

COMMERCE, JUSTICE, SCIENCE, AND RELATED
AGENCIES APPROPRIATIONS FOR 2011

HEARINGS
BEFORE A
SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
ONE HUNDRED ELEVENTH CONGRESS
SECOND SESSION

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED
AGENCIES

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NOTE: Under Committee Rules, Mr. Obey, as Chairman of the Full Committee, and Mr. Lewis, as Ranking
Minority Member of the Full Committee, are authorized to sit as Members of all Subcommittees.

JOHN BLAZEY, DIXON BUTLER, ADRIENNE SIMONSON,
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**COMMERCE, JUSTICE, SCIENCE, AND RE-
LATED AGENCIES APPROPRIATIONS FOR
2011**

THURSDAY, MARCH 4, 2010.

DEPARTMENT OF COMMERCE

WITNESS

HON. GARY LOCKE, SECRETARY OF COMMERCE

Mr. MOLLOHAN. Well, good afternoon.

Welcome, Secretary Locke, to our hearing today.

Today we will hear from Secretary Locke of the Department of Commerce. The fiscal year 2011 budget request includes \$8.9 billion in discretionary funds for Commerce, a decrease of \$5.1 billion, or 36 percent below the fiscal year 2010 enacted level. The significant decrease is attributable to the anticipated completion of the 2010 Decennial Census.

But there are some significant increases in the proposed budget as well, including \$809 million in the National Oceanic and Atmospheric Administration, or NOAA, for satellites, catