruelty rises to a felony only upon a second or third offense, or only if the animal dies; if he survives, no matter how severe his injuries, it is still a misdemeanor.

The key to offering animals the most protection possible, however weak or strong the statute, lies in vigorous enforcement of the law and prosecution of violators. While there are many in law enforcement and the courts who recognize animal abuse for the violent crime that it is and act accordingly, there are those who do not take it seriously, treating it as no more urgent than a parking infraction. Others

<sup>1</sup>The study “I’ll only help you if you have two legs”, or Why human services professionals should pay attention to cases involving cruelty to animals by Loar (1999), as cited on the Web site of the National Coalition Against Domestic Violence ([www.ncadv.org](http://www.ncadv.org)).

<sup>2</sup>“Woman’s Best Friend: Pet Abuse and the Role of Companion Animals in the Lives of Battered Women,” by Flynn (2000), as cited at [www.ncadv.org](http://www.ncadv.org).

<sup>3</sup>Walton-Moss, et al, “Risk factors for intimate partner violence and associated injury among urban women”. *Journal of Community Health*, 30(5), 377-389 (2005).

<sup>4</sup>“Public and Professional Perspectives on Animal Cruelty”, December 2010 ([www.aspc.org](http://www.aspc.org)).

genuinely want to act decisively but may lack the necessary resources, support, or expertise. Moreover, enforcement can be complicated by the laws themselves—weak laws are bad enough, but additional problems may arise from confusion over jurisdiction or limitations in coverage—or by pressure to dispose of cases quickly.

This is where BJA's National Animal Cruelty and Animal Fighting Initiative comes in. It recognizes that animal cruelty and animal fighting crimes not only victimize some of the most innocent and vulnerable members of society, but also create a culture of violence—and a cadre of violent offenders—that affects children, families in general, and society at large. Therefore, preventing and prosecuting these crimes will benefit not only the animals, but the entire community as well by reducing the overall level of violence.

In order to support and enhance the effectiveness of prosecutors in their efforts to achieve this goal, the Association of Prosecuting Attorneys, with BJA's support, is implementing a program to provide the following:

- training conferences and webinars;
- publications;
- technical assistance; and
- online resources, including:
  - a library of briefs;
  - motions;
  - search warrants;
  - legal memos; and
  - State-by-State case law.

It has assembled an advisory council composed of prosecutors, investigators, law enforcement, veterinarians, psychologists, members of the animal protection and domestic violence communities, and others, to identify issues, resource needs, and strategies. It brings these same professionals together to provide its multidisciplinary training, and also calls on them individually for topic-specific Web-based training and materials.

All of this is directed toward two audiences: those who still need to be convinced of the importance of preventing and punishing animal-related crimes, for the sake both of the animals and of the larger community; and those who are dedicated to bringing strong and effective cases against animal abusers but may need assistance to do so.

OJP/BJA showed great vision in recognizing that by identifying precursor crimes, such as animal cruelty and animal fighting, and ensuring adequate adjudication of such cases, our criminal justice system can reduce the incidence of family and community violence and change the paths of potential future violent offenders. The National Animal Cruelty and Animal Fighting Initiative sends a very strong message to prosecutors and law enforcement that crimes involving animals are to be taken seriously and pursued vigorously, and offenders must be held accountable.

---

LETTER FROM CAPTAIN RANDY BOGGS, FOR-HIRE RECREATIONAL FISHERMAN

APRIL 14, 2011.

Hon. BARBARA A. MIKULSKI,  
*Chairman, Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies, Washington, DC.*

Hon. KAY BAILEY HUTCHISON,  
*Ranking Member, Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies, Washington, DC.*

RE: National Oceanic and Atmospheric Administration's fiscal year 2012 budget request

DEAR CHAIRMAN MIKULSKI AND RANKING MEMBER HUTCHISON: My name is Randy Wayne Boggs and I appreciate the opportunity to voice support for the National Oceanic and Atmospheric Administration's (NOAA) request for \$54 million in funding for the National Catch Share Program in fiscal year 2012. I also oppose any effort to prohibit funding for new catch shares in the United States.

As you may know, the for-hire industry, including charter and head boats, provides access to millions of individual anglers in the Gulf of Mexico every year. I own five charter boats of which I personally operate one. I also manage the sale of fuel, bait, and ice at SanRoc Cay Marina in Orange Beach, Alabama for the recreational and charter for hire boats. Three of our vessels are engaged in party boat/head boat type fishing; this is where we place an individual or a small group together on the boat to go fishing. Since it is a large volume of people, we provide access to the fishery for a very modest fee.



In the past I have served on ad hoc and advisory panels to the Gulf of Mexico Fishery Management Council. I have also served as vice president of the Orange Beach Fishing Association, and I hold three college degrees. I participate in the rulemaking process for Gulf of Mexico fisheries as much as possible.

Due to the Deepwater Horizon oil spill in April 2010 we are faced with an uncertain future. Millions of gallons of crude oil were released into the Gulf of Mexico in the summer months of 2010 when the reef fish that form the majority of our catch were spawning. It is unknown how the oil spill will effect or has affected the spawn of fish in the Gulf of Mexico. As a fisherman this is a great concern to me and many others. We are already facing the shortest fishing season on record.

We have seen the fishing industry suffer on the Atlantic coast with multiple closures for the recreational and charter for hire sectors. At the urging of the Council we are trying to become more accountable in our fishery. We have been working with the Council to develop a plan for the charter for-hire and head boat sectors so that we will not have to participate in a derby style fishery where we fish 52 days regardless of weather, fatigue and at less than a premium price for the access to a premium fishery.

We are afraid if we continue in this derby fishery our seasons and bag limits will become so restrictive that we will be unable to continue as professional fishermen and we will have to seek some other way to make a living.

We have developed a plan for the head boats and are asking the Council for a voluntary, pilot Individual Fishing Quota (IFQ) program, a type of catch share, which we have seen work in the commercial red snapper fishing fleet in the gulf. The price they receive for their fish has almost doubled. They have the freedom to manage their fish and fishery, work when sea conditions are safe and in a manner that promotes sustainable fishing for generations to come.

It has taken many years to get these programs on the agenda with the Council and now with the budget crises we face an even more uncertain future if the administrations fiscal year 2012 catch share budget is not passed. The head boats certainly would not mind absorbing a portion of the cost of these programs, but if the administration has no money to monitor the programs all of our work would be in vain.

An IFQ Program for the head boats would also improve the underlying data used for fisheries management by making the process computerized. Law enforcement fisheries management data would be provided in real time which has proven to be the saving grace of the commercial red snapper IFQ Program.

Thank you for the opportunity to testify on this issue. If there is any additional information that I can provide I would welcome the opportunity to work with this subcommittee in any way possible. It is imperative that we keep the \$54 million catch share budget that has been requested in the budget for 2012. There are far too many fishermen that have suffered through oil spills, hurricanes, bad weather, and a slow process in order to become accountable fishermen to let the funding for these programs fall to the way side.

CAPTAIN RANDY BOGGS.

---

PREPARED STATEMENT OF THE COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

The Columbia River Inter-Tribal Fish Commission (CRITFC) is pleased to share our views on the Department of Commerce National Oceanic and Atmospheric Administration (NOAA) Fisheries' fiscal year 2012 budget and has identified the following funding needs:

- \$26.6 million for the Columbia River Mitchell Act hatchery program to implement reforms of which \$6.7 million (or 25 percent of the enacted amount) is directed to the tribes to enhance supplementation (natural stock recovery) programs;
- \$11,603,000 for the Pacific Salmon Treaty Program, of which \$9,759,000 is for the implementation of the 2009–2018 agreement, and previous base programs, and \$1,844,000 is for the Chinook Salmon Agreement Implementation;
- \$110 million for the Pacific Coastal Salmon Recovery Fund to support on-the-ground salmon restoration activities.

*Background.*—The Columbia River Inter-Tribal Fish Commission was founded in 1977 by the four Columbia River treaty tribes:

- Confederated Tribes of the Umatilla Indian Reservation;
- Confederated Tribes of the Warm Springs Reservation of Oregon;
- Confederated Tribes and Bands of the Yakama Nation; and
- Nez Perce Tribe.

CRITFC provides coordination and technical assistance to the tribes in regional, national, and international efforts to protect and restore the fisheries and fish habitat.

In 1855, the United States entered into treaties with the four tribes.<sup>1</sup> The tribes' ceded millions of acres of our homelands to the United States and the United States pledged to honor our ancestral rights, including the right to fish. Unfortunately, a long history of hydroelectric development, habitat destruction and overfishing by non-Indians brought the salmon resource to the edge of extinction with 12 salmon and steelhead trout populations in the Columbia River basin listed under the Endangered Species Act (ESA).

Today, the CRITFC tribes' are among the most successful fishery managers in the country leading restoration efforts and working with State, Federal, and private entities. CRITFC has, and is currently updating, a plan that outlines principles and objectives designed to halt the decline of salmon, lamprey, and sturgeon populations and rebuild the fisheries to levels that support tribal ceremonial, subsistence and commercial harvests. To achieve these objectives, the plan emphasizes strategies that rely on natural production, healthy rivers, and collaborative efforts.

Several key regional agreements were completed in 2008. The Columbia Basin Fish Accords set out parameters for management of the Federal Columbia River Power System for fish passage. New agreements in *United States v. Oregon and the Pacific Salmon Commission* established fishery management criteria for fisheries ranging from the Columbia River to southeast Alaska. The *United States v. Oregon* agreement also contains provisions for hatchery management in the Columbia River Basin. The terms of all three agreements run through 2017. We have successfully secured other funds to support our efforts to implement these agreements, including funds from the Bonneville Power Administration (BPA), the Department of the Interior, and the Southern Fund of the Pacific Salmon Treaty, to name just a few. Continued Federal funding support is needed to accomplish the management objectives embodied in the agreements.

*Columbia River (Mitchell Act) Hatchery Program.*—Restoring Pacific salmon and providing for sustainable fisheries requires using the Columbia River Mitchell Act hatchery program to supplement naturally spawning stocks and populations. To accomplish this goal, \$26.6 million is requested for the tribal and State co-managers to jointly reform the Mitchell Act hatchery program. Of this amount, \$6.7 million, or 25 percent of enacted funding, will be made available to the Columbia River Treaty Tribes for supplementation (natural stock recovery) programs. The Mitchell Act program provides regional economic benefits. NOAA—Fisheries estimates that the program generates about \$38 million in income and supports 870 jobs.

Since 1982, CRITFC has called for hatchery reform to meet recovery needs and meet mitigation obligations. In 1991, this subcommittee directed that "Mitchell Act hatcheries be operated in a manner so as to implement a program to release fish in the upper Columbia River basin above the Bonneville Dam to assist in the rebuilding of upriver naturally spawning salmon runs." Since 1991, we have made progress in increasing the upstream releases of salmon including Mitchell Act fish that have assisted the rebuilding and restoration of naturally spawning of upriver runs of chinook and coho. These efforts need to continue.

We now face the challenges of managing for salmon populations listed for protection under the ESA, while also meeting mitigation obligations. The Draft Environmental Impact Statement (DEIS) for operation of Columbia River basin hatcheries released by NOAA in 2010 illustrates the conundrum we face. While the DEIS, which assumes level funding for Mitchell Act hatcheries, points out the need for hatchery reform, the implementation scenarios for the proposed alternatives to the status quo all call for substantial reductions in hatchery releases. From the tribal perspective the proposed alternatives will not result in the delisting of salmon populations or meet mitigation obligations. Under the proposed alternatives the future is increased regulation under the ESA, resulting in more constrained fisheries along the west coast. The funding for the Mitchell Act program should be increased along with natural stock recovery program reform (supplementation) so that we can make progress toward ESA delisting. This would transition the Mitchell Act program to a much more effective mitigation program.

We support hatchery reform to aid in salmon recovery, while meeting mitigation obligations. The CRITFC tribes are leaders in designing and managing hatchery facilities to aid in salmon restoration and believe similar practices need to be implemented throughout the basin to reform current hatchery production efforts. Addi-

<sup>1</sup>Treaty with the Yakama Tribe, June 9, 1855, 12 Stat. 951; Treaty with the Tribes of Middle Oregon, June 25, 1855, 12 Stat. 963; Treaty with the Umatilla Tribe, June 9, 1855, 12 Stat. 945; Treaty with the Nez Perce Tribe, June 11, 1855, 12 Stat. 957.

tional funding is necessary to reform Mitchell Act hatcheries to accomplish conservation and mitigation objectives. The administration's proposed fiscal year 2012 funding level continues years of inadequate funding. The result is deteriorating facilities that do not serve our objectives.

*Evidence To Support Tribal Salmon Restoration Programs Under the Mitchell Act.*—The tribes' approach to salmon recovery is to put fish back in to the rivers and protect the watersheds where fish live. Scientific documentation of tribal supplementation success is available upon request. The evidence is seen by the increasing returns of salmon in the Columbia River Basin. Wild spring chinook salmon are returning in large numbers in the Umatilla, Yakima, and Klickitat tributaries. Coho in the Clearwater River are now abundant after Snake River coho were declared extinct. Fish are returning to the Columbia River Basin and it is built on more than 30 years of tribal projects.

Once considered for listing under the ESA where only 20,000 fall chinook returned to the Hanford Reach on the Columbia River in the early 1980s. This salmon run has been rebuilt through the implementation of the Vernita Bar agreement of mid-1980s combined with a hatchery program that incorporated biologically appropriate salmon that spawn naturally upon their return to the spawning beds. Today, the Hanford Reach fall chinook run is one of the healthiest runs in the basin. Supporting fisheries in Alaska, Canada, and the mainstream Columbia River, more than 200,000 fall chinook destined for the Hanford Reach returned to the mouth of the Columbia River 2010.

In the Snake River Basin, fall chinook has been brought back from the brink of extinction. Listed as threatened under the ESA, the estimated return of naturally spawning Snake River fall chinook averaged 328 adults from 1986–1992. In 1994, fewer than 2,000 Snake River fall chinook returned to the Columbia River Basin. Thanks to the Nez Perce Tribe's modern supplementation program fall chinook are rebounding. Snake River fall chinook are well on their way to recovery and ESA delisting. More than 40,000 fall chinook made it past Lower Granite Dam in 2010. More than 10,000 of those fish were wild, nearly twice the previous record return since the dam was constructed in 1975.

*Pacific Salmon Treaty Program.*—CRITFC supports the U.S. Section recommendation of \$11,603,000 for Pacific Salmon Treaty implementation. Of this amount, \$9,759,000 is for the Pacific Salmon Treaty base program with Alaska, Oregon, Idaho, Washington, and NOAA to share as described in the U.S. Section of the Pacific Salmon Commission's budget justification for fiscal year 2012. In addition, we support \$1,884,000 as first provided in 1997 to carry out necessary research and management activities to implement the abundance based management approach of the Chinook Chapter to the Treaty. The recommended amount represents an increase of about \$4.1 million for the Pacific Salmon Treaty program for the States to implement the provisions and management and technical changes adopted by the United States and Canada in 1999 and continuing in the 2009–2018 agreement. These funds are subjected annually to a strict technical review process.

*Pacific Coastal Salmon Recovery Program (PCSRF)/Watershed Restoration.*—Beginning in 1996, additional funding has been sought by the State of Alaska, the Pacific Northwest States, and the treaty tribes to serve critical unmet needs for the conservation and restoration of salmon stocks shared in these tribal, State, and international fisheries. The PCSRF program provides a significant role in accomplishing the goals of this shared effort. We recommend restoring the PCSRF fiscal year 2012 funding level to the fiscal year 2002 appropriated level of \$110 million. Long-term economic benefits can be achieved by making PCSRF investments on the ground to rebuild sustainable, harvestable salmon populations into the future.

The State and tribal co-managers have responded to concerns raised by the Congress regarding accountability and performance standards to evaluate and monitor the success of this coast wide program. The co-managers have developed an extensive matrix of performance standards to address these concerns which includes the use of monitoring protocols to systematically track current and future projects basin-wide. Tribally sponsored watershed projects are based on the best science, are competently implemented and adequately monitored, and address the limiting factors affecting salmon restoration. Projects undertaken by the tribes are consistent with CRITFC's salmon restoration plan and the programmatic areas identified by the Congress.

*Department of Justice (DOJ).*—DOJ maintains tribal government-specific grant programs administered by the Office of Justice Programs, the Office of Community Oriented Policing Services and the Office on Violence Against Women. These programs are critically important to the Commission's member tribes. The importance of these programs was underscored by passage of the Tribal Law and Order Act, signed into law on July 29, 2010. Preserving the fiscal year 2010 enacted budget

for these programs is vital to maintaining law enforcement programs of the Commission and its member tribes. We also support the Yakama Nation request for a DOJ needs assessment grant in fiscal year 2012.

In summary, the CRITFC and its four-member tribes have developed the capacity and infrastructure to lead in restoring and rebuilding salmon populations of the Columbia Basin. Our collective efforts protect our treaty reserved fishing rights and we also partner with the non-Indian community to provide healthy, harvestable salmon populations for all citizens to enjoy. This is a time when increased effort and participation are demanded of all of us and we ask for your continued support of a coordinated, comprehensive effort to restore the shared salmon resource of the Columbia and Snake River Basins. We will be pleased to provide any additional information that this subcommittee may require.

---

PREPARED STATEMENT OF THE COASTAL STATES ORGANIZATION

The Coastal States Organization (CSO) is a nonpartisan, nonprofit organization that represents the interests of the Governors of the 35 coastal States, territories, commonwealths, and Washington, DC. Established in 1970, CSO focuses on legislative and policy issues relating to the sound management of coastal, Great Lakes, and ocean resources and is recognized as the trusted representative of the collective interests of the coastal States on coastal and ocean management. For fiscal year 2012, CSO supports the following coastal programs and funding levels within the National Oceanic and Atmospheric Administration (NOAA):

—Coastal Zone Management Program (§§ 306/306A/309)—\$70 million.

—Coastal and Estuarine Land Conservation Program—\$25 million.

Every American, regardless of where he or she lives, is fundamentally connected to our coasts, oceans, and Great Lakes. These valuable resources are a critical framework for commerce, recreation, energy, environment, and quality of life. The U.S. economy is an ocean and coastal economy: though Federal investment does not reflect it, the oceans and coasts provide an irreplaceable contribution to our Nation's economy and quality of life. With sectors including marine transportation, tourism, marine construction, aquaculture, ship and boat building, mineral extraction, and living marine resources, the U.S. ocean-based sector alone provides \$138 billion to U.S. Gross Domestic Product and more than 2.3 million jobs to our citizens. In addition, the annual contribution of coastal counties is in the trillions of dollars, from ports and fishing to recreation and tourism. In 2007, our Nation's coastal counties provided \$5.7 trillion to the economy and were home to 108.3 million people on only 18 percent of the U.S. land area. If these counties were their own country, they would have the world's second-largest economy. Coasts and oceans also add to the quality of life of nearly one-half of all Americans who visit the seashore each year; the nonmarket value of recreation alone is estimated at more than \$100 billion.

Today, our Nation's coasts are as vital for our future as they are vulnerable. As a result of their increasing draw and economic vitality, we are exerting more pressure on our coastal and ocean resources. This demand, combined with an increase in natural hazards such as sea level rise, hurricanes and other flooding events, can be proven to show that the country is in danger of losing these invaluable assets. Despite the difficult budgetary times, we need to provide more funding and support for the key programs that are on the front lines of this daily battle, the programs utilizing the advances in coastal and ocean science, research, and technology to manage our coastal and ocean resources for future generations.

Programs that are engaged in these important efforts and working to balance the protection of coastal and ocean resources with the need for sustainable development include the Coastal Zone Management program and the Coastal and Estuarine Land Conservation Program (CELCP). These programs reside within NOAA and provide direct funding or services to the States and territories, which account for a small portion of the total NOAA Federal budget. The funding for these programs is very cost-effective, as these grants are matched by the States and are used to leverage significantly more private and local investment in our Nation's coasts. Increased funding for these programs that provide on-the-ground services to our local communities and citizens is well worth the investment.

COASTAL ZONE MANAGEMENT PROGRAM (§§ 306/306A/309)

CSO requests that these grants be funded at a level of \$70 million, an amount just more than fiscal year 2010 enacted levels. This funding will be shared among the 34 States and territories that have approved coastal zone management programs. Pursuant to the Coastal Zone Management Act (CZMA), NOAA, and the States partner to implement coastal zone management programs designed to bal-

ance protection of coastal and ocean resources with the need for sustainable development of coastal communities. States have the flexibility to develop programs, policies and strategies that are targeted to their State priorities while advancing national goals. Under the CZMA program, the States receive grants from NOAA that are matched by the States and are used to leverage significantly more private and local investment in our Nation's coastal areas. These grants have been used to reduce environmental impacts of coastal development, resolve conflicts between competing coastal uses, and provide critical assistance to local communities in coastal planning and resource protection.

The CZMA State grants have essentially remained level-funded for 10 years, resulting in a decreased capacity in the State coastal zone management programs and less funding being granted out to local communities. An increase in funding to \$91 million would mean level funding that accounts for inflation over the last 10 years and would provide an additional \$300,000–\$800,000 for each State and territory; however, CSO recognizes that the fiscal climate makes this type of an increase difficult if not impossible. Under the requested level of \$70 million of funding, States and territories would receive between \$850,000 and just more than \$2,000,000 to carry out their coastal management programs based on a formula accounting for shoreline miles and coastal population. The additional funding would also account for the addition of Illinois as a State with an approved coastal program (which is likely during fiscal year 2012). Illinois would be eligible to receive the maximum allotted funds of \$2,000,000. Without an increase, the remaining 34 States would receive less funding than in previous years because of the additional State demand. With an increase to \$70 million, States would not be punished for the addition of Illinois and could focus on activities that address coastal water pollution, work to conserve and restore habitat, help plan with and educate communities, provide for public access to the shore, and prepare to adapt to changing sea and lake levels and the threat of increasing storms. The following are a few examples of activities in Maryland and Texas that CZMA State grants have funded over the last year. These types of examples and more can be found around the Nation.

#### *Maryland*

CZMA funding was utilized to launch Maryland's Coastal Atlas, an online mapping and modeling tool used to inform management decisions for the Chesapeake Bay, and coastal and ocean uses. From finding the best location for renewable energy projects to locating sand resources needed for beach replenishment to helping local communities identify areas vulnerable to sea level rise and erosion, the Atlas will assist users in identifying potential conflicts so that they can then be avoided early in the planning process.

In response to sea level rise concerns, Maryland invested CZMA funding to develop computer models to assist local communities in evaluation of and planning for shoreline change. They directly assisted Queenstown, the city of Annapolis and Worcester, Dorchester, Somerset, Caroline, and Anne Arundel counties to plan for the anticipated impacts of sea level rise. The program also conducted hands-on training for marine contractors on shoreline protection techniques.

#### *Texas*

CZMA funding was used to purchase approximately 10 acres of woodlands, known as the Henderson Tract, for habitat preservation and public access and education. The Henderson Tract is adjacent to approximately 1,500 feet of the existing Tule Creek system, an improved earthen drainage conveyance that carries stormwater runoff from the adjacent FM 3036-North drainage basin of the Tule Creek watershed and from there to Little Bay and Aransas Bay. The property will be operated as a nature preserve, with natural, easily maintained trails, and features such as in-stream and off-channel pools, shallow upland ponds, grassy swales, and low-impact development techniques that harvest and beneficially use runoff for wildlife and habitat.

The Texas General Land Office established guidelines in 2010 for the development of local Erosion Response Plans (ERPs) that can incorporate a building set-back line. The guidelines for ERPs include provisions for prohibition of building habitable structures seaward of the building set-back line, exemptions for certain construction seaward of the set-back line, stricter construction requirements for exempted construction, improvements to and protection of public beach access points and dunes from storm damage, and procedures for adoption of the plans. Development of ERPs by several local governments using CZMA funding is underway.

Several years ago and appropriate at the time, a cap of approximately \$2 million was instituted to allow for funding to spread more evenly across the States and territories, so as to prevent most of the funding from going entirely to the larger, more

heavily populated States. But, now, more than one-half of the States have met the cap and no longer receive an increase in funding, despite increased overall funding for CZMA State grants. Therefore, CSO requests that language be included in the appropriations bill declaring that each State will receive no less than 1 percent and no more than 5 percent of the additional funds over and above previous appropriations. As was provided for in fiscal year 2010, CSO requests that language be included in the appropriations bill that directs NOAA to refrain from charging administrative costs to these grants. This is to prevent any undue administrative fees from NOAA from being levied on grants intended for States.

#### CELCP

CSO requests \$25 million for CELCP. Authorized by the Congress in 2002, CELCP protects “those coastal and estuarine areas with significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational States to other uses.” To date, the Congress has appropriated nearly \$255 million for CELCP. This funding has allowed for the completion of more than 150 conservation projects, with more in progress. CELCP projects in 27 of the Nation’s 35 coastal States have already helped preserve approximately 50,000 acres of the Nation’s coastal treasures. All Federal funding has been leveraged by at least an equal amount of State, local, and private investments, demonstrating the broad support of the program, the importance of coastal protection throughout the Nation, and the critical role of Federal funding to its success.

The preservation of coastal and estuarine areas is critical to both humans and the environment. These areas shield us from storms, protect us from the effects of sea-level rise, filter pollutants to maintain water quality, provide shelter, nesting and nursery grounds for fish and wildlife, protect rare and endangered species and provide access to beaches and waterfront areas. CELCP is the only program entirely dedicated to the conservation of these vital coastal areas.

The demand for CELCP funding far outstrips what has been available in recent years. In the last 3 years, NOAA, in partnership with the States, has identified more than \$270 million of vetted and ranked projects. As demand for CELCP funding has grown, the funding has not kept pace. Adequate funding is needed to meet the demand of the increasingly high-quality projects developed by the States and submitted to NOAA.

This March, the CELCP program was formally authorized as part of H.R. 146, the Omnibus Public Lands Management Act of 2009, once again showing the broad, bipartisan support for coastal and estuarine land conservation. In recognition of the significant demand for CELCP projects, H.R. 146 authorized the program at \$60 million annually.

CSO greatly appreciates the support of the subcommittee has provided in the past. Its support has assisted these programs in working together to protect our coasts and sustain our local communities. We hope you will take our requests into consideration as you move forward in the fiscal year 2012 appropriations process.

---

#### PREPARED STATEMENT OF THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

The Federation of American Societies for Experimental Biology (FASEB) respectfully requests an appropriation of \$7.8 billion for the National Science Foundation (NSF) in fiscal year 2012. This is the same funding level contained in the President’s fiscal year 2012 budget request and recommended by the bipartisan America COMPETES Reauthorization Act of 2010.

As a federation of 23 scientific societies, FASEB represents more than 100,000 life scientists and engineers, making it the largest coalition of biomedical research associations in the United States. FASEB’s mission is to advance health and welfare by promoting progress and education in biological and biomedical sciences, including the research funded by NSF, through service to its member societies and collaborative advocacy. FASEB enhances the ability of scientists and engineers to improve—through their research—the health, well-being, and productivity of all people.

NSF is the only Federal research agency dedicated to supporting basic research and education across all fields of science and engineering. With just 4 percent of the Federal research and development budget, NSF funds more than 60 percent of non-biomedical life science research at academic institutions in fields such as mathematics, geosciences, computer science, and social sciences. NSF also plays a significant role in advancing biological research; 42 Nobel Prizes have been awarded to

NSF-funded scientists for contributions in physiology or medicine. One of these Nobel Prizes was awarded for work that led to the development of magnetic resonance imaging, which is now a key diagnostic tool in hospitals around the world. NSF-funded research truly creates the foundation from which new technologies and therapeutics emerge.

Through its rigorous peer-review that enables experts to identify only the best and most-promising research to be funded, NSF has a history of identifying scientific talent early and funding some of science's most important discoveries. For example, a team of researchers led by a NSF-funded synthetic biologist has genetically engineered yeast to produce a precursor to artemisinin, an effective anti-malaria drug. Before this scientific breakthrough, a slow and expensive process was required to extract the chemical from its natural source, the sweet wormwood plant. Researchers hope that scaled-up production of yeast-derived artemisinin will eventually provide an adequate and affordable supply of the drug to people worldwide. Using this groundbreaking technique, yeast and bacteria may soon be employed to synthesize other therapeutics, such as vaccines. Another example of NSF-funded research with medical applications is the use of robotics, information technology, and biomedicine to develop devices that revolutionize surgical procedures. Robotic arms remotely controlled through a system of levers and 3D high-resolution images of the operative site are enabling surgeons to execute more precise movements, reducing the physical impact of operations on patients, and shortening recovery time. The increased accuracy of robotically enhanced surgery has the potential to improve the effectiveness of treatments, such as the removal of cancerous tumors from the eye.

NSF is also committed to achieving excellence in science, technology, engineering, and math education at all levels. The agency supports a wide variety of initiatives aimed at preparing science teachers, developing innovative curricula, and engaging students in the process of scientific discovery. One of many NSF programs to prepare future scientists, the Graduate Research Fellowship Program (GRFP) annually awards approximately 2,000 3-year fellowships to outstanding graduate students pursuing advanced degrees in science, technology, engineering, and or mathematics. NSF graduate research fellows are making important scientific contributions, including research to improve preclinical testing of artificial heart valves and a study to understand how neuronal networks enable the brain to carry out its problem-solving functions. Past recipients of NSF GRFP awards have gone on to become leading scientists and Nobel Prize winners. In this way, NSF helps foster creative thinking in science, engineering, and mathematics by supporting the next generation of researchers. Moreover, by funding research projects and education initiatives at institutions across the country, NSF ensures that future generations will be able to meet the technical demands of 21st century jobs.

There is wide agreement that the Nation's future is inextricably linked to its capacity for innovation. The United States needs an educated populace, a cadre of world-class scientists and engineers, and a well-developed research infrastructure capable of supporting competitively funded research projects. Recent investment in NSF programs has resulted in new projects, increased graduate training, and an expanded capacity for innovation. Reduction of that effort would mean that fewer university researchers would receive support for critical research and education projects, jeopardizing the jobs of many scientists, engineers, and technical personnel. The NSF budget has both immediate and long-term consequences for the Nation's economy, security, and quality of life. Strong and sustained investment in NSF will enable the transformational research and training essential to the future success and competitiveness of the United States. Furthermore, because of the collaborative work of science agencies and the increasingly interdisciplinary nature of scientific research, support for the Federal research and development portfolio has never been more important to the Nation's prosperity.

Thank you for the opportunity to offer FASEB's support for NSF.

---

PREPARED STATEMENT OF THE GEOLOGICAL SOCIETY OF AMERICA

SUMMARY

The Geological Society of America (GSA) urges the Congress to appropriate at least \$7.67 billion for the National Science Foundation (NSF) in fiscal year 2012, an increase of \$894 million or 13 percent compared with the fiscal year 2010 enacted level. This funding level is consistent with the President's fiscal year 2012 budget request for the NSF and the fiscal year 2012 authorized level of \$7.8 billion under the America COMPETES Act.

GSA supports strong and growing investments in Earth science research and education at NSF and other Federal agencies. Substantial increases in Federal funding for Earth science research and education are needed to ensure the health, vitality, and security of society and for stewardship of Earth. These investments are necessary to address such issues as energy resources, water resources, climate change, and natural hazards. Earth science research forms the basis for training and educating the next generation of Earth science professionals.

GSA, founded in 1888, is a scientific society with more than 23,000 members from academia, government, and industry in all 50 States and more than 90 countries. Through its meetings, publications, and programs, GSA enhances the professional growth of its members and promotes the geosciences in the service of humankind. GSA encourages cooperative research among Earth, life, planetary, and social scientists, fosters public dialogue on geoscience issues, and supports all levels of Earth science education.

#### RATIONALE

Science and technology are engines of economic prosperity, environmental quality, and national security. Federal investments in scientific research pay substantial dividends. According to the National Academies' report "Rising Above the Gathering Storm (2007)", "Economic studies conducted even before the information-technology revolution have shown that as much as 85 percent of measured growth in U.S. income per capita was due to technological change." In 2010, the National Academies issued an updated report, "Above the Gathering Storm, Revisited", which says:

"It would be impossible not to recognize the great difficulty of carrying out the Gathering Storm recommendations, such as doubling the research budget, in today's fiscal environment . . . with worthy demand after worthy demand confronting budgetary realities. However, it is emphasized that actions such as doubling the research budget are investments that will need to be made if the Nation is to maintain the economic strength to provide for its citizens healthcare, social security, national security, and more. One seemingly relevant analogy is that a non solution to making an over-weight aircraft flight worthy is to remove an engine."

Likewise, the National Commission on Fiscal Responsibility and Reform, headed by Erskine Bowles and Alan Simpson, said:

"Cut and invest to promote economic growth and keep America competitive. We should cut redtape and unproductive government spending that hinders job creation and growth. At the same time, we must invest in education, infrastructure, and high-value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs."

The Earth sciences are critical components of the overall science and technology enterprise. Growing investments in Earth science research are required to stimulate innovations that fuel the economy, provide security, and enhance the quality of life. Substantial increases in Federal funding for Earth science research are needed to ensure the health, vitality, and security of society and for Earth stewardship. Earth science research provides knowledge and data essential for developing policies, legislation, and regulations regarding land, mineral, energy, and water resources at all levels of government.

#### BROADER IMPACTS OF EARTH SCIENCE RESEARCH AND EDUCATION

It is critically important to significantly increase NSF's investments in Earth science research and education to meet challenges posed by human interactions with Earth's natural system and to help sustain these natural systems and the economy. Increased investments in NSF's Earth science portfolio are necessary to address such issues as natural hazards, energy, water resources, and climate change.

- Natural hazards—such as earthquakes, tsunamis, volcanic eruptions, floods, droughts, and hurricanes—remain a major cause of fatalities and economic losses worldwide. An improved scientific understanding of geologic hazards will reduce future losses through better forecasts of their occurrence and magnitude. The devastating earthquake in Haiti on January 12, 2010, that killed more than 200,000 people, the damaging earthquake in New Zealand on February 21, 2011, and the small volcanic eruptions in Iceland that disrupted global air travel in April 2010 emphatically demonstrate the need for increased NSF investments in fundamental Earth science research that stimulate innovations in natural hazards monitoring and warning systems.
- Energy and mineral resources are critical to the functioning of society and to national security and have positive impacts on local, national, and international



economies and quality of life. These resources are often costly and difficult to find, and new generations of geoscientists need the tools and expertise to discover them. In addition, management of their extraction, use, and residue disposal requires a scientific approach that will maximize the derived benefits and minimize the negative effects. Improved scientific understanding of these resources will allow for their better management and utilization while at the same time considering economic and environmental issues. This is particularly significant because shifting resource demands often reframe our knowledge as new research—enabling technologies become available. For example, widespread deployment of clean-energy technologies can reduce greenhouse gas emissions, mitigate climate change, and reduce dependence on foreign oil. Many emerging technologies—such as wind turbines, solar cells, and electric vehicles—depend on rare Earth elements and other scarce elements that currently lack diversified sources of supply. China accounts for 95 percent of world production of rare Earth elements although it has only 36 percent of identified world reserves (U.S. Geological Survey, 2010). A renewed Federal commitment to innovative research and education on minerals is needed to address these issues.

- The availability and quality of surface water and groundwater are vital to the well-being of both society and ecosystems. Greater scientific understanding of these critical resources—and communication of new insights by geoscientists in formats useful to decisionmakers—is necessary to ensure adequate and safe water resources for the future. NSF’s new program solicitation on water sustainability and climate is designed to address major gaps in our basic understanding of water availability, quality, and dynamics, and the impact of both a changing and variable climate, and human activity, on the water system.
- Forecasting the outcomes of human interactions with Earth’s natural systems, including climate change, is limited by an incomplete understanding of geologic and environmental processes. Improved understanding of these processes in Earth’s history can increase confidence in the ability to predict future States and enhance the prospects for mitigating or reversing adverse impacts to the planet and its inhabitants.
- Research in Earth science is also fundamental to training and educating the next generation of Earth science professionals.

Increased NSF investments in Earth science education at all levels are needed because knowledge of the Earth sciences is essential to science literacy and to meeting the environmental and resource challenges of the 21st century.

Earth science research and education should be a component of broader initiatives to increase overall public investments in science and technology. For example, Earth science research should be included in a recommendation by the National Academies to “increase the Federal investment in long-term basic research by 10 percent each year over the next 7 years . . .” (Rising Above the Gathering Storm, 2007). Likewise, implementation of the America COMPETES Act, which authorizes a doubling of the budgets of key science agencies in 7 years, should encompass Earth science research and education.

#### EXTRAORDINARY SCIENTIFIC OPPORTUNITIES IN THE EARTH SCIENCES

In October 2009, NSF’s Advisory Committee for Geosciences released a major report, *GEO Vision: Unraveling Earth’s Complexities Through the Geosciences*. “Society stands at a crossroads. With the growing problems of resource depletion, energy sustainability, environmental degradation, and climate change, we wonder if protecting the health of the planet while achieving widespread economic prosperity can become a reality”, the report says.

The NSF report provides a vision for the future of research in the geosciences as focused on fostering a sustainable future through a better understanding of our complex and changing planet. The report articulates a path to achieving its vision. It recommends a new emphasis on interdisciplinary research in order to achieve reasoned and scientifically sound insights for policymakers. The challenges ahead for the geosciences, the report says, are understanding and forecasting the behavior of a complex and evolving Earth; reducing vulnerability and sustaining life; and growing the geosciences workforce of the future. Substantial increases in resources are needed to meet these challenges.

Extraordinary scientific opportunities in the Earth sciences have been summarized in a series of reports, including:

- Understanding Earth’s Deep Past: Lessons for Our Climate Future (National Research Council, 2011).
- Landscapes on the Edge: New Horizons for Research in Earth Surface Processes (National Research Council, 2010).

- GEO Vision: Unraveling Earth's Complexities Through the Geosciences (NSF Advisory Committee for Geosciences, 2009).
- Seismological Grand Challenges in Understanding Earth's Dynamic Systems (Incorporated Research Institutions for Seismology, 2009).
- Origin and Evolution of Earth: Research Questions for a Changing Planet (National Research Council, 2008).
- Hydrology of a Dynamic Earth (Consortium of Universities for the Advancement of Hydrologic Science, 2007).
- Future Research Directions in Paleontology (Paleontological Society and Society for Vertebrate Paleontology, 2007).

NSF's Earth Sciences Division regularly receives a large number of exciting research proposals that are highly rated for both their scientific merit and their broader impacts, but many meritorious projects have not been funded due to budget constraints. Additional investments in Earth science research can have significant positive impacts on society.

EarthScope is producing transformative science while being developed on time and on budget. When this major project was being developed, it was widely expected that the NSF budget would experience a sustained period of robust growth as indicated by the NSF Authorization Act of 2002 and the America COMPETES Act. If NSF's budget growth is not robust, some members of the Earth science community are concerned that EarthScope expenses could put downward pressure on budgets and success rates for other time-sensitive research opportunities in the Earth sciences.

#### CONCLUSION

The America COMPETES Act set the stage to double the NSF budget over 7 years. Despite overwhelming bipartisan support for the America COMPETES Act, appropriations for NSF fell short of the authorized doubling path in the regular appropriations bills for fiscal years 2007–2011. NSF received \$3 billion in economic stimulus funds under the American Recovery and Reinvestment Act of 2009. This one-time injection of funding was very helpful, but sustained growth in NSF's budget is needed to achieve the objectives of the America COMPETES Act.

GSA recommends an appropriation of at least \$7.767 billion for NSF in fiscal year 2012, an increase of \$894 million or 13 percent compared with the enacted level for fiscal year 2010. This funding level is consistent with the President's fiscal year 2012 budget request of \$7.767 billion for the NSF and the authorized funding level of \$7.8 billion under the America COMPETES Act.

GSA is grateful to the Senate Appropriations Subcommittee on Commerce, Science, Justice, and Related Agencies for its past leadership in increasing investments in NSF and other science agencies. Thank you for your thoughtful consideration of our recommendations.

---

#### PREPARED STATEMENT OF THE INSTITUTE OF MAKERS OF EXPLOSIVES

Dear Madam Chairman: On behalf of the Institute of Makers of Explosives (IME), I am submitting a statement for inclusion in the subcommittee's hearing record regarding the proposed fiscal year 2012 budget for the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) regulatory program for the commercial explosives industry.

#### INTEREST OF THE IME

IME is a nonprofit association founded in 1913 to provide accurate information and comprehensive recommendations concerning the safety and security of commercial explosive materials. IME represents U.S. manufacturers, distributors, and motor carriers of commercial explosive materials and oxidizers as well as other companies that provide related services. The majority of IME members are "small businesses" as determined by the Small Business Administration.

Millions of metric tons of high explosives, blasting agents, and oxidizers are consumed annually in the United States. These materials are essential to the U.S. economy. Energy production, construction, and other specialized applications begin with the use of commercial explosives. IME member companies produce 99 percent of these commodities. These products are used in every State and are distributed worldwide. The ability to manufacture, distribute, and use these products safely and securely is critical to this industry.

The production, distribution, transportation, storage, and use of explosives are highly regulated by a myriad of Federal and State agencies. ATF plays a predomi-

nant role in assuring that explosives are identified, tracked, and stored only by authorized persons. We have carefully reviewed the administration's fiscal year 2012 budget request for ATF, and have the following comments about its potential impact on the commercial explosives industry.

#### ATF'S EXPLOSIVES REGULATORY PROGRAM BUDGET REQUEST

The administration's fiscal year 2012 budget request proposes to decrease resources devoted to ATF's regulation and oversight of explosives industries by 23 full-time equivalent (FTE), a 6 percent reduction, from 383 FTE and 360 FTE, for a savings of \$5.9 million.<sup>1</sup>

We understand the current urgency to address the Federal budget deficit. We understand the shared sacrifice that all segments of the Government are asked to make to help the economy recover by spurring job growth and investment. Yet, Members of Congress understand that budgetary cuts to the bureaucracy should not cut essential services. By law, ATF must inspect explosives licensees and permittees at least once every 3 years. During the last full fiscal year, ATF conducted more than 4,000 such compliance inspections and identified 1,620 public safety violations.<sup>2</sup> In addition to this workload, ATF must process applications for new explosives licenses and permits as well as those submitted for renewal of existing licenses and permits. Nearly 3,000 applications were processed during the last full fiscal year.<sup>3</sup> The agency must also conduct inspections of all new applicants. More than 1,000 new applicants needed to be inspected last fiscal year.<sup>4</sup> These are significant workload indicators. Without approved licenses and permits from ATF, the industry would collapse and with it major segments of the economy that are dependent on these products and materials.

At the same time, the Government Accountability Office (GAO) recently released a report identifying unnecessary duplication in Government programs.<sup>5</sup> Among the programs highlighted were those of the ATF and the Federal Bureau of Investigation (FBI) that relate to explosives incidents. As early as 2004, duplication and overlap were identified in the areas of investigations, training, information sharing and use of databases, and laboratory forensic analysis. While plans for consolidating and eliminating redundancies were to begin last November, the GAO recommended that the Congress monitor progress to ensure that "the plans have their intended effect and are enforced."

The costs attributable to these duplicative explosives enforcement activities far exceeds the cost-savings ATF expects to realize from the cuts to its regulatory compliance program for the explosives industry. As the subcommittee considers ATF's budget request, we ask that ATF's ability to perform its regulatory oversight of the explosives industry in a timely fashion not be compromised in the push for fiscal discipline when other areas of duplication and overlap are ripe for reform.

#### ATF'S REGULATORY WORKLOAD

In the last 10 years, ATF has issued nine rulemakings of importance to IME (including two interim final rules). It has finalized three and withdrawn one. Of the five rulemakings still pending, the oldest dates to 2001. In the absence of a process to ensure timely rulemaking that is capable of keeping up with new developments and safety practices, industry must rely on interpretive guidance and variances from outdated requirements in order to conduct business. While we greatly appreciate the ATF's accommodations, these stop-gap measures do not afford the continuity and protections that rulemaking would provide the regulated community, nor allow the oversight necessary to ensure that all parties are being held to the same standard of compliance. These regulatory tasks are critical to the lawful conduct of the commercial enterprises that the ATF controls. ATF should be provided the resources to make timely progress in this area.

<sup>1</sup> Fiscal Year 2012 ATF Budget Submission, page 41.

<sup>2</sup> Fiscal Year 2012 ATF Budget Submission, page 35.

<sup>3</sup> Fiscal Year 2012 ATF Budget Submission, page 35.

<sup>4</sup> Fiscal Year 2012 ATF Budget Submission, page 35.

<sup>5</sup> "Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue", GAO, March 2011, pages 101-104, <http://www.gao.gov/new.items/d11318sp.pdf>.

## INDUSTRY STANDARDS

We take seriously the statutory obligation that ATF take into account industry's standards of safety when issuing rules and requirements.<sup>6</sup> We continue to fulfill this obligation through our development of industry best practices for safety and security, membership in relevant standard-setting organizations, and active participation in forums for training. We have offered ATF recommendations that we believe will enhance safety and security through participation in the rulemaking process, in the ATF's important research efforts, and in other standard-setting activities.

In this regard, IME has spent years developing and validating a credible alternative to strict interpretation of quantity-distance tables used to determine safe setback distances from explosives. IME collaborated with the Department of Defense Explosives Safety Board (DDESB) 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 Institute of Makers of Explosives Safety Assessment for Risk (IMESAFR).<sup>7</sup> 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, ATF is starting to recognize that this powerful assessment tool has potential to help the ATF meet its statutory mandate to ensure safety through quantity-distance limitations. ATF has taken advantage of opportunities to partner with IME and is evaluating existing locations with this risk-based approach. The benefits of risk-based modeling should be recognized and ATF should be provided resources to develop policies that allow the use such models to meet regulatory mandates.

## LEADERSHIP

The resolution of these issues may have to wait the appointment of a new ATF Director. ATF has been without a Director since August 2006. We support President Obama's nomination of Andrew L. Traver for this position.<sup>8</sup> We hope that the Senate will act timely on this nomination. ATF has been too long without permanent leadership.

## CONCLUSION

The manufacture and distribution of explosives is accomplished with a remarkable degree of safety and security. We recognize the critical role ATF plays in helping our industry achieve and maintain safe and secure workplaces. Industry and the public are dependent on ATF having adequate resources to fulfill its regulatory responsibilities. It is up to the 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 INNOCENCE PROJECT

Thank you for the opportunity to submit testimony on behalf of the Innocence Project to the Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies as it considers program funding for fiscal year 2012. Innocence Project respectfully requests funding for the following programs at the described levels:

- Paul Coverdell Forensic Sciences Improvement Grant Program (the "Coverdell Program") at \$35 million through the Department of Justice, National Institute for Justice (NIJ);
- Kirk Bloodsworth Post-Conviction DNA Testing Program (the "Bloodsworth Program") at \$5 million through the NIJ; and
- The Capital Litigation Improvement Grant Program at \$12.5 million, including \$10 million for the Wrongful Conviction Review Program, through the Department of Justice, Bureau of Justice Assistance (BJA).

<sup>6</sup> 18 U.S.C. 842(j).

<sup>7</sup> IMESAFR was built on the DDESB software model, SAFER. The DDESB currently uses SAFER and table-of-distance methods to approve or disapprove Department of Defense explosives activities.

<sup>8</sup> Received in the Committee on the Judiciary, United States Senate, January 5, 2011, PN44.

The Innocence Project represents convicted persons who seek to prove their innocence through postconviction DNA testing. To date, 268 men and women have been exonerated by such testing nationwide. The mission of the Innocence Project is to free innocent people and prevent wrongful convictions through reform. Yet it is important to note that this work has tremendous benefit for public safety. First, every time DNA identifies a wrongful conviction, it enables the identification of the real perpetrator of those crimes. Indeed, the true perpetrators have been identified in more than 40 percent of the DNA exoneration cases. There is a double benefit from the reforms that can prevent wrongful convictions: they also enhance the accuracy of criminal investigations and prosecutions, and thus strengthen them. Because these programs increase public safety and access to justice, Innocence Project requests continued funding in fiscal year 2012.

#### COVERDELL PROGRAM

Recognizing the need for independent government investigations in the wake of forensic problems, the Congress created the forensic oversight provisions of the Coverdell Program, which provides State and local crime laboratories and other forensic facilities with much needed Federal funds. Specifically, in the Justice for All Act (JFAA), the Congress required that “[t]o request a grant under this subchapter, a State or unit of local government shall submit to the Attorney General . . . a certification that a government entity exists and an appropriate process is in place to conduct independent external investigations into allegations of serious negligence or misconduct substantially affecting the integrity of the forensic results committed by employees or contractors of any forensic laboratory system, medical examiner’s office, coroner’s office, law enforcement storage facility, or medical facility in the State that will receive a portion of the grant amount.”<sup>1</sup>

The congressional mandate under the Coverdell Program was a crucial step toward ensuring the integrity of forensic evidence. Now, more than ever, as forensic science budgets find themselves on the chopping block in State legislatures all over the country, their very survival may be dependent upon these Federal funds. With such import and capacity for positive action, we ask that you fund the Coverdell Program at \$35 million.

#### BLOODSWORTH PROGRAM

The Bloodsworth Program provides hope to wrongfully convicted inmates who might otherwise have none by helping States pursue postconviction DNA testing for viable claims of innocence. These funds already have begun to demonstrate a positive impact that has led to much success, one measure of which is the fact that Bloodsworth program funds already have enabled the exoneration of two people, with many more cases being actively pursued by State partnerships under this funding stream. Many organizational members of the national Innocence Network have partnered with State agencies that have received Bloodsworth funding.<sup>2</sup> According to the Innocence Network’s President, Keith Findley, the Bloodsworth Program “will dramatically improve the ability of Innocence Network members to meet the tremendous need for post-conviction DNA testing. Many of the projects funded under the Bloodsworth Program will enable projects in various states to proactively search for . . . cases in which DNA testing can prove guilt or innocence, but which are otherwise overlooked or hidden.”<sup>3</sup>

The Bloodsworth Program does not fund the work of the Innocence Project directly. In fact, the Office of Justice Programs has encouraged State applicants to draft proposals that fund a range of entities involved in settling innocence claims, from law enforcement agencies to crime laboratories. Additionally, the Bloodsworth Program has fostered the cooperation of innocence projects and State agencies. For example, with its fiscal year 2008 award, the Arizona Justice Project, in conjunction with the Arizona Attorney General’s Office, began the Post-Conviction DNA Testing Project. Together, they have canvassed the Arizona inmate population, reviewed cases, worked to locate evidence and filed joint requests with the court to have evidence released for DNA testing. In addition to identifying the innocent, Arizona Attorney General Terry Goddard has noted that the “grant enables [his] office to support local prosecutors and ensure that those who have committed violent crimes are

<sup>1</sup> 42 U.S.C. § 3797k(4).

<sup>2</sup> The Innocence Network is an affiliation of organizations dedicated to providing pro bono legal and investigative services to individuals seeking to prove innocence of crimes for which they have been convicted and working to redress the causes of wrongful convictions.

<sup>3</sup> *Strengthening Our Criminal Justice System: Extending the Innocence Protection Act*. 111th Cong., 1st Sess., 10 (2009) (testimony of Keith Findley, President of the Innocence Network).

identified and behind bars.”<sup>4</sup> Such joint efforts have followed in Connecticut, Louisiana, Minnesota, North Carolina, and Wisconsin.

The Bloodsworth Program is a relatively small yet powerful investment for States seeking to identify and free innocent people who were erroneously convicted. As such, we ask that you fund the Bloodsworth Program at \$5 million.

#### WRONGFUL CONVICTION REVIEW PROGRAM

Particularly when DNA isn’t available, or when it alone isn’t enough to prove innocence, being able to prove one’s innocence to a level sufficient for exoneration is even harder than “simply” proving the same with DNA evidence. These innocents languishing behind bars require expert representation to help navigate the complex issues that invariably arise in their bids for postconviction relief. And the need for such representation is enormous; only a small fraction of cases involve evidence that could be subjected to DNA testing (for example, it is estimated that even among murders, only 10 percent of cases have the kind of evidence that could be DNA tested). Thus for the wrongfully convicted who have strong evidence of innocence, yet no ability to use postconviction DNA testing to enable their freedom, the effective review of their cases can enable a wrongful conviction to be righted, and pursuit of the real perpetrator to continue.

Realizing the imperative presented by such cases, the BJA carved-out of its Capital Case Litigation Initiative funding to create the Wrongful Prosecution Review (now the Wrongful Conviction Review) discretionary grant program.<sup>5</sup> The program provides applicants—nonprofit organizations and public defender offices focused on exonerating the innocent—with support for quality, efficient representation in order to pursue the strongest claims of wrongful conviction by those for whom postconviction DNA testing is not available to establish their innocence.

The program’s benefits, in addition to exonerating the innocent, are significant: to alleviate burdens placed on the criminal justice system through costly and prolonged postconviction litigation and to identify, whenever possible, the actual perpetrator of the crime. Above all, though, this program forms a considerable piece of the comprehensive Federal package of innocence protection measures created in recent years; without it, a great deal of innocence claims might otherwise fall through the cracks. Accordingly, we urge you to fund the Wrongful Conviction Review Program through the BJA at \$10 million.

#### ADDITIONAL NOTES ON THE DEPARTMENT OF JUSTICE’S (DOJ) REQUESTED BUDGET FOR FISCAL YEAR 2012

DOJ’s fiscal year 2012 budget request does not specifically include two of the above programs—the Coverdell and Bloodsworth programs. It is unclear from the budget request whether these programs would be rolled into the much broader “DNA Initiative” for a requested funding level of \$110 million. Regardless, it is crucial that these two programs be specifically identified and funded in fiscal year 2012.

In addition to the critical need for funding for these programs, especially during this time of significant economic downturn for States, Innocence Project is concerned about the impact that “block-granting” the Bloodsworth and Coverdell programs within DOJ’s DNA Initiative would have on the requirements and incentives that these programs provide to prevent wrongful convictions and ensure the integrity of evidence.<sup>6</sup> These incentives have proven significant for the advancement of State policies to prevent wrongful convictions. Indeed, the Coverdell Program forensic oversight requirements have created in States nationwide entities and processes for ensuring the integrity of forensic evidence in the wake of the forensic scandals that have undermined public faith in forensic evidence. The Coverdell Program oversight requirements are essential to ensuring the integrity of forensic evidence in the wake of identified acts of forensic negligence or misconduct.

Therefore, Innocence Project requests that the Congress maintain and specifically fund both the Bloodsworth and Coverdell programs in order to preserve their important incentive and performance requirements. Doing away with these requirements would thwart the intent of the Congress, which was to provide funding only to

<sup>4</sup> Arizona receives Federal DNA grant, <http://community.law.asu.edu/news/19167/Arizona-receives-Federal-DNA-grant.htm> (last visited March 11, 2011).

<sup>5</sup> Reauthorization of the Innocence Protection Act, 111th Cong., 1st Sess., 8 (2009) (testimony of Lynn Overmann, Senior Advisor, Office of Justice Programs).

<sup>6</sup> Of course, the other section 413 programs once reauthorized and appropriated under section 413 will add to these incentives.

States that demonstrate a commitment to preventing wrongful convictions in those areas.

CONCLUSION

Thank you so much for your time and consideration of these important programs, and the opportunity to submit testimony. We look forward to working with the subcommittee this year.

PREPARED STATEMENT OF THE INDEPENDENT TRIBAL COURTS REVIEW TEAM

Thank you for the opportunity to testify today and to address the serious funding needs that have limited and continue to hinder the operations of tribal judicial systems in Indian country. I am the lead judge representing the Independent Tribal Court Review Team. I am here today to provide justification for increased funding for tribal courts in the Department of Justice (DOJ), Office of Justice Programs for the tribal courts Assistance Program. We thank this subcommittee for the additional \$10 million funding in fiscal year 2010. These funds were a blessing to tribes. Even minimal increases were put to good use. It is the strong recommendation of the Independent Tribal Courts Review Team that the Federal tribal courts budget be substantially increased in fiscal year 2012 to support the needs of tribal judicial systems.

*Budget Priorities, Requests, and Recommendations*

- + \$10 million increase for tribal courts above the fiscal year 2010 enacted level.
- + \$58.4 million authorized under the Indian Tribal Justice Act of 1993, Public Law 103–176, 25 U.S.C. 3601 and re-authorized in the fiscal year 2000 Public Law 106–559 (no funds have been appropriated to date).

The increase will support:

- Hiring and training of court personnel;
- Compliance with the 2010 Tribal Law and Order Act;
- Salary increases for existing judges and court personnel;
- State-of-the-art technology for tribal courts;
- Security and security systems to protect court records and privacy of case information;
- Tribal court code development; and
- Financial code development.

*Background*

DOJ provides funding to State, local, and tribal governments to supplement their justice systems for a broad array of activities including courts. Tribal courts play a “vital role” in tribal self-determination and self-governance as cited in long-standing Federal policy and acts of the Congress. Funding levels from DOJ to support tribal justice systems have not met the Federal obligations.

For the past 5 years, the Independent Court Review Team has been traveling throughout Indian country assessing how tribal courts are operating. During this time, we have completed approximately 73 court reviews. There is no one with more hands-on experience and knowledge regarding the current status of tribal courts than our review team.

We have come into contact with every imaginable composition of tribe; large and small; urban and rural; wealthy and poor. What we have not come into contact with is any tribe whose court system is operating with financial resources comparable to other local and State jurisdictions.

*Justification for Request*

*Hiring and Training of Court Personnel.*—Tribal courts make do with underpaid staff, under-experienced staff, and minimal training. (We have determined that hiring tribal members limits the inclination of staff to move away; a poor excuse to underpay staff.)

*Compliance With the 2010 Tribal Law and Order Act.*—To provide judges, prosecutors, and public defenders, who are attorneys and who are barred to do “enhanced sentencing” in tribal courts.

*Salary Increases for Existing Judges and Court Personnel.*—Salaries should be comparable to local and State court personnel to keep pace with the nontribal judicial systems and be competitive to maintain existing personnel.

*Tribal Courts Need State-of-the-Art Technology.*—Many tribes cannot afford to purchase or upgrade existing court equipment unless they get a grant (software, computers, phone systems, tape recording machines). This is accompanied by training expenses and licensing fees which do not last after the grant ends.

*Security and Security Systems To Protect Court Records and Privacy of Case Information.*—Most tribal courts do not even have a full-time bailiff, much less a state-of-the-art security system that uses locked doors and camera surveillance. This is a tragedy waiting to happen.

*Tribal Court Code Development.*—Tribes cannot afford legal consultation. A small number of tribes hire on-site staff attorneys. These staff attorneys generally become enmeshed in economic development and code development does not take priority. Tribes make do with underdeveloped codes. The Adam Walsh Act created a hardship for tribes who were forced to develop codes, without funding, or have the State assume jurisdiction. (States have never properly overseen law enforcement in a tribal jurisdiction.)

*Financial Code Development.*—We have rarely seen tribes with developed financial policies. The process of paying a bond, for example, varies greatly from tribe to tribe. The usual process of who collects it, where it is collected and how much it is, is never consistent among tribes.

#### *Tribal Courts Review*

There are many positive aspects about tribal courts. 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. Tribes with even modest resources tend to allocate funding to courts before other costs. 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. Tribal court systems have appellate courts, jury trials, well-cared-for courthouses (even the poorer tribes), and tribal bar listings and fees. Perhaps most importantly, tribes recognize the benefit of an independent judiciary and have taken steps to insulate courts and judges from political pressure. No longer in Indian country are judges automatically fired for decisions against the legislature.

Our research indicates tribal courts are at a critical stage in terms of need. Nationwide, there are 184 tribes with courts that received \$24.7 million in Federal funding in 2010.

Assessments have indicated that the Bureau of Indian Affairs (BIA) only funds tribal courts at 26 percent of the funding needed to operate. Tribes who have economic development generally subsidize their tribal courts. On the flip side, tribes who cannot afford to assist in the financial operations of the court are tasked with doing the best they can with what they have even at the expense of decreasing or eliminating services elsewhere. This is while operating at a disadvantage with already overstrained resources and underserved needs of the tribal citizens. The assessment suggests that the smaller courts are both the busiest and most underfunded.

The grant funding in the DOJ is intended to be temporary, but instead it is used for permanent needs; such as funding a drug court clerk who then is used as a court clerk with drug court duties. When the funding runs out, so does the permanent position. We have witnessed many failed drug courts, failed court management software projects (due to training costs), and incomplete code development projects. When the Justice funding runs out, so does the project.

As a directive from the Office of Management and Budget, our reviews specifically examined how tribes were using Federal funding. In the last 5 fiscal years through fiscal year 2010 there were only two isolated incidents of a questionable expenditure of Federal funds. It is speculated that because of our limited resources, we compromise one's due process and invoke "speedy trials" violations to save tribal courts money. Everyone who is processed through the tribal judicial system is afforded their constitutional civil liberties and civil rights.

We do not wish to leave an entirely negative impression about tribal courts. Tribal courts need an immediate, sustained, and increased level of funding. True. However, there are strong indications that the courts will put such funding to good use.

There are tribes like the Fort Belknap Tribe of Montana whose chief judge manages both offices and holds court in an old dormitory that can't be used when it rains because water leaks into the building and the mold has consumed one wall. Their need exceeds 100 percent.

There are several courts where the roofs leak when it rains and those court houses cannot be fixed due to lack of sufficient funds. The team took pictures of



those damaged ceilings for the BIA hoping to have additional funds for the tribes to fix the damaged ceilings.

Tribal courts have other serious needs. Tribal appellate court judges are mostly attorneys who dedicate their services for modest fees that barely cover costs for copying and transcription fees. Tribal courts offer jury trials. In many courts, one sustained jury trial will deplete the available budget. The only place to minimize expenses is to fire staff. Many tribal courts have defense advocates. These advocates are generally not law trained and do a good job protecting an individual's rights (including assuring speedy trial limitations are not violated.) However, this is a large item in court budgets and if the defense advocate, or prosecutor, should leave, the replacement process is slow.

I come here today to tell the Congress these things. We feel it is our duty to come here on behalf of tribes to advocate for better funding. Tribes ask us to tell their stories. They open their files and records to us and say, "We have nothing to hide". Tell the Congress we need better facilities, more law enforcement, more detention facilities, more legal advice, better codes . . . the list goes on and on. But, as we have indicated, it all involves more funding. This Congress and this administration can do something great. Put your money where your promises have been.

#### *National Requests*

We support the requests and recommendations of the National Congress of American Indians.

On behalf of the Independent Tribal Court Review Team, thank you.

---

#### PREPARED STATEMENT OF THE LUMMI INDIAN BUSINESS COUNCIL

Good morning to the distinguished subcommittee members. Thank you for this opportunity. I am honored to present the appropriations request of the Lummi Nation for fiscal year 2012 to the Department of Commerce. Today, I am presenting a long-term, strategic plan described in a sustainable set of coordinated proposals to address the prolonged economic and cultural disaster and the suffering of our people. This strategy is a comprehensive approach combining habitat restoration, environmental monitoring and assessment, with Lummi Hatchery infrastructure improvements.

LUMMI NATION SPECIFIC TOTAL REQUEST IS \$11,650,000

This funding is being requested under the 1855 Treaty of Point Elliot, Secretarial Order No. 3206, entitled "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (ESA), and section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act".

#### *Lummi Nation Fiscal Year 2012 Budget Requests*

- + \$750,000 Monitoring and Assessment Program to include:
  - Habitat restoration program support;
  - Environmental and fisheries monitoring program; and
  - Lummi Natural Resources Department policy staff support.
- + \$10.9 million—Salmon/Shellfish Hatcheries:
  - \$6,716,000 Lummi Bay and Skookum Hatchery Improvements; and
  - \$4,184,000 Lummi Shellfish Hatchery Improvements.

#### REGIONAL REQUESTS

The Lummi Nation supports the fiscal year 2012 requests of the Northwest Indian Fisheries Commission.

#### NATIONAL REQUESTS

The Lummi Nation supports the fiscal year 2012 Requests of the National Congress of American Indians.

JUSTIFICATION OF REQUESTS—LUMMI NATION SPECIFIC TOTAL REQUEST IS \$11,650,000

- + \$750,000 Monitoring and Assessment Program.
- + \$10.9 Million for Lummi Hatchery Infrastructure: *Stock Re-Building Program.*—The Lummi Nation requests funding to support this strategic plan to eliminate the tribe's dependence upon the Frasier River Sockeye salmon stock and to account for lost fishing opportunities imposed by the ESA. The Lummi Nation appropriation requests represent an investment in a sustainable strategy to maintain a future mod-

erate living for fishermen as guaranteed by the treaty 1855 Point Elliot Treaty, affirmed by the U.S. Supreme Court (1979).

The Lummi Nation currently operates two salmon hatcheries and one shellfish hatchery that support tribal and nontribal fisheries in the region. Lummi Nation hatcheries were originally constructed utilizing Department of Commerce funding received from 1969–1971. Since that time Hatchery operations and maintenance funding from the Bureau of Indian Affairs has been used. At the time of construction, those hatcheries were cutting edge.

Original Hatchery infrastructure needs to be repaired, replaced, or completely modernized. Lummi Nation fish biologists estimate that these facilities are now operating at 40 percent of their productive capacity. Through the operation of these hatcheries, the tribe annually produces 1 million fall Chinook salmon, 2 million Coho salmon, 6.5 million shellfish seed, and 300,000 pounds of clams. These production numbers simply do not provide the fishing opportunity and associated economic benefits necessary to offset the financial loss caused by the Sockeye Salmon Fisheries Disaster. To provide sufficient salmon stock resources and shellfish harvest opportunities on an annual basis to the Lummi Fishing Fleet, the hatchery operations and associated infrastructure require rehabilitation.

The hatchery infrastructure improvement plan represents an investment that increases the immediate annual return and is a long-term sustainable activity.

#### DETAILED HATCHERY LINE-ITEMIZED DESCRIPTIONS ARE LISTED BELOW

##### *Lummi Nation Skookum Creek Hatchery—\$725,000*

*New Raceways \$725,000.*—Replace originally constructed infrastructure that is deteriorating and falling apart.

##### *Lummi Bay Hatchery—\$5,991,000*

*Nooksack River Pump Station \$5,536,000.*—The project will increase annual production by 300 percent by providing additional water to the hatchery. The major limiting factor to production at this facility is lack of freshwater. This project will ensure adequate water supply to achieve needed production levels.

*Rearing Pond Improvements \$455,000.*—Repair and pave juvenile rearing pond and restructure adult ladder and attraction complex.

##### *Lummi Shellfish Hatchery—\$4,184,000*

*Improvements at Shellfish Hatchery \$484,000.*—Repair and expand current facility to increase seed production by improving heating and cooling systems, live feed production, and growout tank space

*Build a Geoduck-Specific Hatchery \$2,400,000.*—The current facility could then be dedicated to oyster and manila clam production. Increased seed production will increase enhancement activities on Lummi tidelands to create jobs for tribal harvesters and support the west coast shellfish industry and associated businesses.

*Repair the Seapond Tidegates \$1,300,000.*—Improving circulation within the Lummi Bay Seapond will improve production at both the shellfish and Lummi Bay salmon hatcheries and production of manila clams in the seapond.

#### BACKGROUND INFORMATION

The Lummi Nation is located on the northern coast of Washington State, and is the third-largest tribe in the State, serving a population of more than 5,200 people. The Lummi Nation is a fishing nation. We have drawn our physical and spiritual subsistence from the rivers, marine tidelands, and marine waters since time immemorial. Lummi has rights guaranteed by the 1855 Treaty of Point Elliot to harvest fish, shellfish, and game in our usual and accustomed area. The *Boldt* decision of 1974 re-affirmed that right, and designated Lummi as a co-manager of a once abundant salmon fishery. Now, the abundance of wild salmon is gone. In 1985, the Lummi fishing fleet landed more than 15 million pounds of finfish and shellfish. In 2001, the combined harvest was approximately 3.9 million pounds. The remaining salmon stocks do not support tribal fisheries, and the nation is suffering both spiritually and economically.

In 1973, the Endangered Species Act (ESA) was passed. ESA should have resulted in improved salmon habitat and more resources for salmon habitat restoration, but ESA has become a “double-edged sword”. Today, ESA has impacted tribal hatchery production and tribal harvests for commercial, subsistence, and ceremonial purposes. Tribal dependence on salmon and the timing of economic development results in tribal members and tribal governments bearing a disproportionate burden for the conservation of listed species. Lummi Treaty fishers are directly impacted by the listing of Puget Sound Chinook, Bull trout, and Puget Sound steelhead. Secretarial

Order 3206, entitled “American Indian Tribal rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act”, specifically states that “. . . the Departments will carry out their responsibilities in a manner that . . . strives to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species . . .” The Lummi Nation is actively engaged in recovering listed salmon species in our watershed, restoring critical habitat, and monitoring listed population to determine which factors adversely affect those populations and other critical but nonlisted species. The Lummi Nation cannot, however, continue to recover salmon and maintain our way of life without appropriations from the Federal Government.

#### CONTINUOUS SOCKEYE FISHERIES DISASTER DECLARATION

In 2008, the Department of Commerce reissued the sockeye fishery disaster declaration in a statement contained in a letter to Lummi Nation, (see letter from Secretary, Department of Commerce, November 3, 2001). The declaration conforms with the findings of the Congressional Research Services—“CRS Report to Congress, Commercial Fishery Disaster Assistance”, (RL-34209). For more information, see CRS Report RS21312, by Eugene H. Buck.

In 2010, the Fraser River sockeye salmon run was the largest is recorded history. After years of sitting on the beach, the Lummi sockeye fleet was able to harvest sockeye salmon again. One good year, however, does not make up for the previous years of continuous fisheries disasters and associated loss of financial and cultural benefits. To account for the lack of a consistent sockeye salmon fishery and to make up for the lost fishing opportunity attributed to habitat degradation and subsequent salmon population crashes, the Lummi Nation plans to bolster both finfish and shellfish production from its facilities.

Hatcheries ensure future salmon stock populations large enough to support our families and our way of life, until such time as the habitat is able to sustain harvestable levels of salmon. The Lummi Nation recognizes that hatcheries alone will not restore salmon stocks to historical levels. The Lummi Natural Resources Department allocates a substantial amount of time, effort, and funding to improving and monitoring freshwater habitat, managing and monitoring tribal harvest activities, and is intent upon restoring ecosystem function in the Nooksack River Basin.

By improving hatchery production of shellfish, chum salmon, coho salmon, and Chinook salmon, the Lummi Nation will create a reliable backup resource to salmon fishers; decreasing tribal dependence on the sockeye fishery. Additionally, we seek to raise the value of these harvests through advanced marketing, the introduction of a fisher’s market and shellfish growout operations for shellfish products.

#### REGIONAL REQUESTS

The Lummi Nation supports the fiscal year 2012 requests of the Northwest Indian Fisheries Commission.

#### NATIONAL REQUESTS

The Lummi Nation supports the fiscal year 2012 requests of the National Congress of American Indians.

On behalf of the Lummi Nation, Hy’shqe.

---

#### PREPARED STATEMENT OF THE MARINE CONSERVATION BIOLOGY INSTITUTE

Madam Chairwoman and members of the subcommittee: Marine Conservation Biology Institute (MCBI), based in Bellevue, Washington, is a nonprofit conservation organization whose mission is to protect vast areas of the ocean. We use science to identify places in peril and advocate for bountiful, healthy oceans for current and future generations. I wish to thank the members of the subcommittee for the opportunity to submit written testimony on the fiscal year 2012 appropriations for the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA).

America’s oceans provide jobs, energy resources, food, recreation and tourism opportunities, as well as play a vital role in our Nation’s economy, trade, and transportation. According to the National Ocean Economics Program, the U.S. ocean economy contributes more than \$138 billion to our Nation’s Gross Domestic Product from living marine resources, tourism, recreation, transportation, construction, and mineral extraction. Additionally, more than 2.3 million jobs in the United States depend on the marine environment.

Keeping in mind the hard economic times our Nation is in, I would like to highlight the importance of maintaining or moderately increasing funds for eight of NOAA's programs.

#### HAWAIIAN MONK SEAL RECOVERY

The Hawaiian monk seal is one of the most critically endangered marine mammals in the world. It is also the only marine mammal whose entire distribution range lies within our national jurisdiction; thus the United States has sole responsibility for its continued survival. Over the last 50 years, the Hawaiian monk seal population has declined to an all-time low of less than 1,200 individuals. The majority of the Hawaiian monk seals reside in the remote Papahānaumokuākea Marine National Monument; however, a smaller (but growing) population resides in the Main Hawaiian Islands (MHI). The MHI population may serve as the "insurance" population for this species.

The recovery program has benefited greatly from the subcommittee's decision to more than double the funds for the program since 2008. Your action has created crucial momentum to protect the Hawaiian monk seal from extinction by enabling NOAA to establish year-round research field camps, conduct outreach to fishermen and the general public concerning the seal's ecological and cultural importance, provide urgent care and supplies, and continue vital research studies on disease and mortality mitigation.

The administration has recommended \$2.5 million for the monk seal account. In order to guarantee that the seal recovery effort continue apace, MCBI strongly recommends a minimum of \$5.5 million (current level of funding) for continued Hawaiian monk seal recovery efforts.

#### DEEP SEA CORAL RESEARCH AND TECHNOLOGY PROGRAM

The discovery of widespread deep sea coral ecosystems within U.S. waters has challenged scientists to learn the extent of these important ecosystems and develop strategies on how to protect them. The Deep Sea Coral Research and Technology Program was established by NOAA under the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA) of 2006. NOAA is charged with mapping and monitoring locations where deep sea corals are likely to occur, developing technologies designed to reduce interactions between fishing gear and deep sea corals, and working with fishery management councils to protect coral habitats.

MCBI was pleased to see increased funding for the National Marine Fisheries Service Deep Sea Coral Program to a level of \$2.5 million in fiscal year 2010 and would like to see that level sustained in fiscal year 2012. Previous funding has allowed for coral habitat mapping in the SE Atlantic region. Sustained funding will permit the continued mapping of coral areas off the west coast, as well as the initiation of coral mapping in Alaska waters. There is a great need for habitat assessments to inform management and development decisions; reduced funding levels would severely hamper the compilation of this information.

#### MARINE DEBRIS PROGRAM

Marine debris has become one of the most widespread pollution problems affecting the world's oceans and waterways. Recently, much attention has been given by the press to the huge floating garbage patch in the Pacific Ocean and its impacts on ocean life and places like Hawaii. Research has shown that debris has serious effects on the marine environment, wildlife, the economy, and human health and safety. An estimated 4.2 million pounds of debris was recovered from U.S. beaches in 2009.

Marine debris in the northwestern Hawaiian Islands (NWHI) contributes to avian and marine wildlife decline through ingestion and entanglement, and is one of the chief causes of death for the critically endangered Hawaiian monk seals that live there. An estimated 700 metric tons of marine debris, primarily derelict fishing gear, was removed from NWHI coral reefs and beaches by NOAA between 1996 and 2006.

The Marine Debris Research, Prevention and Reduction Act was enacted in 2006 to identify, assess, reduce, and prevent marine debris and its effects on the marine environment. The Marine Debris Program has been level funded at \$4 million since 2008. MCBI recommends NOAA's Marine Debris Program receive a minimum of \$4 million in fiscal year 2012 to maintain marine debris removal and mitigation efforts. However, MCBI recommends the program receive an additional \$1 million to ramp up efforts to prevent and reduce the loss of fishing gear by the industry. Greater than 30 tons of derelict fishing gear is removed annually in the NWHI every year which causes damage to coral reefs and threatens the survival of many key species.

## NATIONAL MARINE SANCTUARIES

Presently, the Office of National Marine Sanctuaries is responsible for managing the Nation's 13 marine sanctuaries and Papahānaumokuākea Marine National Monument in the northwestern Hawaiian Islands. Collectively, these 14 units cover more area than the National Park System.

MCBI recommends \$64 million to operate and maintain management capabilities for the National Marine Sanctuary System. This amount maintains fiscal year 2010 funding levels, but funnels all funds to the Operations, Research, and Facilities (ORF) account. This increase in the ORF account will allow the Office of National Marine Sanctuaries to fulfill its responsibilities as a leader in ocean management and conservation. The funding would not only restore reduced operations, but would also support better monitoring and enforcement, education and outreach programs, vessel and visitor center operations, and scientific research, including climate monitoring and historical ecology.

## MARINE PROTECTED AREAS (MPA) PROGRAM

NOAA is charged with implementing Executive Order 13158, Marine Protected Areas, which directs Federal agencies to develop a national system of MPAs. These areas are critical to maintaining biological diversity, protecting ocean habitats, and effectively managing fish populations.

Given the ongoing loss of our marine resources, the implementation of the Executive order has moved too slowly, partly due to insufficient funding. MCBI recommends \$4 million for the MPA Center in fiscal year 2011, a slight increase more than the enacted fiscal year 2010 level, but below the fiscal year 2004 enacted level of \$4.9 million. Critical program needs to be addressed with these additional funds include developing and expanding the national system of MPAs, allowing for stakeholder involvement in gap analyses and regional planning efforts, and developing a methodology to collect data on human uses of the ocean throughout the country and prepare maps of where these uses occur, and how they conflict with one another or with marine conservation needs. This information is vital to decisions about managing ocean uses.

## CORAL REEF CONSERVATION PROGRAM (CRCP)

NOAA's CRCP manages NOAA's coral reef programs including both deep sea corals, as directed by the Deep Sea Coral Research and Technology Program, and shallow water corals.

CRCP's shallow water coral activities focus on improving understanding of tropical coral reef ecosystems and minimizing the threats to their health and viability. Due to limited resources, CRCP has narrowed its efforts to better understand and address the top three global threats:

- climate change;
- fishing; and
- pollution.

MCBI recommends \$32 million to sustain and enhance the CRCP. These funds will aid in addressing the top three global threats by monitoring and forecasting climate change impacts on coral reefs, reducing additional threats to coral reef ecosystems, and combating land-based sources of pollution.

## COASTAL AND MARINE SPATIAL PLANNING (CMSP)

CMSP is the tool adopted to implement the President's National Ocean Policy (2010). CMSP is a comprehensive, integrated, ecosystem-based approach that addresses conservation, economic activity, user conflict, and the sustainable use of ocean, coastal, and Great Lakes resources. A strong National Policy will help our Nation rebuild overexploited fisheries, protect endangered species, restore vulnerable habitats, and develop measures to address marine impacts of climate change, all of which will strengthen our Nation's economy.

CMSP requires a long-term commitment, as well as adequate and sustained resources. MCBI is encouraged by the administration's recommendation of \$6.7 million for CMSP, but recommends an increased funding level of \$10 million to ensure the proper set up of key programs. This funding will support habitat mapping and characterization using existing data sets at NOAA; human-use patterns mapping and user conflicts analysis; identification of current management authorities and jurisdictions; development of decision support tools; initial regional planning; and coordination of multiple agency efforts.

## REGIONAL OCEAN PARTNERSHIPS (ROP)

ROPs are a component of the Framework for CMSP. Coastal States have already established regional ocean partnerships, many of which will inform the regional planning bodies that will implement CMSP. These partnerships will be used as place-based lenses through which funding can be focused for marine and coastal priorities at a State and regional level. MCBI recommends \$30 million for regional ocean partnerships to provide competitive grants to address priority marine and coastal issues within each region.

## OCEAN ACIDIFICATION

Ocean acidification is the process by which seawater becomes corrosive to calcium carbonate structures found in many of the shells and skeletons of marine organisms, such as oysters and corals. It is a major marine impact associated with elevated carbon dioxide levels in the atmosphere. Ocean acidification has already begun to negatively impact commercial and recreational fishing, as well as coastal communities and economies.

The Federal Ocean Acidification Research and Monitoring (FOARAM) Act that passed in early 2009 calls upon NOAA to coordinate research, establish a monitoring program, identify and develop adaptation strategies and techniques, encourage interdisciplinary and international understanding of the impacts associated with ocean acidification, improve public outreach, and provide critical research grants to understanding the ecosystem impacts and socioeconomic effects of ocean acidification. Ocean acidification research was appropriated at \$6 million in fiscal year 2010. MCBI supports the presidential recommendation of \$11.6 million in fiscal year 2012 to more fully understand the impacts of ocean acidification on our coastal communities.

In summary, MCBI respectfully requests that the subcommittee maintain or slightly augment funding for the conservation side of the NOAA's budget by the amounts discussed above.

## PREPARED STATEMENT OF THE MARINE FISH CONSERVATION NETWORK

On behalf of the nearly 200 member groups nationally who are dedicated to conserving marine fish and achieving sustainable fisheries, the Marine Fish Conservation Network (Network, or MFCN) submits the following testimony for the record on the fiscal year 2012 budget for National Marine Fisheries Service (NMFS) within the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce. For fiscal year 2012, the Network is asking the subcommittee to increase funding for core fisheries conservation and management programs \$21.2 million more than the President's fiscal year 2012 request in the following program areas:

## NETWORK RECOMMENDATIONS FOR CORE FISHERIES PROGRAMS, FISCAL YEAR 2012

[In millions of dollars]

NOAA/NMFS Fisheries Research and Management	Fiscal year 2010 enacted	President's fiscal year 2012 request	MFCN fiscal year 2012 request
Expand annual stock assessments .....	50.9	67.1	67.1
Fisheries statistics/Marine Recreational Information Program .....	21.0	24.4	24.4
Fishery observers .....	41.0	39.1	50.0
Fisheries cooperative research .....	17.5	7.2	17.5
Survey and monitoring projects .....	23.7	24.2	24.2

The Network supports the President's requested increase of \$16.2 million more than the fiscal year 2010 funding level to expand annual stock assessments as well as the \$3.4 million increase for Fisheries Statistics to expand recreational fishery monitoring activities—both are critical to successful annual catch limit (ACL) implementation in U.S. fisheries in 2011 and beyond. However, the Network also seeks additional funding of \$9 million more than fiscal year 2010 for Fishery Observers and seeks level funding for Cooperative Research at the fiscal year 2010 level of \$17.5 million, for the reasons provided below. Investments in these interrelated activities are not only essential for stewardship of the Nation's fisheries resources, but for sustaining businesses and communities whose livelihoods depend on healthy fisheries.

Information provided by these core programs reduces scientific and management uncertainty and enables fishery managers to make informed decisions when setting ACLs, a new requirement for all U.S. fisheries in 2011 that is intended to provide a transparent accounting mechanism for measuring compliance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA or MSRA) requirements to prevent overfishing and rebuild overfished stocks.<sup>1</sup> Therefore, we respectfully request the following amounts in NMFS Fisheries Management and Research programs for activities supporting baseline data collection, fishery monitoring, and stock assessment science which provide the basis for sustainable management and informed decisionmaking in the catch-setting process.

EXPAND ANNUAL STOCK ASSESSMENTS—MFCN REQUEST: \$67.1 MILLION

The requirement of the MSRA for ACLs in all U.S. fisheries by 2011 increases the need for timely, reliable fisheries data and stock assessments. Quantitative stock assessments provide the scientific basis for setting numerical catch limits that prevent overfishing and optimize yield. Absent significant new funding for stock assessment development, many fishery ACLs will have to be specified without assessments or using assessments that are infrequently updated. Without a current knowledge base, fishery scientists and managers will have to exercise greater caution to account for higher uncertainty and risk of overfishing. Investments in stock assessments reduce uncertainty and enable managers to increase fishing opportunities safely.

The President's fiscal year 2012 budget requests a significant increase of \$16.2 million more than the fiscal year 2010 funding level of \$50.9 million to expand annual stock assessments. The President's fiscal year 2012 budget request of \$67.1 million for expanded stock assessment development will provide critically needed resources to assess priority stocks in the ACL implementation process, including additional resources in the southeast region to establish assessment benchmarks for post spill management of the Gulf of Mexico fisheries. Because the information provided by stock assessments is so vital to the MSA's near-term requirements and long-term goals for sustainable management of U.S. fisheries, the President's requested increase of \$16.2 million to expand annual stock assessments should receive the highest priority for funding at the level of \$67.1 million in fiscal year 2012.

FISHERIES STATISTICS—MFCN REQUEST: \$24.4 MILLION

The President's fiscal year 2012 budget requests \$24.4 million for the fisheries statistics line, an increase of \$3.4 million more than the fiscal year 2010 enacted level. The increase is intended for the Marine Recreational Information Program (MRIP), the new and improved national data collection program for recreational saltwater fisheries that is intended to address the shortcomings identified in a review of existing recreational fisheries data collection programs by the National Research Council (NRC 2006).<sup>2</sup> In response to this NRC review and new requirements in the reauthorized Magnuson-Stevens Act of 2006,<sup>3</sup> NMFS has launched a number of initiatives to implement improved recreational fisheries survey methods and is also completing the implementation of a new saltwater angler registry. Additional funding will be necessary to improve the precision and timeliness of recreational catch statistics for use in fishery management.

The MRIP was funded at a level of approximately \$9 million in fiscal year 2010, through the fisheries statistics and the fisheries research and management budget lines. NMFS has indicated that approximately \$20 million is needed to fully implement the program, and the fisheries statistics line has been identified as the appropriate place for additional funding for MRIP. The President's fiscal year 2012 budget requests a funding level of \$24.4 million for fisheries statistics, reflecting an increase of \$3.4 million more than the fiscal year 2010 funding level to increase the MRIP budget from \$9 million to \$12 million. As an incremental step toward full implementation of MRIP that will provide additional resources for ACL implementation in recreational saltwater fisheries, the President's requested funding level of \$24.4 million for fisheries statistics is strongly recommended in fiscal year 2012.

FISHERY OBSERVERS AND TRAINING—MFCN REQUEST: \$50 MILLION

At-sea observers are the most reliable source of information about fishery catch, bycatch and at-sea discards, and they are a central pillar of the national fishery by-

<sup>1</sup> Senate Report 109–229 on S. 2012 (April 4, 2006), p. 21.

<sup>2</sup> National Research Council (2006). *Review of Recreational Fisheries Survey Methods*.

<sup>3</sup> MSA 16 U.S.C. § 1881(g).

catch strategy.<sup>4 5</sup> Observers also monitor the incidental entanglement and mortality of protected marine mammals, seabirds, and sea turtles. The President's fiscal year 2012 budget requests \$39.1 million to the national fishery observer program, a cut of nearly \$2 million from the enacted fiscal year 2010 level. Current funding supports at-sea observer programs in 40 broadly defined fisheries nationwide, only 23 of which are considered by NMFS to have adequate levels of observer coverage. The agency's goal for observer coverage is approximately 85 fisheries, based on a 2004 national bycatch report.<sup>6</sup> The President's fiscal year 2012 budget request for fishery observers would mean a significant loss in the already limited capability of the program to deploy observers where needed.

To achieve adequate observer coverage in all high-priority fisheries and provide reliable estimates of catch and bycatch for management purposes in the ACL-setting process, the Network recommends an appropriation of at least \$50 million (\$9 million above the fiscal year 2010 enacted level) for fishery observers and observer training in fiscal year 2012.

COOPERATIVE RESEARCH—MFCN FISCAL YEAR 2012 BUDGET REQUEST: \$17.5 MILLION

The Omnibus Appropriations Act of 2010 funded Cooperative Research at NOAA's requested fiscal year 2010 level of \$17.5 million to expand a regionally based competitive grants program that funds partnerships between fishermen and scientists to advance the science and management of the Nation's fisheries. Grants awarded to qualifying projects leverage the expertise of fishermen to support the acquisition of fishery data, improve our understanding of fish populations, and test innovative fishing gear designs and other technologies which can increase fishery performance, reduce operational costs, enhance safety at sea, and save fishing jobs in coastal communities.<sup>7</sup> Cooperative research partnerships can increase the confidence of fishermen in data used in decisionmaking and create employment opportunities in fishing communities. The President's fiscal year 2012 budget request would cut \$10.3 million from the fiscal year 2010 enacted funding level for Cooperative Research. The Network believes that substantial new opportunities for cooperative research remain untapped, and therefore the Network recommends an appropriation of \$17.5 million for Cooperative Research in fiscal year 2012.

SURVEY AND MONITORING—MFCN REQUEST: \$24.2 MILLION

The Omnibus Appropriations Act of 2010 funded this program at NOAA's requested fiscal year 2010 level of \$23.7 million, and the President's fiscal year 2012 budget requests \$24.2 million. This budget line supports the collection of fishery-independent resource survey data as well as fishery catch data needed for developing and updating stock assessments in some of the Nation's most iconic and important fisheries, including red snapper, bluefin tuna, bluefish, striped bass, and Alaska pollock. The President's fiscal year 2012 request would maintain essential resource survey and monitoring programs that support the management of highly valued fisheries, therefore an appropriation of \$24.2 million for survey and monitoring is recommended for fiscal year 2012.

Maintaining adequate public investments in the management of the Nation's fisheries is critical to realize their full potential.<sup>8</sup> Increased investments in these fisheries programs will improve efforts to set sustainable catch limits and monitor compliance, facilitate the rebuilding of fisheries to meet their full economic and biological potential, and increase fishing industry confidence in the science being used to make management decisions.

Thank you for considering our request.

<sup>4</sup>NOAA/NMFS, *Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs*, NOAA Technical Memorandum NMFS-F/SPO-66, October 2004. 108 pp.

<sup>5</sup>National Standard 9 (NS9) of the MSA requires fishery managers to minimize bycatch and to minimize the mortality of bycatch that cannot be avoided (16 U.S.C. 1851(9)). Section 303 of the MSA requires Fishery Management Plans to establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery, and to include measures consistent with NS9 to minimize bycatch (16 U.S.C. §§ 1853(11)).

<sup>6</sup>See *NOAA Fiscal Year 2010 Budget Request, President's Submission to Congress*, Exhibit 13, p. 245. The full list of fisheries prioritized for observer coverage in 2004 can be found in: U.S. Department of Commerce/NOAA/NMFS, *Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs*, NOAA Technical Memorandum NMFS-F/SPO-66, October 2004. 108 pp.

<sup>7</sup>For program details, go to: <http://www.st.nmfs.noaa.gov/st4/NationalCooperativeResearchCoordination.html>.

<sup>8</sup>For instance, see: Somma (2003), Pew Oceans Commission (2003), Sumaila and Suatoni, (2005), Dyck and Sumaila (2010).



## PREPARED STATEMENT OF THE NORTHWEST INDIAN FISHERIES COMMISSION

Thank you for the opportunity to provide written testimony on the Department of Commerce fiscal year 2012 appropriations. My name is Billy Frank, and I am the chairman of the Northwest Indian Fisheries Commission (NWIFC). The NWIFC is comprised of the 20 tribes party to the *United States vs. Washington*,<sup>1</sup> and we support funding for National Oceanic and Atmospheric Administration (NOAA)—National Marine Fisheries Service (NMFS) and the National Ocean Service (NOS) budgets. We are pleased that the budgets for these services continue to be given the serious attention they deserve by the administration and hope that the Congress will agree.

In particular, we appreciate a number of the new National Ocean Policy initiatives that support key Federal, State, and tribal partnerships. The creation of the National Ocean Council and its Governance Advisory Coordinating Committee (GACC) represents the increased focus on oceans. The GACC includes three, at-large tribal representatives including one from the Washington Coastal Treaty Tribes represented by the NWIFC.

## SUMMARY OF FISCAL YEAR 2012 APPROPRIATIONS REQUEST

*NWIFC Specific Funding Requests*

- \$110 million for the Pacific Coastal Salmon Recovery Fund (NOAA/NMFS).
- \$20 million for the Regional Ocean Partnership Grants Program (NOAA/NOS).
- \$3 million for the Pacific Salmon Treaty Chinook Annex (NOAA/NMFS).
- \$16 million for the Mitchell Act Hatchery Program, plus funding required for reform projects (NOAA/NMFS).

*Justification of Requests**\$110 Million for the Pacific Coastal Salmon Recovery Fund*

The Pacific Coastal Salmon Recovery Fund (PCSRF) is a multi-State, multi-tribe program established by the 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, the Congress initially provided funds for salmon habitat restoration, salmon stock enhancement, salmon research, and implementation of the 1999 Pacific Salmon Treaty Agreement between the United States and Canada. PCSRF is making a significant contribution to the recovery of wild salmon throughout the region.

The tribes' overall goal in the PCSRF program is to "restore wild salmon populations. The key tribal objective is to protect and restore important habitat that promotes the recovery of Endangered Species Act (ESA) listed species and other salmon populations in Puget Sound and along the Washington coast that are essential for western Washington tribes to exercise their treaty-reserved fishing rights consistent with *United States vs. Washington* and *Hoh vs. Baldrige*.<sup>2</sup> These funds will also support policy and technical capacities within tribal resource management departments to plan, implement, and monitor recovery activities.

It is for these reasons that the tribes strongly support the Pacific Coastal Salmon Recovery budget justification which reads, in part, ". . . for necessary expenses associated with the restoration of Pacific salmon populations . . . provided that of the funds provided herein the Secretary of Commerce may issue grants to the States of Washington, Oregon, Idaho, Nevada, California, and Alaska, and federally recognized tribes of the Columbia River and Pacific coast (including Alaska) for projects necessary for conservation of salmon and steelhead populations that are listed as threatened or endangered, or identified by a State as at-risk to be so-listed, for maintaining populations necessary for exercise of tribal treaty fishing rights or native subsistence fishing, or for conservation of Pacific coastal salmon and steelhead habitat, based on guidelines to be developed by the Secretary of Commerce."

The tribes have used these funds to support the scientific salmon recovery approach that makes this program so unique and important. Related to this scientific approach has been the tribal leadership and effort which has developed and imple-

<sup>1</sup> *United States vs. Washington*, Boldt Decision (1974) reaffirmed Western Washington Tribes' treaty fishing rights.

<sup>2</sup> *Hoh vs. Baldrige*—A Federal court ruling that required fisheries management on a river-by-river basis.

mented the ESA-listed Puget Sound Chinook Recovery Plan recently approved by NOAA.

Unfortunately, the PCSRF monies have decreased over the past few years from the fiscal year 2002 amount of \$110 million. Restoration of this line item in fiscal year 2012 to the \$110 million level will support the original intent of the Congress and enable the Federal Government to fulfill its obligations to salmon recovery and the treaty fishing rights of the tribes.

*\$20 Million for the Regional Ocean Partnership Grants Program*

The Hoh 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 have an effective partnership, the tribes and their partners need additional funding.

The four tribes, the State of Washington and NOAA's NOS, through the Marine Sanctuary Program, have formed the Intergovernmental Policy Council, which 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. In addition to this partnership with the Marine Sanctuary Program, the four tribes have proposed a mechanism by which they can effectively engage with the West Coast Governors' Agreement for Ocean Health to create a regional ocean planning group for the west coast that is representative of the States and sovereign tribal governments with an interest in the ocean.

The four coastal tribes and the State also wish to engage in an ocean monitoring and research initiative to support and transition into an ecosystem-based fisheries management plan for the Washington coast. This tribal-State effort would be in collaboration with NOAA and consistent with regional priorities identified by a regional planning body. 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.

For the tribes to participate in this regional ocean planning body, and for the tribes and State to conduct an ocean monitoring and research initiative off the Washington coast, they will need funding to support this effort. The Regional Ocean Partnership Grants program, within the NOS coastal management account, would be an ideal program to support tribal participation with the West Coast Governors' Agreement to address ocean governance and coastal/marine spatial planning issues.

*\$3 Million for the Pacific Salmon Treaty 2008 Chinook Annex*

Adult salmon returning to most western Washington streams migrate through United States and Canadian waters and are harvested by fisherman from both countries. For years, there were no restrictions on the interception of returning salmon by fishermen of neighboring countries.

In 1985, after two decades of discussions, the Pacific Salmon Treaty (PST) was created through the cooperative efforts of tribal, State, United States and Canadian governments, and sport and commercial fishing interests. The Pacific Salmon Commission was created by the United States and Canada to implement the treaty, which was updated in 1999, and most recently in 2008.

The 2008 update of the treaty gave additional protection to weak runs of Chinook salmon returning to Puget Sound rivers. The update provides compensation to Alaskan fishermen for lost fishing opportunities, while also funding habitat restoration in the Puget Sound region.

As co-managers of the fishery resources in western Washington, tribal participation in implementing the PST is critical to achieve the goals of the treaty to protect, share and restore salmon resources. We support the fiscal year 2012 NOAA Fisheries budget which includes \$3 million to implement the 2008 Pacific Salmon Treaty Chinook Annex. Specifically, the funds would be used for Coded-Wire-Tag Program Improvements (\$1.5 million) and Puget Sound Critical Stocks Augmentation (\$1.5 million).

*\$16 Million for the Mitchell Act Hatchery Program, Plus Funding Required for Reform Projects*

Salmon produced by the Mitchell Act hatcheries on the lower Columbia River are critically important in that they provide significant harvest opportunities for both Indian and non-Indian fisheries off the coast of Washington. This hatchery produc-

tion is intended to mitigate for the lost production caused by the hydropower dam system on the Columbia River. This hatchery production is also important in that it dampens the impact of Canadian fisheries under the terms of the PST Chinook Annex on Puget Sound and coastal stocks. This funding provides for the operations of this important hatchery program along with required reform projects. The funding is required to mitigate for the Federal hydropower system on the Columbia River.

#### OUR MESSAGE

We generally support the administration's fiscal year 2012 budget with the changes noted above. The tribes strive to implement their co-management authority and responsibility through cooperative and collaborative relationships with the State and local communities. 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.

We are sensitive to the budget challenges that the Congress faces. Still, we urge you to increase the allocation and appropriations that can support priority ecosystem management initiatives. For the sake of sustainable health, economies and the natural heritage of this resource, it is critically important for the Congress and the Federal Government to do even more to coordinate their efforts with State and tribal governments.

#### CONCLUSION

Clearly, western Washington tribes are leaders in protecting and sustaining our natural resources. The tribes possess the legal authority, technical and policy expertise, and effectively manage programs to confront the challenges that face our region and Nation.

The tribes are strategically located in each of the major watersheds, and no other group of people is more knowledgeable about the natural resources. No one else so deeply depends on the resources for their cultural, spiritual and economic survival. Tribes seize every opportunity to coordinate with other governments and nongovernmental entities, to avoid duplication, maximize positive impacts, and emphasize the application of 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 Congress help us in our efforts to protect and restore our great natural heritage and support our funding requests. Thank you.

#### PREPARED STATEMENT OF THE NATURAL SCIENCE COLLECTIONS ALLIANCE

The Natural Science Collections Alliance appreciates the opportunity to provide testimony in support of fiscal year 2012 appropriations for the National Science Foundation (NSF). We encourage the Congress to provide NSF with at least \$7.767 billion in fiscal year 2012.

The NSF drives innovation and supports job creation by awarding research grants to scientists and institutions; assisting with the acquisition of research infrastructure and instrumentation; and training students and teachers. Collectively, these activities provide the foundation for the Nation's research enterprise, generating information that ultimately drives economic growth, improves human health, addresses energy needs, and enables sustainable management of our natural resources. These efforts, however, require a sustained and predictable Federal investment. Unpredictable swings in Federal funding can disrupt research programs, create uncertainty in the research community, and stall the development of the next great idea. The budget request for fiscal year 2012 would invest in these critical efforts by allowing NSF to fund nearly 2,000 additional research grants, thereby supporting more than 6,000 additional researchers and students.

The Biological Sciences Directorate (BIO) within NSF is the primary Federal supporter of basic biological research, and serves a vital role in ensuring our Nation's continued leadership in the biological sciences. BIO provides roughly 68 percent of Federal grant support for fundamental biological research conducted at our Nation's universities and other nonprofit research centers, such as natural history museums. BIO's support of transformative research has advanced our understanding of complex living systems and is leading the way forward in addressing major challenges—conserving biodiversity, mitigating and adapting to climate change, and developing new bio-inspired technologies.

Equally important, NSF provides essential support for our Nation's biological research infrastructure, such as natural science collections, university-based natural history museums, and field stations. These research centers enable scientists and students to study the basic data of life, conduct modern biological and environmental research, and provide undergraduate and graduate students with hands-on training opportunities.

We strongly encourage the Congress to support the request for \$10 million to support the digitization of high-priority U.S. specimen collections. Collections play a central role in many fields of biological research, including disease ecology, biodiversity, and climate change. They also provide critical information about existing gaps in our knowledge of life on Earth. This investment would help the scientific community ensure access to and appropriate curation of irreplaceable biological specimens and associated data, and would stimulate the development of new computer hardware and software, digitization technologies, and database management tools. For example, this effort is bringing together biologists, computer and information scientists, and engineers in multidisciplinary teams to develop innovative imaging, robotics, and data storage and retrieval methods. These tools will expedite the digitization of collections and, more than likely, contribute to the development of new products or services of value to other industries.

The fiscal year 2012 budget would also continue efforts to better understand biodiversity. Funding is included for the Dimensions of Biodiversity program to support cross-disciplinary research to define the impacts of biodiversity on ecosystem services and human well being.

The Directorate for Geosciences (GEO) also supports research and student training opportunities with natural history collections. GEO supports cross-disciplinary research on the interactions between Earth's living and nonliving systems—research that has important implications for our understanding of climate change, water and natural resource management, and biodiversity.

Within the Directorate for Education and Human Resources, the Informal Science Education program is advancing our understanding of informal science, technology, engineering, and mathematics (STEM) learning. This program supports projects that create tools and resources for STEM educators working outside of traditional classrooms. The program also builds professional capacity for research, development, and practice in the field. We urge the Congress to support the administration's fiscal year 2012 budget request for this program.

#### CONCLUSION

Continued investments in natural history collections and the biological sciences are critical. The President's budget request for NSF will help spur economic growth and innovation and continue to build scientific capacity at a time when our Nation is at risk of being outpaced by our global competitors. Please support an investment of \$7.767 billion in NSF for fiscal year 2012.

Thank you for your thoughtful consideration of this request and for your prior support of the NSF.

#### ABOUT NSC ALLIANCE

The Natural Science Collections Alliance (NSC Alliance) is a nonprofit association that supports natural science collections, their human resources, the institutions that house them, and their research activities for the benefit of science and society. We are comprised of more than 100 institutions who are part of an international community of museums, botanical gardens, herbariums, universities, and other institutions that house natural science collections and utilize them in research, exhibitions, academic and informal science education, and outreach activities.

#### PREPARED STATEMENT OF THE PEW ENVIRONMENT GROUP

Dear Chairwoman Mikulski and Ranking Member Hutchison: We, the undersigned 137 organizations representing a diverse range of commercial and recreational fishing associations, commercial seafood dealers, the charter and for-hire industry, fishery dependent businesses and ocean conservation organizations, collectively urge the subcommittee and all Members of Congress to support the President's fiscal year 2012 National Oceanic and Atmospheric Administration budget request of \$91.5 million for the Expand Annual Stocks Assessments and Fisheries Statistics line-items. We request that you make these data collection and analysis line items a top priority in fiscal year 2012.

The National Marine Fisheries Service estimates that U.S. commercial and salt-water recreational fishing contributes more than \$160 billion to the economy annually and supports nearly 2 million jobs. These industries rely on healthy fish populations, which provide food for our tables, offer recreational opportunities for millions of Americans and sustain jobs and communities on every coast. The Congress should invest in America's fish populations and fishing businesses by providing the funding necessary to ensure that managers use the best science possible to guide stewardship of our ocean fish resources.

EXPAND ANNUAL STOCK ASSESSMENTS (\$67.1 MILLION, AS REQUESTED)

Stock assessments provide the basic information that scientists use to determine the health of fish populations. Assessments provide estimates of abundance and catch levels that a fish population can support. Increased funding will reduce scientific and management uncertainty and will allow managers to set catch levels and accountability measures that maximize fishing opportunities while rebuilding those that have been determined to be overfished and maintaining healthy fish populations.

FISHERIES STATISTICS (\$24.4 MILLION, AS REQUESTED)

The 2006 amendments to the Magnuson-Stevens Act required the agency, within 2 years, to improve the quality and accuracy of their primary private angler data collection program. These amendments led to the establishment of the Marine Recreational Information Program which is funded primarily through the Fisheries Statistics budget line. Investment of funds for this line item will improve data on recreational catch levels and participation, and will help scientists to better estimate recreational fishing mortality and set more accurate catch limits. This program will also result in more timely decisions that both the regional fishery management councils and the fishing industry need to improve management and potentially lead to more fishing opportunities.

Thank you for your consideration of our requests. Rarely does such a diverse group of U.S. stakeholders agree on fishery-related issues, but on the need to adequately fund fisheries data collection there is no disagreement. If we are going to have abundant fisheries, the Congress must provide the resources to necessary to sustainably manage ocean fish by ensuring that management decisions are based on timely and accurate information and analysis. The health of America's ocean fish populations and the jobs, income, recreation, seafood, and communities that they sustain depend on your investments in fiscal year 2012.

*National:*

Berkley Conservation Institute, Pure Fishing	National Marine Sanctuary Foundation
Blue Ocean Institute	Natural Resources Defense Council
Bonefish and Tarpon Trust	Ocean Conservancy
Environment America	Ocean Conservation Research
Center for Environment, Commerce & Energy, African American Environmentalist Association	OCEAN Magazine
Environmental Defense Fund	Oceana
FishWise	Pew Environment Group
Greenpeace USA	Plant a Fish
Interfaith Council for the Protection of Animals and Nature	Reef Relief
International Game Fish Association	Republicans for Environmental Protection
Marine Fish Conservation Network	Sailors for the Sea
National Audubon Society	Shark Savers
	Sport Fishing Magazine
	Waterkeeper Alliance
	West Marine

*Alabama:*

AAA Charters

*Alaska:*

Alaska Marine Conservation Council

*California:*

Intersea Foundation  
Reef Check California

World of Diving

*Delaware:*

Delaware Nature Society

*Florida:*

Eric Zamora Photography	Off the Bank Charters
Fantastic Endeavors	Palm Beach County Reef Rescue
Gulf Coast Conservancy	Sanibel Captiva Conservation
Hernando Audubon Society	Foundation
Indian Riverkeeper	Snook Foundation
Just-in-Time Charters	St. Lucie County Conservation Alliance
North Swell Media	

*Hawaii:*

Hawaii Fishing & Boating Association	SeaPics.com
--------------------------------------	-------------

*Maine:*

Island Institute	Midcoast Fishermen's Association
Maine Rivers	Midcoast Fishermen's Cooperative

*Maryland:*

Backwater Angler	Environment Maryland
Center for Chesapeake Communities	Prime Seafood
Chesapeake Bay Foundation	

*Massachusetts:*

AL Cignoli Company	FV Alyson Marie
Alewives Anonymous	FV Karen M.
Bach Corp	Ipswich River Watershed Association
Byson Investments	Johnston Associates
Capt. John Boats	MD Group
Cence Cincotti Strategies	New England Coastal Wildlife Alliance
Conservation Law Foundation	O'Sullivan & Associates
Full Armor	Plymouth Area Chamber of Commerce

*New Jersey:*

Environment New Jersey	SandyHook SeaLife Foundation
Great Egg Harbor Watershed Association	

*New York:*

Alpha Dive Training	North Flats Guiding
Citizens Campaign for the Environment	Ocean Blue Divers
Coastal Water Guides	Riverkeeper
Green Drinks NYC	Swim and Scuba Tiedemann's Diving Center
Integrated Electronic Systems	

*North Carolina:*

NC Sierra Club	North Carolina League of Conservation Voters
Lower Neuse Riverkeeper	Pamlico-Tar River Foundation
Upper Neuse Riverkeeper	White Oak-New Riverkeeper Alliance

*Ohio:*

Deep Blue Adventures	
----------------------	--

*Oregon:*

Northwest Environmental Advocates	
-----------------------------------	--

*Pennsylvania:*

Juniata Valley Audubon	Big Blue Aquatic Gifts
PennEnvironment	Snapper Charters

*Rhode Island:**South Carolina:*

South Carolina Coastal Conservation League	
--	--

*Texas:*

Circle H Outfitters	Hingle's Guide Service
Charter Fishermen's Association	Reel Threel Saltwater
Environment Texas	Underwater Expeditions
Geaux Fishing Charters	

*Virginia:*

5 Point Norfolk Farm Market	Green Jobs Alliance
Alchemy Redefined	Greener Results Virginia
Alt Daily	Hampton Roads Green Caffeine
And Design Collective	Hampton Roads Green Drinks
Batten Bay Farm	ModTra Corp
Beach Flavor	MoveOn.Org-Hampton Roads
Central VA Wind Energy and Manufacturing	Naro Expanded Cinemas
Cherry Brothers Railing Company	Nuckols Tree Care
Chesapeake for Change	Riehl Photography and Green Irene
Counseling Interventions	Sabrosa Foods
Croc's Eco-Bistro	Shenandoah Riverkeeper
Dominion Fuels	Solar Services-Virginia Beach
Echelon Pavers	Sunrise Solar and Wind
Eco Maniac	Terra-Scapes Environmental Consulting
Green Alternatives	Treehouse Magazine

*Washington:*

Sustainable Fisheries Foundation

## PREPARED STATEMENT OF PEW ENVIRONMENT GROUP

The Pew Environment Group (PEG) appreciates the opportunity to provide testimony on the National Oceanic and Atmospheric Administration (NOAA) fiscal year 2012 budget request, particularly as it relates to implementation of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). In order to meet the critical fisheries management requirements of the MSA, PEG supports the President's fiscal year 2012 budget request of \$346.3 million for data collection and analysis programs at the National Marine Fisheries Service (NMFS). We are concerned that the current request does not represent the long-term investment level needed to maintain sustainable fisheries in the future and would like to discuss this further with the subcommittee. However, given current fiscal constraints we are prepared to support the proposed funding levels.

In the 35 years since the law was enacted on April 13, 1976, the MSA has enjoyed strong bipartisan support, including the most recent 2006 reauthorization, which was sponsored by the late Senator Ted Stevens and signed into law by President George W. Bush. The MSA provides the legal tools to sustainably manage ocean fish, one of America's most valuable natural resources. Healthy fish populations are the backbone of America's commercial and recreational saltwater fishing industries, which according to NMFS generated \$163 billion in sales impacts and supported nearly 1.9 million full- and part-time jobs in 2008 alone.<sup>1</sup> For this reason, diverse stakeholders including commercial fishermen, recreational anglers, and environmental groups are united in advocating for data collection and analysis appropriations.

Data collection programs are the lifeblood of good fisheries management, generating information that helps managers make informed decisions, and fishermen and other fishery-related businesses plan their investments and business actions. The Congress should support the following line-item requests because they are critical for maintaining healthy fish populations that support stable and productive fisheries:

*Expand Annual Stock Assessments.*—\$67.1 million as requested, an increase of \$16.2 million more than the fiscal year 2010 enacted level. Fish stock assessments are critical for setting science-based annual catch limits (ACLs), a key provision of the 2006 amendments, which prevent overfishing and maintain productive fisheries over time. This funding would provide NMFS greater capability to assess the 230 commercially and recreationally important fish stocks managed by the Federal Government. Timely, updated stock assessments reduce the scientific uncertainty associated with ACL-setting and can help fishery managers increase commercial and recreational fishing opportunities while minimizing the risk of overfishing. We strongly support this critical increase in funding.

*Fisheries Statistics.*—\$24.4 million as requested, an increase of \$3.4 million more than the fiscal year 2010 enacted level. This budget line item supports

<sup>1</sup>National Marine Fisheries Service (NMFS), 2010, "Fisheries Economics of the United States, 2008", <http://www.st.nmfs.noaa.gov/st5/publication/index.html>.

programs that provide advice, coordination, and guidance on matters related to the collection, analysis, and dissemination of statistics in both commercial and recreational saltwater fisheries. The Marine Recreational Information Program, created to improve the quality and accuracy of recreational fishing data per the 2006 MSA amendments, is funded primarily through this budget line-item. Higher quality data on marine recreational fishing, which contributes \$59 billion in sales impacts to the U.S. economy and supports 384,000 jobs, will allow scientists to better estimate fishing mortality and set ACLs more accurately, thus reducing the risk of overfishing.<sup>2</sup> At a time when recreational fishermen and scientists agree that better data are critical for both restoring fish populations and increasing recreational fishing opportunities, we urge the Congress to support this increase in funding.

*Survey and Monitoring Projects.*—\$24.2 million as requested, an increase of \$500,000 more than the fiscal year 2010 enacted level. NOAA has stated that “many fisheries lack adequate and timely monitoring of catch and fishing effort”.<sup>3</sup> Survey and monitoring projects provide critical support for implementation of the new ACL requirement. Increased funding will improve the accuracy of ACLs and increase the percentage of stocks with assessments.<sup>4</sup> Additional funding for fishery-independent surveys, monitoring, and research will improve estimates of ecosystem change, fishing mortality and population size.

*Observers/Training.*—\$39.1 million as requested, a decrease of \$1.9 million from the fiscal year 2010 enacted level. Trained fisheries observers provide essential data on the amount and type of fish caught by fishermen, which is used for compliance monitoring and scientific stock assessments.<sup>5</sup> NOAA considers at-sea observers the most reliable source of information about fishing catch and bycatch (i.e., incidental catch of nontarget ocean wildlife).<sup>6</sup> Funding for observer coverage will improve the quality and quantity of fisheries data, especially estimates of bycatch mortality, information that is critical to estimating population size and sustainable fishing levels. While we have strong reservations about the proposed cut to the observers/training line item because of the impact it will have on these important programs, we support the proposed fiscal year 2012 funding request of \$39.2 million.

*Cooperative Research.*—\$7.2 million as requested by the President, a decrease of \$10.3 million from the fiscal year 2010 enacted level. Cooperative research programs pay fishermen, working under the direction of Federal scientists, to collect fisheries data and test new sustainable fishing gear and practices. These programs provide jobs for fishermen and also enable managers to tap into their on-the-water knowledge and expertise to conduct critical research programs. In 2003, NMFS estimated that it would need \$25.5 million for cooperative research by fiscal year 2009.<sup>7</sup> The President’s request will only meet a fraction of this identified need, and we are concerned about the effect of the proposed reduction on this critical program.

In addition, the President’s fiscal year 2012 budget request transfers \$6 million out of the cooperative research line item and into the National Catch Share Program line item. We believe that any increases for catch share programs should be made with new money, not transferred from existing general research programs that should be available for all fisheries. Although NMFS asserts that the \$6 million will be used for cooperative research in catch share fisheries, there is no guarantee that it will continue to be used for cooperative research in the future. Taking funding from general cooperative research, where it would be available for all fisheries, and restricting it to only catch share fisheries, short changes the vast majority of fisheries, which are not catch share fisheries.

<sup>2</sup>NMFS, 2010, “Fisheries Economics of the United States, 2008”, [http://www.st.nmfs.noaa.gov/st5/publication/fisheries\\_economics\\_2008.html](http://www.st.nmfs.noaa.gov/st5/publication/fisheries_economics_2008.html).

<sup>3</sup>NOAA, “Budget Estimates, Fiscal Year 2009, Congressional Submission”, p. 166. Available at [http://www.corporateservices.noaa.gov/nbo/fy09\\_rollout\\_materials/OAA\\_FY09\\_Final\\_CJ.pdf](http://www.corporateservices.noaa.gov/nbo/fy09_rollout_materials/OAA_FY09_Final_CJ.pdf).

<sup>4</sup>NOAA, “Technical Memorandum NMFS–F/SPO–56: Marine Fisheries Stock Assessment Improvement Plan: Report of the National Marine Fisheries Service National Task Force for Improving Fish Stock Assessments”, October 2001. Available at [http://www.nmfs.noaa.gov/pr/sars/improvement/pdfs/marine\\_fisheries\\_saip.pdf](http://www.nmfs.noaa.gov/pr/sars/improvement/pdfs/marine_fisheries_saip.pdf).

<sup>5</sup>NOAA, “NOAA Fiscal Year 2012 President’s Budget”, Chapter 2: National Marine Fisheries Service, p. 315–19. Available at [http://www.corporateservices.noaa.gov/nbo/fy12\\_presidents\\_budget/National\\_Marine\\_Fisheries\\_Service\\_FY12.pdf](http://www.corporateservices.noaa.gov/nbo/fy12_presidents_budget/National_Marine_Fisheries_Service_FY12.pdf).

<sup>6</sup>NOAA/NMFS, *Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs*, NOAA Technical Memorandum NMFS–F/SPO–66, October 2004. 108 pp.

<sup>7</sup>NMFS’ 2003 5-year assessment estimated the need for cooperative research to be \$22.8 million more than fiscal year 2003 levels by fiscal year 2009, for a total of \$25.5 million.



*Fisheries Research and Management Programs.*—Total of \$184.3 million as requested, a \$6.5 million decrease from the fiscal year 2010 enacted level. Fisheries research and management programs provide accurate and timely information and analysis of the biology and population status of managed fish, as well as the socioeconomics of the fisheries that depend on those populations. Such information is critical for the development of management measures to ensure an end to overfishing. Because of their vital role, Fisheries Research and Management Programs should be funded at no less than the fiscal year 2012 request of \$184.3 million. In NOAA's fiscal year 2012 budget request, \$11.4 million is transferred from the Fisheries Research and Management Programs line item into the National Catch Share Program line item. As with Cooperative Research, no funds from this line item should be transferred to the National Catch Share Program because those funds would become permanently unavailable to support research and management of the vast majority of federally managed fisheries that are not currently in a catch share program, and may not be included in one in the future.

Good fisheries management leads to healthy fish populations, a stable and productive fishing industry and robust recreational fisheries—a win-win for conservation, anglers and marine-related businesses. Today, because of the MSA, fishery managers are using science-based catch limits that do not allow overfishing and rebuild depleted fish populations to healthy levels. These requirements are working, providing economic benefits to fishing communities and the Nation as a whole, and promise to provide even greater returns in the future.

We cannot afford to leave the job of bringing our fish populations back to healthy levels unfinished—our Nation's fishermen and our fish resources depend on it. NMFS data indicate that 39 of the 190 assessed commercially and recreationally important fish stocks (about 20 percent) are still subject to overfishing, and another 43 populations remain at unhealthy levels.<sup>8</sup> The relatively modest investments that we are requesting today will lead to healthy U.S. fish populations in the future, which according to NMFS will catalyze a \$31 billion increase in annual sales and support for 500,000 new U.S. jobs.<sup>9</sup>

We ask the subcommittee to continue its support of the MSA and invest at least \$346.3 million in fiscal year 2012 in one of America's most valuable natural resources, our ocean fish populations, so that they can continue to provide significant and growing benefits for U.S. taxpayers through fishing jobs, healthy oceans, local seafood, and vibrant coastal communities.

---

#### PREPARED STATEMENT OF THE REGIONAL INFORMATION SHARING SYSTEMS PROGRAM

The Regional Information Sharing Systems (RISS) Program was established more than 30 years ago by the law enforcement community for law enforcement agencies and officers to close the gap on information sharing and to serve as a force multiplier in the areas of secure communications, intelligence sharing, and investigative support. RISS is a proven and cost-effective program that leverages funding to support thousands of local, State, Federal, and tribal law enforcement agencies across the Nation. It is respectfully requested that the Congress appropriate \$45 million to RISS for fiscal year 2012. This amount is level with fiscal year 2010 funding.

RISS consists of six regional centers that tailor their services to meet the needs of their unique regions while working together on nationwide initiatives. The RISS Centers provide investigative services to more than 8,700 law enforcement and criminal justice agencies in all 50 States, the District of Columbia, U.S. territories, Australia, Canada, England, and New Zealand. Hundreds of thousands of officers utilize RISS resources and services each year. RISS supports efforts against organized and violent crime, gang activity, drug activity, terrorism, human trafficking, identity theft, and other regional priorities, while promoting officer safety.

Through RISS's timely and accurate intelligence information and critical investigative support services, law enforcement and criminal justice agencies have increased their success exponentially. These results are measured in the number of career criminals that are removed from our communities and the reduction of illicit drugs available on our streets. With level funding, RISS will continue to maintain the following critical services and programs:

<sup>8</sup>NMFS (December 2010). 2010 Status of U.S. Fisheries: Fourth Quarter Update, [www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm](http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm).

<sup>9</sup>Testimony of Eric Schwaab on Implementation of the Magnuson-Stevens Conservation and Management Act before the U.S. Senate Committee on Commerce, Science and Transportation Subcommittee on Oceans, Atmosphere, Fisheries and the Coast Guard, p. 3, March 8, 2011: <http://www.legislative.noaa.gov/112testimony.html>.

- Operate the six RISS Centers and the RISS Technology Support Center;
- Provide investigative support services, including analytical services, equipment loans, and research assistance;
- Operate and maintain the RISS Secure Intranet (RISSNET);
- Operate, maintain, and enhance the RISS Criminal Intelligence Databases (RISSIntel) and the RISS National Gang Intelligence Database (RISSGang);
- Operate and maintain the RISS Officer Safety Event Deconfliction System (RISSafe);
- Participate in and implement goals of the sensitive but unclassified (SBU)/controlled unclassified information (CUI) Interoperability Initiative (SII);
- Operate and maintain the RISS Automated Trusted Information Exchange (ATIX);
- Operate the Pawnshop Database and identify strategies to expand the application; and
- Continue to support partnerships with fusion centers.

The Bureau of Justice Assistance (BJA), Office of Justice Programs, Department of Justice, provides oversight and program management for the RISS Program. The RISS Centers have adopted appropriate operational policies as well as a privacy policy that fully complies with the Criminal Intelligence Systems Operating Policies (28 Code of Federal Regulations [CFR] Part 23). RISS firmly recognizes the need to ensure that an individual's constitutional rights, civil liberties, civil rights, and privacy interests are protected throughout the intelligence process.

RISSNET is an existing and proven infrastructure that connects disparate systems and enables users to query connected systems simultaneously. RISSNET resources include RISSIntel, RISSafe, RISSGang, RISS ATIX, the RISS Investigative Leads Bulletin Board (RISSLeads), a data-visualization and link-analysis tool (RISSLinks), the RISS Search Engine (RISSearch), the RISS Center Web sites, and secure email. More than 600 resources from a variety of sources are available to authorized users via RISSNET. The owners of these resources rely on RISS for its secure infrastructure and communications.

In fiscal year 2010, more than 3.4 million records were available in RISSIntel. In addition, RISS experienced more than 4 million inquiries to RISS resources. Users query RISSIntel to obtain information on subjects, weapons, and addresses. Users select one or all connected systems and conduct a federated search. In addition to RISSIntel, member agencies have access to various State, regional, Federal, and specialized criminal justice intelligence systems connected to RISSNET. Almost 100 agencies are connected or pending connection to RISSNET, including 31 High Intensity Drug Trafficking Areas, 38 State agency systems, and 22 Federal and other systems, such as the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF); the Federal Bureau of Investigation (FBI) Law Enforcement Online; the FBI National Gang Intelligence Center; the National Virtual Pointer System; Nlets—The International Justice and Public Safety Network; and many others. RISS continually strives to maximize information sharing among these systems and increase the number of systems connected to RISSNET. By connecting agencies and systems to RISSNET, rather than funding the build-out of infrastructure for new stand-alone information systems, hundreds of millions of dollars are saved and millions of data records are easily and quickly accessed by law enforcement at little or no cost to the user.

RISSafe stores and maintains data on planned law enforcement events, with the goal of identifying and alerting affected agencies and officers of potential conflicts impacting law enforcement efforts. RISSafe helps prevent undercover and other operations from conflicting and prevents officer injuries and deaths that might otherwise have occurred. RISSafe was honored as 1 of 10 2010 Honorable Mention winners at the 23d Annual Government Computer News Awards for "Outstanding Information Technology Achievement in Government." In addition, in February 2011, RISSafe achieved a milestone with the 300,000th operation being entered into the application. Since RISSafe's inception, close to 100,000 conflicts have been identified.

The RISS Officer Safety Web site serves as a nationwide repository for issues related to officer safety, such as concealments, hidden weapons, armed and dangerous threats, officer safety videos, special reports, and training opportunities. At the recent International Association of Chiefs of Police conference, the U.S. Attorney General addressed officer safety, specifically announcing the VALOR Program, which is designed to promote officer safety and prevent injuries and deaths to law enforcement officers in the line of duty. RISSafe and the RISS Officer Safety Web site are two RISS resources available to support the VALOR Program's efforts.

The RISSGang Program consists of a criminal intelligence database, a Web site, informational resources, and secure communications to aid and support gang-related

investigations. The RISSGang database provides access to gang information, including suspects, organizations, weapons, photographs of gang members, and graffiti. Like RISSIntel, the RISSGang database provides for a federated search, including the CalGang database. RISS is working to connect other gang intelligence databases to RISSNET, such as the ATF GangNet.

RISS ATIX is available to thousands of law enforcement and public safety agencies. RISS ATIX resources include Web pages that contain general and community-specific information. The RISS ATIX Bulletin Board provides secure online conferences for users to collaborate and post information. The Document Library provides informational and educational materials. ATIX secure email enables the distribution of alerts, SBU/CUI, and other information.

In addition to its information-sharing resources, RISS offers a full complement of investigative support services and resources to criminal justice agencies, setting RISS apart from other information sharing programs. The following summarizes RISS's investigative support services.

*Analysis.*—RISS analysts developed 37,832 analytical products in fiscal year 2010 for investigators and prosecutors to help increase their ability to identify, detect, and apprehend suspects as well as enhance prosecutorial success in court. These products include link-analysis charts, crime scene diagrams, telephone toll analysis and financial analysis reports, digital forensics analysis, and audio and video enhancement services.

*Investigative Support.*—RISS intelligence research staff responded to 102,761 requests in fiscal year 2010 to conduct database searches and research numerous resources.

*Equipment Loans.*—Pools of highly specialized investigative and surveillance equipment are available for loan to member agencies for use in support of multi-jurisdictional investigations. In fiscal year 2010, 4,992 pieces of equipment were borrowed by member agencies.

*Confidential Funds.*—RISS provides funds to purchase contraband, stolen property, and other items of an evidentiary nature or to provide for other investigative expenses. RISS provided \$393,186 in confidential funds in fiscal year 2010.

*Training.*—RISS Centers sponsor or cosponsor training classes, meetings, and conferences that build investigative expertise for member-agency personnel. In fiscal year 2010, 80,204 criminal justice professionals received RISS training.

*Publications.*—Each center develops and distributes numerous publications, bulletins, and reports focusing on local and nationwide issues. In fiscal year 2010, the RISS Centers developed 317 documents and distributed thousands of copies of each to law enforcement personnel.

*Field Services Support.*—The integration of field services is unique to RISS, whereby individuals regularly contact law enforcement and public safety agencies to ensure that RISS is meeting their needs. RISS field staff conducted 25,653 on-site visits in fiscal year 2010 to train, support, and help integrate RISS services. This one-on-one support has resulted in trusted relationships and a program prized among its members.

All criminal justice entities throughout the country are facing tightened budgets and limited resources. RISS's structure and diverse services help augment their efforts. With the assistance of RISS services, agencies arrested 4,563 individuals during fiscal year 2010. In addition, agencies seized or recovered more than \$23 million in narcotics, property, and currency.

RISS seeks new and strengthens existing partnerships with other law enforcement entities and participates on regional and national committees to further expand and enhance information sharing. One critical initiative involving RISS is the SBU/CUI Interoperability Initiative. RISSNET is 1 of 4 SBU/CUI networks/systems participating in the initiative under the auspices of the White House and the Office of the Program Manager, Information Sharing Environment. The goal of this initiative is to provide single sign-on and access to a variety of system-to-system enhancements within an interoperable and protected SBU/CUI network/system environment for local, State, Federal, and tribal law enforcement, regardless of agency ownership of the individual network/system.

RISS also supports a number of other programs and initiatives and provides the secure infrastructure for law enforcement to share information, including the Nationwide Suspicious Activity Reporting (SAR) Initiative, the National Center for Missing & Exploited Children, the National Motor Vehicle Title Information System, the United States Attorneys' Offices, and the FBI's National Gang Intelligence Center. In addition, information is shared on threats against elected officials and dignitaries through the U.S. Secret Service Targeted Violence Information Sharing System. RISS is supported by all national law enforcement organizations, such as the International Association of Chiefs of Police, the National Sheriffs' Association, and

the National Narcotic Officers' Associations' Coalition, as well as numerous State associations.

Each RISS Center has developed partnerships and programs to meet the needs of its unique region. Some examples include the Project Safe Neighborhoods Mapping and Analysis Program, the National Identity Crimes Law Enforcement Network, the Cold Case Locator System, the Metals Theft Initiative, the Master Telephone Index, the Pawnshop Database, the Combat Meth Project, and the Cold Hit Outcome Project.

RISS is recognized in the National Criminal Intelligence Sharing Plan and the Law Enforcement Information Sharing Program Strategy as a mechanism to facilitate secure information sharing. RISS has become the program of choice for law enforcement and criminal justice agencies from across the Nation.

It is respectfully requested that the Congress appropriate \$45 million for fiscal year 2012 to enable RISS to continue to serve the law enforcement community by providing resources, services, and programs they have come to rely on. 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 is unable to 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.

RISS provides resources and capabilities to share critical information nationwide, serves as a secure platform for other criminal justice entities to share and exchange their information, and provides investigative support services that, in many cases, agencies would not otherwise receive. RISS is essential in promoting officer safety and creating a safer work environment for our Nation's law enforcement. Appropriate funding and support will enable RISS to continue its programs while effectively serving the criminal justice community. For additional information on the RISS Program, visit [www.riss.net](http://www.riss.net). RISS appreciates the support this subcommittee has continuously provided to the RISS Program and is grateful to provide this testimony.

---

PREPARED STATEMENT OF THE SOUTHERN CATCH—SOUTH ATLANTIC FISHERMEN'S ASSOCIATION

Dear Chairman Mikulski, Ranking Member Hutchinson, and members of the subcommittee: I write on behalf of the South Atlantic Fishermen's Association, a new and growing organization made up of fishermen and seafood lovers from North Carolina to the Florida Keys. We work to protect the Southeast's fishing heritage by advocating for sustainable year-round fishing rules, collecting better fishery science, and connecting consumers and businesses with fishermen, to improve the abundance and accessibility of local seafood. We also want to pass our fishing heritage on to future generations.

We strongly support the \$54 million in funding for the National Oceanic and Atmospheric Administration's (NOAA) National Catch Share Program in fiscal year 2012. We oppose recent efforts to prohibit fishermen from considering catch share programs, because commercial fishermen should have the option to implement catch share programs if they so choose.

Commercial fishing in the South Atlantic is an important part of the economy, and local fishing supports jobs and the seafood industry, generating more than \$7 billion in annual sales and supporting 137,000 jobs. But, current management isn't working and the commercial fishing industry is facing difficult times.

What we want is management that gives commercial fishermen flexibility and more time on the water. Catch share programs could provide this freedom by enabling fishermen to stabilize their businesses and helping to ensure a sustainable fishery for future generations.

After implementing catch shares, fishermen in the Gulf of Mexico were able to fish year-round and provide local, fresh product to consumers. Catch shares helped Gulf of Mexico fishermen cut operating costs and avoid market gluts that drove fish prices down. This resulted in a sustainable commercial fishery and profitable fishing businesses.

South Atlantic commercial fishermen should have the opportunity to develop catch share programs, and a portion of the \$54 million in funding in fiscal year 2012 for NOAA's National Catch Share Program would help us to do this.

We would also like to reiterate our opposition to a recent amendment offered by Representative Walter Jones (R-NC) that is included in the final fiscal year 2011 budget agreement. This amendment would prohibit funding for approval of new

catch share programs by the Gulf of Mexico, South Atlantic, Mid-Atlantic, and New England Regional Fishery Management Councils.

Taking away fishermen's access to catch shares is not going to end the loss of fishing jobs, or put an end to fisheries closures or consolidation. This amendment is going to lengthen the struggle for our fisheries, which we cannot afford. Fishermen already feel like they don't have a voice in the process and this is just one more step that will distance fishermen from the fishery management process.

The future of our region's commercial fishing industry is at stake. We need a sustainable fishery and strong fishing businesses that will attract future generations of fishermen. Catch shares are a management tool that could help us achieve this. We need the Congress to provide funding and the flexibility for fishermen to work with the South Atlantic Fishery Management Council on catch shares.

#### PREPARED STATEMENT OF THE SOCIETY FOR NEUROSCIENCE

##### INTRODUCTION

Mr. Chairman and members of the subcommittee, my name is Susan Amara, Ph.D. I am the Thomas Detre Professor of Neuroscience and chair of the Department of Neurobiology as well as co-director of the Center for Neuroscience at the University of Pittsburgh and president of the Society for Neuroscience (SfN). My major research efforts have been focused on the structure, physiology, and pharmacology of a group of proteins in the brain that are the primary targets for addictive drugs including cocaine and amphetamines, for the class of therapeutic antidepressants, known as reuptake inhibitors, and for methylphenidate, which is used to treat attention deficit hyperactivity disorders.

On behalf of the more than 41,000 members of SfN and myself, I would like to thank you for your past support of neuroscience research at the National Science Foundation (NSF). Over the past century, researchers have made tremendous progress in understanding cell biology, physiology, and chemistry of the brain. Research funded by NSF has made it possible to make advances in brain development, imaging, genomics, circuit function, computational neuroscience, neural engineering, and other disciplines. In this testimony, I will highlight how these advances have benefited taxpayers and why we should continue to strengthen this investment, even as the Nation makes difficult budget choices.

##### FISCAL YEAR 2012 BUDGET REQUEST

SfN supports the President's request of \$7.7 billion for NSF in fiscal year 2012, a 13-percent increase more than fiscal year 2010. This level of funding will enable the field to serve the long-term needs of the Nation by continuing to advance science, improve health, and promote America's near-term and long-range economic strength by investing in the proven economic engine of discovery.

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. Also, 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 human knowledge, health, and wellness—the question is whether America will maintain its role leading the next generation of scientific advances.

Resources provided to NSF will go to support the Nation's best and brightest researchers at the forefront of promising discoveries, to deserving graduate students at the start of their careers, and to developing advanced scientific tools and infrastructure that will be broadly available to the research community.

##### WHAT IS THE SOCIETY FOR NEUROSCIENCE

SfN is a nonprofit membership organization of basic scientists and physicians who study the brain and nervous system. Its mission is to:

- Advance the understanding of the brain and the nervous system by bringing together scientists of diverse backgrounds, by facilitating the integration of research directed at all levels of biological organization, and by encouraging translational research and the application of new scientific knowledge to develop improved disease treatments and cures.
- Provide professional development activities, information and educational resources for neuroscientists at all stages of their careers, including undergraduates, graduates, and postdoctoral fellows, and increase participation of scientists from a diversity of cultural and ethnic backgrounds.

- Promote public information and general education about the nature of scientific discovery and the results and implications of the latest neuroscience research. Support active and continuing discussions on ethical issues relating to the conduct and outcomes of neuroscience research.
- Inform legislators and other policymakers about new scientific knowledge and recent developments in neuroscience research and their implications for public policy, societal benefit, and continued scientific progress.

#### NEUROSCIENCE AND NSF

Neuroscience is the study of the nervous system. It advances the understanding of human thought, emotion, and behavior. Neuroscientists use tools ranging from computers to special dyes to examine molecules, nerve cells, networks, brain system, and behavior. From these studies, we learn how the nervous system develops and functions normally and what goes wrong in neurological and psychiatric disorders.

SfN supports the President's proposed increase for NSF because NSF research is indispensable to studying how the brain functions, how it controls behavior and health, and how to develop new tools to treat many debilitating diseases and disorders. The field of neuroscience is deeply interdisciplinary and interdisciplinary collaboration is the hallmark of NSF research. For example, 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. Also, NSF-funded physicists, mathematicians, computer scientists, and engineers have conducted groundbreaking work that enables the analysis of EEG data, the development of advanced 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 allow for the extremely accurate measurement of very small amounts of brain hormones.

As the subcommittee works to set funding levels for critical research initiatives for fiscal year 2012 and beyond we need to do more than establish a budget that is "workable" in the context of the current fiscal situation. We ask you to help establish a national commitment to advance the understanding of the brain and the nervous system—an effort that has the potential to transform the lives of thousands of people living with brain-based diseases and disorders. Help us to fulfill our commitment to overcoming the most difficult obstacles impeding progress, and to identifying critical new directions in basic neuroscience.

#### BRAIN RESEARCH AND DISCOVERIES

The power of basic science unlocks the mysteries of the human body by exploring the structure and function of molecules, genes, cells, systems, and complex behaviors. Every day, neuroscientists are advancing scientific knowledge and medical innovation by expanding our knowledge of the basic makeup of the human brain. In doing so, researchers exploit these findings and identify new applications that foster scientific discovery which can lead to new and ground-breaking medical treatments.

Basic research funded by the NSF continues to be essential to ensuring discoveries that will inspire scientific and medical progress for future generations. We know from past experience that it is not always clear where the next critical breakthrough or innovative approach will come from—progress in science depends on imaginative curiosity-driven research that makes leaps in ways no one could have anticipated, and it is often identified through basic research funded at NSF. Where would neuroscience and cell biology be without a rainbow of fluorescent proteins from jellyfish? The original discovery of green fluorescent protein earned three researchers the Nobel Prize for chemistry in 2008 and their work is now illuminating pathways of study for neurological diseases and disorders. Where would cutting edge work in systems neuroscience be today without research on channel rhodopsins from algae? This discovery has blossomed into the burgeoning field of optogenetics and now holds promise for novel, noninvasive treatments for brain disorders. More than ever is it important to support and fund research at many levels from the most basic to translational, from the biological to the physical, in pursuit of human understanding and scientific advances.

Indeed, many of the new findings in neuroscience can be traced back to fundamental work in diverse research 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. 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. The following are a few additional basic research success stories in neuroscience research.

#### *Nicotine Addiction*

Although tobacco has been used legally for hundreds of years, nicotine addiction takes effect through pathways similar to those involving cocaine and heroin. During addiction, drugs activate brain areas that are typically involved in the motivation for other pleasurable rewards such as eating or drinking. These addictions leave the body with a strong chemical dependence that is very hard to get over. In fact, almost 80 percent of smokers who try to quit fail within their first year. The lack of a reliable cessation technique has profound consequences. Tobacco-related illnesses kill as many as 440,000 Americans every year, and thus the human and economic costs of nicotine addiction are staggering. One out of every five U.S. deaths is related to smoking.

Past Federal funding has enabled scientists to understand the mechanisms of nicotine addiction, enabling them to develop successful treatments for smoking cessation. The discoveries that lead to these findings started back in the 1970s, when scientists identified the substance in the brain that nicotine acted on to transmit its pleasurable effects. They found that nicotine was hijacking a receptor, a protein used by the brain to transmit information. This receptor, called the nicotinic acetylcholine receptor, regulates the release of another key transmitter, dopamine, which in turn acts within reward circuits of the brain to mediate both the positive sensations and eventual addiction triggered by nicotine consumption. This knowledge has been the basis for the development of several therapeutic strategies for smoking cessation: nicotine replacement, drugs that target nicotine receptors, as well as drugs that prevent the reuptake of dopamine have all been shown to increase the long-term odds of quitting by several fold.

More recently, using mice genetically modified to have their nicotinic acetylcholine receptors contain one specific type of subunit, scientists determined that some kinds of receptor subunits are more sensitive to nicotine than others, and because each subunit is generated from its own gene, this discovery indicated that genetics can influence how vulnerable a person is to nicotine addiction. Further research to spot genetic risk factors and to generate genetically tailored treatment options is ongoing. Other studies are also testing whether a vaccine that blocks nicotine's effects can help discourage the habit. Since people who are able to quit smoking immediately lower their risk for certain cancers, heart disease and stroke, reliable and successful treatments are clearly needed. Today's continued research funding can make it possible for these emerging therapies to ultimately help people overcome the challenges of nicotine addiction.

#### *Brain-machine Interface*

The brain is in constant communication with the body in order to perform every minute motion from scratching an itch to walking. Paralysis occurs when the link between the brain and a part of the body is severed, and eliminates the control of movement and the perception of feeling in that area. Almost 2 percent of the U.S. population is affected by some sort of paralysis resulting from stroke, spinal cord, or brain injury as well as many other causes. Previous research has focused on understanding the mechanisms by which the brain controls a movement. Research during which scientists were able to record the electrical communication of almost 50 nerve cells at once showed that multiple brain cells work together to direct complex behaviors. However, in order to use this information to restore motor function, scientists needed a way to translate the signals that neurons give into a language that an artificial device could understand and convert to movement.

Basic science research in mice led to the discovery that thinking of a motion activated nerve cells in the same way that actually making the movement would. Further studies showed that a monkey could learn to control the activity of a neuron, indicating that people could learn to control brain signals necessary for the operation of robotic devices. Thanks to these successes, brain-controlled prosthetics are being tested for human use. Surgical implants in the brain can guide a machine to perform various motor tasks such as picking up a glass of water. These advances, while small, are a huge improvement for people suffering from paralysis. Scientists hope to eventually broaden the abilities of such devices to include thought-controlled speech and more. Further research is also needed to develop noninvasive interfaces for human-machine communication, which would reduce the risk of infection and tissue damage. Understanding how neurons control movement has had and will continue to have profound implications for victims of paralysis.

A common theme of both these examples of basic research success stories is that they required the efforts of basic science researchers discovering new knowledge, of physician scientists capable adapting those discoveries into better treatments for their patients and of companies willing to build on all of this knowledge to develop new medications and devices.

#### THE NEXT GENERATION OF SCIENCE AND SCIENTISTS

Finally, another key aspect of NSF is its support for science education and training. SfN recognizes the leadership role that NSF plays in driving innovation in science education. Investment in pre-college and collegiate science-technology-engineering-math instruction is vital to providing a strong pipeline of knowledgeable and motivated young people who will make future discoveries. Additionally, I must emphasize that NSF is a leading force in the development of the next generation of scientists through its support of training. 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, while mentoring and training students of all levels.

As the subcommittee considers this year's funding levels and in future years, I hope that the members will consider that significant advancements in the biomedical sciences often come from younger investigators who bring new insights and approaches to bear on old or intractable problems. Without sustained investment, I fear that flat or falling funding will begin to take a toll on the imagination, energy, and resilience of younger investigators and I wonder about the impact of these events on the next generation. America's scientific enterprise—and its global leadership—has been built over generations, but without sustained investment, we could lose that leadership quickly, and it will be difficult to rebuild.

#### CONCLUSION

The field of neuroscience research holds tremendous potential for making great progress to understand basic biological principles and for addressing the numerous neurological and psychiatric illnesses that strike more than 100 million Americans annually. While we have made great strides toward understanding molecules, cells and brain circuitry, scientists continue to unearth how these circuits come together in systems to do things like record memories, illuminate sight, and produce language. We have entered an era in which knowledge of nerve cell function has brought us to the threshold of a more profound understanding of behavior and of the mysteries of the human body and mind. However, this can only be accomplished by a consistent and reliable funding source.

An NSF appropriation of \$7.7 billion for fiscal year 2012 is required to take the research to the next level in order to improve the health of Americans and to sustain America's global leadership in science. Thank you for this opportunity to testify.

#### PREPARED STATEMENT OF THE SOCIETY FOR INDUSTRIAL AND APPLIED MATHEMATICS

This written testimony is submitted on behalf of the Society for Industrial and Applied Mathematics (SIAM) to ask you to continue your support of the National Science Foundation (NSF) in fiscal year 2012 by providing NSF with \$7.767 billion. In particular, we urge you to provide the request level for key applied mathematics and computational science programs in the Division of Mathematical Sciences and the Office of Cyberinfrastructure.

We are submitting this written testimony for the record to the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the United States Senate on behalf of SIAM.

SIAM has approximately 13,000 members, including applied and computational mathematicians, computer scientists, numerical analysts, engineers, statisticians, and mathematics educators. They work in industrial and service organizations, universities, colleges, and government agencies and laboratories all over the world. In addition, SIAM has more than 400 institutional members, including colleges, universities, corporations, and research organizations.

First, we would like to emphasize how much SIAM appreciates your subcommittee's continued leadership on and recognition of the critical role of NSF and its support for mathematics, science, and engineering in enabling a strong U.S. economy, workforce, and society.

Today, we submit this testimony to ask you to continue your support of NSF in fiscal year 2012 and beyond. In particular, we request that you provide NSF with



\$7.767 billion, the level requested for this agency in the fiscal year 2012 budget request.

As we are reminded every day, the Nation's economic strength, national security, and public health and welfare are being challenged in profound and unprecedented ways. Addressing these challenges requires that we confront fundamental scientific questions. Computational and applied mathematical sciences, the scientific disciplines that occupy SIAM members, are particularly critical to addressing U.S. competitiveness and security challenges across a broad array of fields:

- medicine;
- engineering;
- technology;
- biology;
- chemistry; and
- computer science.

Furthermore, in the face of economic peril, Federal investments in mathematics, science, and engineering create and preserve good jobs; stimulate economic activity; and help to maintain U.S. pre-eminence in innovation, upon which our economy depends.

#### NSF

NSF provides essential Federal support of applied mathematics and computational science, including more than 60 percent of all Federal support for basic academic research in the mathematical sciences. Of particular importance to SIAM, NSF funding supports the development of new mathematical models and computational algorithms, which are critical to making substantial advances in such fields as climate modeling, energy technologies, genomics, analysis and control of risk, and nanotechnology. In addition, new techniques developed in mathematics and computing research often have direct application in industry. Modern life as we know it, from search engines like Google to the design of modern aircraft, from financial markets to medical imaging, would not be possible without the techniques developed by mathematicians and computational scientists. NSF also supports mathematics education at all levels, ensuring that the next generation of the U.S. workforce is appropriately trained to participate in cutting-edge technological sectors and that students are attracted to careers in mathematics and computing.

Below are highlights of the main budgetary and programmatic components at NSF that support applied mathematics and computational science.

#### NSF DIVISION OF MATHEMATICAL SCIENCES

NSF's Division of Mathematical Sciences (DMS) provides the core support for all mathematical sciences. DMS supports areas such as:

- algebra;
- analysis;
- applied mathematics;
- combinatorics;
- computational mathematics;
- foundations;
- geometry;
- mathematical biology;
- number theory;
- probability;
- statistics; and
- topology.

In addition, DMS supports national mathematical science research institutes; infrastructure, including workshops, conferences, and equipment; and postdoctoral, graduate, and undergraduate training opportunities.

The activities supported by DMS and performed by SIAM members, such as modeling, analysis, algorithms, and simulation, provide new ways of obtaining insight into the nature of complex phenomena, such as the power grid, software for military applications, the human body, and energy-efficient building systems. SIAM strongly urges you to provide DMS with the budget request level of \$260.4 million to enable sustained investment by NSF in critical mathematical research and related mathematical education and workforce development programs.

In particular, investment in DMS is critical because of the foundational and cross-cutting role that mathematics and computational science play in sustaining the Nation's economic competitiveness and national security, and in making substantial advances on societal challenges such as energy, the environment, and public health. NSF, with its support of a broad range of scientific areas, plays an important role

in bringing U.S. expertise together in interdisciplinary initiatives that bear on these challenges. DMS has traditionally played a central role in such cross-NSF efforts, with programs supporting the interface of mathematics with a variety of other fields, such as geosciences, biology, cyber discovery, and solar energy.

SIAM supports DMS's role in enabling interdisciplinary work and draws your attention to the proposed Research at the Interface of Biological, Mathematical, and Physical Sciences and Engineering (BioMaPS) Initiative, which would support research in mathematical and computational biology to expand our understanding of biological processes and inspire potentially transformative new technologies for manufacturing and energy. This effort is particularly timely in light of the challenges outlined in the 2009 National Research Council report on "A New Biology for the 21st Century". The report emphasizes the need for development of new information technologies and sciences and creation and implementation of interdisciplinary curricula, graduate training programs, and educator training in order to create a quantitative approach in biological and other sciences to tackle key challenges in food, environment, energy, and health.

#### NSF OFFICE OF CYBERINFRASTRUCTURE (OCI)

Work in applied mathematics and computational science is critical to enabling effective use of the rapid advances in information technology and cyberinfrastructure. Programs in the NSF OCI focus on providing research communities access to advanced computing capabilities to convert data to knowledge and increase our understanding through computational simulation and prediction.

SIAM strongly urges you to provide OCI with the budget request level of \$236 million to invest in the computational resources and science needed to solve complex science and engineering problems. In addition, SIAM strongly endorses OCI's efforts to take on the role of steward for computational science across NSF, strengthening NSF support for relevant activities and driving universities to improve their research and education programs in this multidisciplinary area.

The programs in OCI that support work on software and applications for the next generation of supercomputers and other cyberinfrastructure systems are very important to enable effective use of advances in hardware, to facilitate applications that tackle key scientific questions, and to better understand increasingly complex software systems. SIAM strongly supports the proposed fiscal year 2012 increase in funding for OCI software activities, particularly for the Software Institutes program, which is aimed at supporting a community of partnerships among academia, government laboratories, and industry for the development and stewardship (expansion, hardening, and maintenance) of sustainable end-to-end software systems. SIAM also supports the proposed increase in OCI data activities including data infrastructure, tools, and repositories. The explosion in data available to scientists from advances in experimental equipment, simulation techniques, and computer power is well known, and applied mathematics has an important role to play in developing the methods and tools to translate this shower of numbers into new knowledge.

SIAM also supports the new agency-wide initiative, Cyberinfrastructure Framework for 21st Century Science and Engineering. This proposed program would develop comprehensive, integrated, sustainable, and secure cyberinfrastructure to accelerate research and capabilities in computational and data-intensive science and engineering.

#### SUPPORTING THE PIPELINE OF MATHEMATICIANS AND SCIENTISTS

Investing in the education and development of young scientists and engineers is a critical role of NSF and a major step that the Federal Government can take to ensure the future prosperity and welfare of the United States. Currently, the economic situation is negatively affecting the job opportunities for young mathematicians—at universities, companies, and other research organizations. It is not only the young mathematicians who are not being hired who will suffer from these cutbacks. The research community at large will suffer from the loss of ideas and energy that these graduate students, postdoctoral fellows, and early career researchers bring to the field and the country will suffer from the lost innovation.

In light of this situation, SIAM strongly supports NSF's proposed fiscal year 2012 increases in the Graduate Research Fellowship (GRF) program and the Faculty Early Career Development (CAREER) program. The GRF program would receive \$198 million which would support 2,000 new graduate student awards. This funding would also allow NSF to increase the cost of education allowance in fiscal year 2012 from \$10,500 to \$12,000, as mandated in the America COMPETES Reauthorization Act. The CAREER program would receive \$222 million and would support an additional 60 CAREER awards, totaling 606 new awards for fiscal year 2012 if funded.

CONCLUSION

We would like to conclude by thanking you again for your ongoing support of NSF that enables the research and education communities it supports, including thousands of SIAM members, to undertake activities that contribute to the health, security, and economic strength of the United States. NSF needs sustained annual funding to maintain our competitive edge in science and technology, and therefore we respectfully ask that you continue robust support of these critical programs by providing \$7.767 billion for NSF for fiscal year 2012.

We appreciate the opportunity to provide testimony to the subcommittee on behalf of SIAM. SIAM looks forward to providing any additional information or assistance you may ask of us during the fiscal year 2012 appropriations process.

PREPARED STATEMENT OF THE NATURE CONSERVANCY

Thank you for the opportunity to offer the recommendations of The Nature Conservancy (TNC) on the fiscal year 2012 budget for the National Oceanic and Atmospheric Administration (NOAA).

The devastating gulf oil spill last year reminded us of the immense human, economic, and ecological value of healthy coastal and marine systems. As part of the response to the spill, President Obama established a comprehensive national policy for the stewardship of our ocean, coasts, and Great Lakes, to include a framework for effective marine spatial planning. NOAA's programs and products directly contribute to this national vision. By ensuring the sound management and conservation of our natural resources while supporting the functions of major industries including transportation, energy, tourism, and recreational and commercial fishing, NOAA provides a vital service to the country.

TNC urges the subcommittee to dispense appropriations for NOAA as requested in the President's budget for fiscal year 2012. As our top priorities, TNC supports the following funding levels for specific NOAA efforts:

[In millions of dollars]

Regional Spatial Planning and Partnerships .....	26.8
Coral reefs .....	27
Coastal and estuarine land conservation .....	25
Habitat restoration .....	29.9
Fisheries management:	
National Catch Share Program .....	54
Expand annual stock assessments .....	67.1
Pacific salmon and protected species conservation .....	88.8

NOAA AND THE NATURE CONSERVANCY

At more than 100 marine sites around the world, TNC has used a variety of strategies for marine and coastal 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.

Over the years, and across many of these sites, NOAA has been an invaluable partner to TNC. NOAA programs that provide practical, community-oriented approaches to restoration, resource management, and conservation are natural fits for TNC's mission. The Coastal Services Center and National Estuarine Research Reserve programs educate hundreds of local community officials and practitioners to better ways to apply tools and science. In addition, NOAA's data, research, and monitoring of coastal and marine systems directly provide data and decision-support tools that inform the safe operations of industry, prioritize habitats for restoration, and advance science-based management decisions.

The following detailed funding recommendations highlight critical programs that support marine, estuarine, and coastal conservation and restoration.

*Regional Spatial Planning and Partnerships (\$26.8 million)*

*Coastal and Marine Spatial Planning (CMSP) (\$6.8 million).*—We need a coordinated approach and thoughtful planning that resolves conflicts, enhances our ability to most fully utilize oceans, and maintains healthy marine habitats. CMSP is a decisionmaking process that creates a blueprint for ocean use and conservation by bringing together diverse oceans users; mapping ocean activities, marine species, and habitats; providing a forum to proactively make informed decisions about how

to best use our shared marine resources; and creating a coordinated way to allocate marine spaces and assess tradeoffs to simultaneously achieve multiple goals. The fiscal year 2012 President's budget proposes \$6.8 million to develop agency capability to implement CMSP, including creating maps of important areas and existing area-based management authorities, developing decision support tools, facilitating data integration, and supporting interagency coordination. TNC supports funding to conduct habitat mapping and characterization in high-priority areas. Without adequate information on habitat types and distributions, science-based decisionmaking will be severely limited. In addition, funding is needed to identify and map existing human uses, as well as to analyze potential conflicts between uses and how certain uses may impact ecological factors.

*Regional Ocean Partnerships (ROP) (\$20 million).*—The fiscal year 2012 President's budget requests \$20 million for grants to Regional Ocean Partnerships (ROPs). The proposed funding would provide support to implement priority actions identified by existing and developing ROPs, including the Northeast Regional Ocean Council, the Mid-Atlantic Regional Council on Oceans, the South Atlantic Alliance, the Gulf of Mexico Alliance, the West Coast Governors' Agreement on Ocean Health, and the Council of Great Lakes Governors. These multi-State collaborations originated to address regional priorities such as habitat conservation and restoration, energy siting, coastal resilience to severe storms, coastal water quality, and regional data and science needs. Additional funding should be provided to support State and regional engagement in the development of CMSP, including stakeholder processes and consensus building tools, analysis of data and information, and facilitation of broad public participation in the CMSP process. Up to 5 percent of the funding should be available to pay for administration of the ROPs so that these entities can guide regional efforts.

*Coral Reef Conservation (\$27 million)*

The decline of coral reefs has significant social, cultural, economic, and ecological impacts on people and communities in the United States and around the world. As the "rainforests of the sea", coral reefs provide services estimated to be worth as much as \$375 billion each year.

TNC works with the NOAA Coral Reef Conservation Program under a competitively awarded, multi-year cooperative agreement to address the top threats to coral reef ecosystems:

- climate change;
- overfishing; and
- land-based sources of pollution.

Together we work on developing place-based strategies; developing resilient marine protected area networks; measuring the effectiveness of management efforts; and building capacity among reef managers at the global scale. NOAA has undertaken a coral reef conservation priority setting exercise in all seven of the U.S. jurisdictions with coral reef resources. The \$27 million would provide funding to support implementation of these locally driven conservation priorities and efforts to provide for more comprehensive mapping and data compilation and analysis on cold water corals in U.S. waters.

*Coastal and Estuarine Land Conservation (CELCP) (\$25 million)*

*CELCP.*—The Conservancy supports funding CELCP at \$25 million for fiscal year 2012. To date, the Congress has appropriated funds to complete more than 150 conservation projects, with more in progress. These projects have taken place in 28 of the Nation's 35 coastal States have already conserved more than 45,000 acres of the Nation's coastal treasures. Federal funding has been issued on a competitive basis and leveraged by at least an equal amount of State, local, and private investments. Over a 3-year period, \$230 million of vetted ranked projects were identified, yet only \$74 million in funding was available. Funding for CELCP needs to accommodate a greater percentage of the overall demand for coastal acquisition projects.

*Habitat Restoration (\$29.9 million)*

*Fisheries Habitat Restoration.*—This level of funding will provide \$23.9 million for the Community-based Restoration Program and \$6 million for the Open Rivers Initiative. These programs restore important natural systems that provide long-term ecological and economic benefits. In 2010, the Congress provided \$167 million for NOAA habitat restoration under the American Recovery and Reinvestment Act (ARRA). These funds were successful in creating hundreds of jobs—an estimated 20.3 jobs per \$1 million—and restoring important habitats such as oyster reefs that communities rely upon for their culture and economy. The competitive call for projects under the ARRA generated more than 800 requests for funding and showed a demand of \$3 billion in community-driven ecological and economically significant

projects. To address this overwhelming backlog of restoration work, we ask the subcommittee to support this program.

*Fisheries Management (\$121 million)*

The provisions of the reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act (MSA) in 2007 were intended to provide a more aggressive approach to ending overfishing in the United States and address destructive fishing practices in U.S. waters. Most U.S. fisheries have traditionally been managed under an open access quota system that for decades encouraged and subsidized fleet expansion, heavy dependence and investment on particular fishing gear, and shorter fishing seasons—all contributors to overfishing and other challenges. The requirements of the MSA have aided the United States in making strides in addressing these challenges and strengthening fisheries management; however, improvements need to continue. For example, the administration has recognized the need to look beyond traditional open-access management and in some regions implemented limited-entry programs. To recover fish stocks so that they provide food and jobs to struggling fishermen now and in the future, we need to move beyond limited entry and toward innovative management practices that consider both the impacts of fishing practices on the marine environment, as well as the needs of local communities that depend on fishing for their livelihood. Moreover, the design of many existing limited access fisheries in the United States need improvements to increase environmental and economic performance.

*National Catch Share Program (\$54 million).*—By giving participating fishermen a stake in the benefits of a well-managed fishery, National Marine Fisheries Service (NMFS) aims to align the incentives for resource stewardship with the natural incentive for fishermen to increase their earnings with a sustainable business model. Getting the design and implementation of these new catch share programs right is crucial to their success. For example, improved fishery monitoring is imperative to successful catch share systems and to meeting fundamental requirements of the MSA. Better monitoring leads to better science, better science leads to better management, and better management leads to better, and more consistent, economic outcomes for fishing communities. Monitoring, combined with clear environmental goals and provisions for access for communities to adjacent fishing grounds, will allow catch share programs to drive the sustainable use of a public resource.

*Expand Annual Stock Assessments (\$67.1 million).*—The MSA mandates the establishment, by 2011, of annual catch limits in all fisheries to prevent overfishing. However, current lack of information and assessment capacity for many fish stocks makes this impossible, putting at risk both valuable fisheries and the livelihoods of fishing communities across the United States. Incomplete scientific information for many fish stocks resulting from lack of adequate stocks assessments forces fishery managers to resort to setting annual catch limits in an overly conservative manner, thus limiting fishing opportunity. Adequate stock assessments are essential for the sound management of fisheries and the sustainability of fishing resources.

*Pacific Salmon and Protected Species Conservation (\$88.8 million)*

*Pacific Coastal Salmon Recovery Fund (PCSRF) (\$65 million).*—PCSRF has funded hundreds of successful, on-the-ground salmon conservation efforts. PCSRF projects are matched at a 3:1 ratio (Federal/non-Federal) and have resulted in significant progress in protecting and restoring salmon across their range.

*Species Recovery Grants (\$23.8 million).*—Through this program, NMFS provides grants to States to support conservation actions that contribute to recovery or have direct conservation benefits for listed species, recently de-listed species, and candidate species that reside within that State. We support the President budget's request for \$23.8 million.

Thank you for this opportunity to share with the subcommittee the Conservancy's priorities in NOAA's fiscal year 2012 budget.

PREPARED STATEMENT OF THE UNIVERSITY CORPORATION FOR ATMOSPHERIC  
RESEARCH

On behalf of the University Corporation for Atmospheric Research (UCAR), I submit this testimony to the Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies for the subcommittee record. UCAR is a consortium of more than 100 research institutions including 76 doctoral-degree-granting universities, that manages and operates the National Center for Atmospheric Research (NCAR) for the National Science Foundation (NSF).

On behalf of the geosciences research community represented by UCAR, I urge the subcommittee to support the President's request for science funding in the fiscal year 2012 Commerce, Justice, Science, and Related Agencies Appropriations Act, including \$7.767 billion for the NSF, \$5.017 billion for the Science Mission Directorate of the National Aeronautics and Space Administration (NASA), and at least \$5.498 billion for the National Oceanic and Atmospheric Administration (NOAA).

*National Science Foundation (NSF).*—Last December, I was on a team to evaluate China's agency equivalent to NSF. My experience was eye-opening. The budget of the National Natural Science Foundation of China has increased by more than 20 percent annually since its founding in 1986. In 1949, about 600 Chinese citizens were engaged full time in research and development (R&D)—by 2009, there were 51 million. This Asian power now has the world's fastest supercomputer and its students have the world's top scores in reading, mathematics, and science. China has launched 10 weather satellites in the past 20 years and plans to launch 18 more by 2020. China is investing in R&D and education in the same aggressive manner in which the United States invested in science and science education decades ago—and by doing so, we created the world's largest and most successful economy. If we abandon that approach to economic growth at the same time our competitors are adopting it, the consequences could be dire.

For evidence of how NSF investments affect the economy and jobs, one need to look no further than the example of Sergey Brin, co-founder of Google, who began his work on search engines as an NSF-funded graduate fellow. The President's \$7.767 billion fiscal year 2012 budget request for NSF keeps the agency on track to reach the funding commitment authorized in the America COMPETES Act, passed with bipartisan congressional support in 2010. I urge you to support this overall NSF request and to fund the \$979 million request for NSF's Geosciences Directorate (GEO).

GEO supports a broad and diverse academic field that contributes to our understanding of long-term weather, extreme weather, dynamics of water resources, effects of the Sun on the Earth, effects of space weather on global communications, interactions of the Earth's systems, energy resources, geologic hazards, and all aspects of the global oceans. GEO's Atmospheric and Geospace Science (AGS) program supports research that saves lives and property through better prediction and understanding of weather-related and other natural hazards such as tornados, hurricanes, snow storms, droughts, and solar storms. Cities, communities, and businesses use this research to prepare for and mitigate the effects of these and other hazards.

Within GEO, I urge you to support the President's AGS fiscal year 2012 request of \$286.3 million and the \$100 million request for NCAR. NCAR is the national hub for research for the atmospheric sciences community, and the entire community depends on having access to its facilities, data, and research collaborations. While we are supportive of NSF's efforts to create interdisciplinary cross-directorate programs, without adequate overall funding these activities come at the expense of base programs like NCAR. Thus, we urge you to support the President's full request of \$100 million for NCAR as well as the requested additional funds to support cross-directorate activities.

*NASA: Science Mission Directorate.*—The research conducted and data collected by NASA's Science Mission Directorate are essential to atmospheric sciences research and global Earth observations. I urge the subcommittee to support the President's fiscal year 2012 budget request of \$5.017 billion for NASA's Science Mission Directorate, including \$1.653 billion for earth science.

The Orbiting Carbon Observatory 2 (OCO-2), Landsat Data Continuity Mission (LDCM), and the Global Precipitation Measurement (GPM) mission, are in preparation for launches in fiscal year 2013, and fiscal year 2012 funding must be sustained to ensure that prior taxpayer investments are leveraged for the full benefit of society.

Fiscal year 2012 will initiate the first two decadal survey missions, the Soil Moisture Active and Passive (SMAP) Mission, which will map soil moisture and freeze/thaw states from space, and the Ice, Cloud, and Land Elevation Satellite-2 (ICESat-2), which will quantify polar ice sheet contributions to sea level change and collect better data on the characteristics of sea ice. At the same time, it is a disappointment that a delay is proposed for two critical probe missions:

- the Deformation, Ecosystem Structure and Dynamics of Ice (DESDynI) Mission, a dedicated U.S. interferometric synthetic aperture radar and light detection and ranging mission optimized for studying hazards and global environmental change; and
- the Climate Absolute Radiance and Refractivity Observatory (CLARREO) Mission, which will monitor the pulse of the Earth to better understand changes

in long-term weather trends. We urge speedy development of these valuable probes.

*NOAA.*—NOAA operations save lives, protect valuable natural resources and property, and serve many industrial sectors. Despite these critical functions, year after year, NOAA is faced with an uncertain budgetary outlook. Now, in addition to a request that is sub-critical, the agency is having difficulty getting approval to simply organize itself in a manner that is responsive to the needs of Americans. We must have information to deal with changes in long-term weather patterns that cause droughts and floods, hurricanes and blizzards, and affect all aspects of the economy, including national security. On behalf of UCAR, I ask that the subcommittee allow NOAA to implement the planned no cost reorganization that will provide this country with a much needed climate service.

Further, I ask the subcommittee to fund NOAA at the fiscal year 2012 request level of \$5.498 billion at a minimum. This will allow NOAA to make progress in replacing aging weather satellites with the Joint Polar Satellite System (JPSS). Imagine the impacts of a single day without the ability to predict the weather several days out, forecasts upon which the economy and safety of the American people depend. JPSS is a national priority, with the capacity to meet civil and military needs for weather forecasting, storm tracking, and the study of long-term weather trends. This investment will improve warning lead times for severe storms, information used by sectors such as agriculture, transportation, and energy production. The fiscal year 2011 budget eliminates funding to keep JPSS on schedule, putting the country's weather forecasting abilities at risk. NOAA originally planned to launch the first two JPSS satellites in 2014 and 2018, however, both launches are already delayed by at least 18 months due to the lack of funding in fiscal year 2011. NOAA has stated these delays will cost as much as \$3 to \$5 for every \$1 not received for JPSS in fiscal year 2011. In addition to these added costs, data gaps will exist, undoubtedly, beginning in 2017. To meet the increasingly dire needs of the Nation, JPSS must ramp up immediately before current systems fail. I urge the subcommittee to provide the requested \$1.07 billion for JPSS in fiscal year 2012 within NOAA's National Environmental Satellite Service (NESS).

JPSS instruments will provide critical atmospheric measurements of sulfur dioxide, nitrous oxide, water vapor, methane, ozone, soot, carbon dioxide, aerosols, and solar energy reaching the Earth's atmosphere and the Earth's reflected and radiated energy. These data were identified in 2007 as the top priority by the joint NOAA-NASA climate assessment of the National Research Council. The Total Solar Irradiance Sensor, the Clouds and Earth's Energy System and the Ozone Mapping and Profiler Suite-Limb sensors will provide critically important continual data to researchers and decisionmakers. I urge you to support the fiscal year 2012 request of \$30.4 million within NESS for JPSS instruments.

Also within NESS, the Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC) program is an example of a cost-effective means of improving weather forecasts. The COSMIC-1 constellation of six small satellites using GPS Radio Occultation has proven so successful in improving weather forecasts since its launch 5 years ago, that NOAA is committed to transitioning it to operational use. Currently, approximately 1,000 weather balloons are launched in the world each day, typically over land. COSMIC-1 provides more global coverage with an additional 2,000 soundings per day that have an even distribution and accuracy rate over the ocean and land. COSMIC-2 will provide at least 8,000 soundings per day, resulting in significantly more accurate long-range forecasts, including tracks and intensity of hurricanes and typhoons. I urge the subcommittee to appropriate the requested \$11.3 million for COSMIC-2 in fiscal year 2012. This program is extremely cost effective, with our partner Taiwan providing one-half of the costs. However, it has been delayed considerably because the proposed NOAA start in 2011 was not funded. Further delay could jeopardize the funding provided by Taiwan. This is an excellent leveraging opportunity that must not be lost.

The proposed Climate Service line office will manage the Competitive Research Program in which NOAA funds climate science to advance understanding of the Earth's climate system and its atmospheric, oceanic, land, and snow and ice components. Grants in the fiscal year 2012 budget will address priority research topics in the areas of climate monitoring; Earth system science; modeling, analysis, predictions, and projections; and climate and societal interactions. I urge the subcommittee to provide \$64 million in fiscal year 2012 for NOAA's Competitive Research Program.

*Office of Oceanic and Atmospheric Research (OAR).*—Among OAR's responsibilities is the successful extramural U.S. Weather Research Program (USWRP). The university community plays a pivotal role in this research program that works in close collaboration with the National Weather Service (NWS) to transition research

to useful weather- and air-quality applications. University collaboration in this work leverages what OAR can accomplish with minimal resources. The fiscal year 2011 request for USWRP was \$5.5 million. I urge the subcommittee to appropriate \$5.5 million in fiscal year 2012 for USWRP.

*NWS.*—NWS is a 24/7 operation and the Nation's sole authoritative source for issuing warnings and forecasts related to weather, severe weather, and long-term weather trends. Every day for the United States, its territories, adjacent waters, and ocean areas the NWS provides vital information regarding transportation safety, marine conditions, fire weather, air quality, agriculture, and flooding. I urge the Congress' continued strong support for the critical activities of the NWS.

*Space Weather Prediction Center (SWPC).*—In coming years, solar activity, including flares that release immense magnetic energy that can harm power grids, electronic communication, and satellite systems, is predicted to peak. NOAA's SWPC, part of the NWS, is the Nation's official source of space weather forecasts, alerts, and warnings. With a solar maximum expected in 2013, this is a critical time when NOAA must continue to provide alerts, watches, warnings, and forecasts to customers to ensure the Nation's infrastructure is not disrupted. I ask the subcommittee to provide the requested \$11.6 million for NOAA's space weather activities in fiscal year 2012.

I want to thank the subcommittee for its past support of Global Learning and Observations to Benefit the Environment (GLOBE) at \$5 million and ask that you fund its inclusion in both the NASA and NOAA fiscal year 2012 budgets. This proven, experiential program supports the collaboration of students, teachers, and scientists on inquiry-based investigations of the environment and the Earth system involving more than 1 million students, 50,000 teachers, and 20,000 schools around the world. NASA and NOAA have both supported this important program for many years. In fiscal year 2011, NOAA was willingly directed by the Congress to rejoin the program. This renewed partnership between NASA and NOAA has been critical for the program and for the fulfillment of both agency missions relating to education. However, NOAA was directed to treat GLOBE as a congressionally directed project and to zero out NOAA's \$3 million commitment to NASA for fiscal year 2012. We ask that those GLOBE funds of \$3 million, preferably as a stand-alone item, or be restored from NOAA's Competitive Education Grants Program in order to keep this proven global education program operating.

Mr. Chairman, we know that we must all become more economical, and I believe we are up to making the sacrifices that task entails. But I urge the subcommittee to give high priority to funding for science agencies that support our Nation's R&D, contribute to the continued global competitiveness of the Nation, and promote economic and job growth. Thank you for your attention and for this opportunity to speak to the Nations' scientific needs.

---

PREPARED STATEMENT OF THE UNITED STATES SECTION OF THE PACIFIC SALMON COMMISSION

Mr. Chairman, my name is Jeffrey Koenings, and I serve as a U.S. Commissioner on the Pacific Salmon Commission (PSC). The PSC was established in 1985 to oversee implementation of the Pacific Salmon Treaty (PST) between the United States and Canada. In May 2008, the PSC concluded bilateral negotiations that developed revised 10-year salmon fishing regimes to replace regimes that were expiring at the end of 2008. The provisions of the new fisheries agreements were approved by the United States and Canadian governments and are being implemented for the 2009–2018 period. The U.S. Section recommends that the Congress:

- Fund the Pacific Salmon Treaty line item of the National Marine Fisheries Service (NMFS) at \$9,708,000 for fiscal year 2012 an increase in funding compared to \$5,600,000 in recent-year budgets. This funding provides support for the States of Alaska, Washington, Oregon, and Idaho and the NMFS to conduct the salmon stock assessment and fishery management programs required to implement the PST's conservation and allocation provisions for coho, sockeye, Chinook, chum, and pink salmon fisheries. Included within the total amount of \$9,708,000 is \$400,000 to continue a joint Transboundary River Salmon Enhancement Program as required by the Treaty.
- Fund the Pacific Salmon Treaty Chinook Salmon Agreement line item of the NMFS for fiscal year 2012 at \$1,844,000, level funding from what has been provided by the Congress in recent years and is included in the President's fiscal year 2012 request. This funding is necessary to acquire the technical information to fully implement the abundance-based Chinook salmon management program provided for under the PST.



The funding identified above is for ongoing annual programs and does not include new funding specifically needed for full application of the revised agreement for 2009–2018 that was negotiated by the PSC and accepted by the Governments of the United States and Canada on December 23, 2008. This funding was part of the NMFS fiscal year 2010 budget, which the U.S. PSC Commissioners recommend be continued in the fiscal year 2012 Federal budget.

The base PST implementation projects included in the Pacific Salmon Treaty line item consist of 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, Idaho, the Federal NMFS, and the 24 treaty tribes of Washington and Oregon are charged with carrying out 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 collection from fisheries are represented. The information from many of these programs is used directly to establish fishing seasons, harvest levels, and accountability to the provisions of Treaty fishing regimes.

The base Treaty implementation funding of approximately \$5.6 million in the fiscal year 2010 budget has essentially remained at this low level since the early 1990s. Since that time, the growing complexity of conservation-based (Federal Endangered Species Act compliant) fishing regimes has required vastly more stock assessment, fishing compliance monitoring, and technical support activities. In order to continue to implement the Federal PST, the States have had to augment Federal funding with other Federal and State support. For example, additional sources of funding have included Federal Anadromous Fish Grants, Federal Pacific Coast Salmon Recovery Funds (PCSRF), Federal Dingell-Johnson dollars, and State general funds. However, the Anadromous Fish Grants were eliminated in the Federal fiscal year 2010 budget, use of PCSRF monies was constrained in fiscal year 2010 by new appropriations language, and State dollars and Dingell-Johnson grants were cut significantly during the current economic recession.

The economic impact of commercial and sport fisheries has been measured by the U.S. Fish and Wildlife Service at approximately \$2–\$3 billion per year to the States involved in the PST. To continue to implement the Federal PST conservation-based fishing regimes that contribute to the sustainability of salmon stocks and the large economic return to the States, the U.S. PSC members recommend an increase in base treaty implementation funding from the current \$5.6 million to \$9,708,000.

Effective, science-based implementation of negotiated salmon fishing arrangements and abundance-based management approaches for Chinook, southern coho, Northern Boundary and Transboundary River salmon fisheries includes efforts such as increased annual tagging and tag recovery operations and application of other emerging stock identification techniques. The U.S. PSC members recommend that \$9,708,000 be provided for the NMFS Pacific Salmon Treaty line item in fiscal year 2012 for Treaty technical support activities. The \$400,000 that has been provided in the separate International Fisheries Commissions line item since 1988 for a joint Transboundary River enhancement program with Canada is now included in this amount. The recommended amount for the combined projects represents an approximate increase of \$4,108,000 more than the amount appropriated for fiscal year 2010.

Beginning in fiscal year 1998, the Congress provided \$1,844,000 to allow for the collection of necessary stock assessment and fishery management information to implement a new abundance-based management approach for Chinook salmon coast-wide in the Treaty area. Through a rigorous competitive technical review process for project approval, the States of Alaska, Washington, Oregon, and Idaho, and the 24 treaty tribes are using the funding to support research and data collection needed for abundance-based Chinook management. The U.S. Section recommends level funding of \$1,844,000 for fiscal year 2012 to support the abundance-based Chinook salmon management.

The United States and Canada agreed in 1988 to a joint salmon enhancement program on the Transboundary Rivers, which are rivers rising in Canada and flowing to the sea through southeast Alaska. Since 1989, the Congress has provided \$400,000 annually for this effort through NMFS 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. The funding for the U.S. share is included in the \$9,708,000 the U.S. Section is recommending for the fiscal year 2012 NMFS Pacific Salmon Treaty line item.

This concludes the statement of the U.S. Section of the PSC submitted for consideration by your subcommittee. We wish to thank the subcommittee for the support that it has given us in the past. I will be pleased to answer any questions the subcommittee members may have.

SUMMARY OF PROGRAM FUNDING FOR THE U.S.-CANADA PACIFIC SALMON TREATY

DEPARTMENT OF COMMERCE—PACIFIC SALMON TREATY LINE ITEM

Fiscal year 2009 appropriation .....	\$5,610,000
Fiscal year 2010 appropriation .....	5,600,000
Fiscal year 2012 U.S. Section recommendation .....	<sup>1</sup> 9,708,000

<sup>1</sup>The recommended fiscal year 2012 amount includes \$400,000 provided for the Joint Transboundary River Enhancement Program currently funded under the NMFS International Fisheries Commission account.

PACIFIC SALMON TREATY—CHINOOK SALMON AGREEMENT LINE ITEM

Fiscal year 2009 appropriation .....	\$1,844,000
Fiscal year 2010 appropriation .....	1,844,000
Fiscal year 2012 U.S. Section recommendation .....	1,844,000

## LIST OF WITNESSES, COMMUNICATIONS, AND PREPARED STATEMENTS

	Page
American:	
Geological Institute, Prepared Statement of the .....	287
Geophysical Union, Prepared Statement of the .....	289
Institute of Biological Sciences, Prepared Statement of the .....	292
Public Power Association, Prepared Statement of the .....	296
Society:	
For:	
Microbiology, Prepared Statement of the .....	297
Quality, Prepared Statement of the .....	302
Of Plant Biologists, Prepared Statement of the .....	299
Animal Welfare Institute, Prepared Statement of the .....	304
Association of Public and Land-Grant Universities, Prepared Statement of the .....	293
Bolden, Charles F., Jr., Administrator, National Aeronautics and Space Ad- ministration .....	131
Prepared Statement of .....	142
Summary Statement of .....	136
Brown, Senator Sherrod, U.S. Senator From Ohio: .....	
Questions Submitted by.....	189, 263
Statement of .....	136
Boggs, Captain Randy, For-hire Recreational Fisherman, Letter From .....	306
Coastal States Organization, Prepared Statement of the .....	310
Cochran, Senator Thad, U.S. Senator From Mississippi, Questions Submitted by.....	195, 282
Collins, Senator Susan, U.S. Senator From Maine, Questions Submitted by ....	127
Columbia River Inter-Tribal Fish Commission, Prepared Statement of the .....	307
Federation of American Societies for Experimental Biology, Prepared State- ment of the .....	312
Feinstein, Senator Dianne, U.S. Senator From California, Questions Sub- mitted by .....	58, 181, 250
Geological Society of America, Prepared Statement of the .....	313
Graham, Senator Lindsey, U.S. Senator From South Carolina, Questions Submitted by .....	74
Holder, Jr., Hon. Eric H., Attorney General, Department of Justice .....	1
Prepared Statement of .....	9
Summary Statement of .....	6
Hutchison, Senator Kay Bailey, U.S. Senator From Texas:	
Opening Statements of .....	133, 203
Prepared Statement of .....	134
Questions Submitted by.....	63, 117, 197, 265
Statements of.....	4, 79
Independent Tribal Courts Review Team, Prepared Statement of the .....	321
Innocence Project, Prepared Statement of the .....	318
Inouye, Senator Daniel K., U.S. Senator From Hawaii, Questions Submitted by .....	249
Institute of Makers of Explosives, Prepared Statement of the .....	316

	Page
Krebs, David, President of the Gulf of Mexico Reef Fish Shareholders' Alliance, Prepared Statement of .....	285
Locke, Hon. Gary F., Secretary, Department of Commerce .....	201
Prepared Statement of .....	206
Summary Statement of .....	204
Lummi Indian Business Council, Prepared Statement of the .....	323
Marine Conservation Biology Institute, Prepared Statement of the .....	325
Marine Fish Conservation Network, Prepared Statement of the .....	328
Mikulski, Senator Barbara A., U.S. Senator From Maryland:	
Opening Statements of .....	1, 75, 131, 201
Prepared Statement of .....	77
Questions Submitted by .....	27, 101, 242
Mueller, Hon. Robert S., III, Director, Federal Bureau of Investigation, Department of Justice .....	75
Prepared Statement of .....	83
Summary Statement of .....	81
Murkowski, Senator Lisa, U.S. Senator From Alaska, Questions Submitted by .....	200, 278
Natural Science Collections Alliance, Prepared Statement of the .....	333
Nelson, Senator Ben, U.S. Senator From Nebraska, Question Submitted by .....	60, 256
Northwest Indian Fisheries Commission, Prepared Statement of the .....	331
Pew Environment Group, Prepared Statements of the .....	334, 337
Pryor, Senator Mark, U.S. Senator From Arkansas, Questions Submitted by .....	61, 184, 259
Regional Information Sharing Systems Program, Prepared Statement of the ...	339
Society for:	
Industrial and Applied Mathematics, Prepared Statement of the .....	346
Neuroscience, Prepared Statement of the .....	343
Southern CATCH—South Atlantic Fishermen's Association, Prepared Statement of .....	342
The Nature Conservancy, Prepared Statement of .....	349
United States Section of the Pacific Salmon Commission, Prepared Statement of the .....	354
University Corporation for Atmospheric Research, Prepared Statement of the .....	351

# SUBJECT INDEX

## DEPARTMENT OF COMMERCE

### SECRETARY OF COMMERCE

	Page
Activities and Capabilities That Support Catch Share Programs .....	223
Additional Committee Questions .....	242
Administrative Savings—Departmental Efficiencies .....	230
And So Goes the Saga of Modern-day Fishing .....	285
Arctic Research .....	281
Broadband Funding .....	256
Calfed Biological Opinion .....	228
Catch:	
Limits .....	278
Share:	
Program .....	226
Programs .....	221
Shares .....	253, 281
Census:	
Bureau .....	242
Lessons .....	267
Climate Service .....	246
Coastal and Marine Spatial Planning .....	280
Commerce:	
Connect .....	264
Trade Reorganization .....	270
Consolidation of U.S. Trade Agencies .....	216
Cooperative Research .....	226
Current Industrial Reports Program and Alternatives .....	256
Cybersecurity at the Department of Commerce .....	245
Deepwater Horizon .....	248
Department Funding Levels .....	215
Economic Development Administration .....	270
Fisheries .....	277
Government:	
Accountability Office Report .....	230
Reorganization .....	250
Gulf of Mexico Resources .....	265
Implementation and Operation of Specific Catch Share Programs .....	223
Importance of Funding Catch Share Programs Such as the Red Snapper IFQ .....	286
Inspector General Concerns .....	233
Intellectual Property .....	232
Investments .....	208
Joint Polar Satellite System .....	249
JPSS .....	238
Manufacturing .....	259
Extension Partnership .....	255
Marine Spatial Planning .....	224
Mid-Atlantic Fisheries Management Council .....	227
Miller Freeman Fishery Survey Vessel .....	280
National:	
Cybersecurity .....	245
Export Initiative .....	263
Institute of Standards and Technology .....	253

	Page
National—Continued	
Oceanic and Atmospheric Administration Satellites .....	243
NEI .....	231
New England Fisheries .....	225
NIST:	
Advanced Manufacturing Technology Consortia .....	273
Budget Increase .....	276
Cybersecurity .....	274
Hollings MEP .....	276
Manufacturing .....	271
NOAA:	
Satellites .....	268
Stem Education .....	267
Pacific Salmon Treaty Funding .....	278
Reductions .....	208
Reorganization of Export-related Agencies .....	217
Salmon .....	250
Specific Projects .....	235
Statistical Agencies and Measuring Globalization .....	263
Steller Sea Lions in the Aleutian Islands .....	279
Stock Assessments .....	224
Support Requests From Regional Fishery Management Councils for Analysis and Development of New Catch Share Programs .....	223
The Gulf Red Snapper Story .....	285
Three Projects Focused on:	
Improving Acquisition Processes .....	236
Specific Challenges .....	237
U.S. Patent and Trademark Office .....	244
USPTO Backlog .....	213
Weather Modification .....	269

## DEPARTMENT OF JUSTICE

## ATTORNEY GENERAL

Additional Committee Questions .....	26
Afghanistan—Fighting Narco-Terrorism—DEA .....	47
Assist State, Local, and Tribal Law Enforcement Partners .....	11
ATF:	
Director .....	41
Gunrunner Allowing Firearms To Be Trafficked .....	73
Long Guns Reporting .....	41
ATF's:	
National Integrated Ballistics Imaging Network .....	66
NIBIN—Houston .....	66
Bill Allen Alaska Case .....	18
Bureau of Prisons Construction Funding .....	22
Consequences of Fiscal Year 2011 Continuing Resolution .....	27
COPS and Byrne Grant Funding Reductions .....	29
Cost of Guantánamo Bay Detainee Trials .....	69
Curbing Lavish Spending .....	52
Cuts to State and Local Assistance .....	60
Cyber Security .....	34
Danger Pay for:	
DEA and USMS in Mexico .....	46
Mexico .....	71
Defense of Marriage Act .....	20
Earmarks Ban—Congressional Communications .....	51
Effect of Cuts to the COPS Program .....	22
Effects of Fiscal Year:	
2011 Continuing Resolution:	
Funding .....	14
Furloughs .....	13
Morale .....	13
Prison Funding .....	13
2010 Levels on FBI .....	68
Extraditions From Mexico (Drug Caucus) .....	58
Federal Courthouse and Judicial Security .....	42

	Page
Financial Fraud—Predatory Lending .....	31
Fiscal Year 2012 Budget Cuts .....	16
Fort Hood Shootings .....	63
Fugitive Safe Surrender Program .....	24
Funding for Terrorist Trials .....	39
Guantánamo Bay Trials .....	15
Gun Show Loophole .....	24
Healthcare Fraud .....	49
High-Capacity Ammunition Magazines .....	23
ICE Agent Shooting in Mexico .....	65
Law Enforcement Wireless:	
Communications 2 .....	67
Technical .....	70
Maintain Safe Prison and Detention Facilities .....	11
Meth Labs .....	26
Prescription Drug Abuse Programs .....	25
Preserve Traditional Missions .....	10
Prisons:	
Overcrowding .....	55
Thompson Prison Facility .....	54
Understaffing .....	56
Problem-Solving Courts .....	61
Project Gunrunner.....	14, 72
—ATF .....	40
Savings and Efficiencies .....	12
Southwest Border Violence .....	44
State and Local:	
Grants Management .....	57
Law Enforcement Cuts .....	72
Stopping Child Predators .....	31
Strengthen National Security .....	10
Task Forces—State and Local Law Enforcement .....	36
The President’s Announcement on Guantánamo Detainee Trials .....	63
Uncollected Court-Ordered Fines .....	35
Violence in Fugitive Apprehension .....	37

#### FEDERAL BUREAU OF INVESTIGATION

Additional Committee Questions .....	101
Brady Law .....	93
Budget Request for Resources in New Jersey .....	95
Criminal Threats .....	87
Digital Analysis and Research Center .....	108
Effects of Fiscal Year 2010 Levels on the FBI .....	120
Endangered Child Alert Program .....	108
FBI:	
Academy .....	113
Budget Prioritization .....	95
Fort Hood:	
Shooting .....	100
Shootings .....	119
Gangs .....	99
Gun Show Loophole .....	93
Hybrid Squads .....	120
IINI Research and Development Team .....	108
Immigration and Customs Enforcement Agent Shooting—Process and Resources .....	117
Impact of a Government Shutdown on FBI .....	123
Innocence Lost .....	121
Innocent Images .....	122
Lack of Support for Southwest Border Efforts.....	117, 125
Law Enforcement Partnerships .....	108
Misconduct of FBI Employees .....	112
Mortgage Fraud .....	96
Predatory Lending .....	101
National Security:	
Letters .....	114
Threats .....	84

	Page
9/11 Trial Costs to the FBI .....	118
Other Than Mexicans .....	125
OTMs—Other Than Mexicans .....	124
Offsets .....	88
Online Undercover Operations .....	107
Operating Under a Continuing Resolution .....	88
Operation Rescue Me .....	109
Port Newark and Liberty International Airport .....	94
Relationship Between Intellectual Property Theft and Crime/Terrorism .....	122
Render Safe Mission .....	111
Sentinel .....	105
Southwest Border .....	97
Funding .....	91
Violence .....	110
State and Local Law Enforcement—Fighting: .....	
Terrorism .....	104
Violent Crime .....	109
Stopping: .....	
Human Trafficking .....	103
Internet Child Predators .....	107
Terrorist: .....	
Access to Guns .....	94
Watchlist .....	114
<b>NATIONAL AERONAUTICS AND SPACE ADMINISTRATION</b>	
2012 Continuing Resolution .....	163
Additional Committee Questions .....	181
Aeronautics Research .....	148
Cassini Report .....	165
Collaboration With the Federal Aviation Administration and the U.S. Air Force .....	190
Commercial .....	135
Constellation: .....	
Funding .....	182
Program Contract Modification .....	171
Construction and Environmental Compliance and Restoration .....	158
Continuing Resolution .....	174
Contracting and Acquisition .....	177
Cost-Plus Contracts—Fixed-Price Contracts .....	176
Cross-Agency Support .....	157
Budget .....	194
Deformation, Ecosystem, Structure and Dynamics of Ice Satellite Program .....	183
Disposition of Orbiter Vehicles.....	168, 174
ETDD .....	168
Earth Departure Stage and Lander Development .....	189
Education .....	156
Exploration .....	152
Feasibility of Developing Commercial Crew Capability .....	189
Fiscal Year 2012 Budget Request—Detailed Summary .....	146
Glenn Research Center .....	179
Hangar One .....	196
Human Space Flight .....	135
Safety .....	199
Human-Rating Requirements .....	178
International Space Station Continuation .....	197
ISS Risk if Commercial Cargo is Late .....	197
JWST .....	164
Kodiak Launch Complex .....	200
Launch Capability and Safety .....	181
Life and Microgravity Research .....	198
NASA Centers .....	183
Contract Management .....	175
National Aeronautics and Space Administration Education .....	184
Plumbrook Testing Facility .....	178
Rocket Propulsion Test Infrastructure .....	195
Science .....	146
Technology, Engineering, and Mathematics Education .....	192



	Page
Space:	
Operations .....	154
Technology .....	150
Stennis Space Center .....	196
STS-134 Shuttle Flight Mission .....	179
Technology Development Program .....	185
Ten Healthy Centers .....	167
Testing:	
Capability at Stennis Space Center .....	166
Commercial Launch Vehicles .....	167
Unpublished Test Requirements Document .....	189
Utilization of the Constellation Contracts .....	172

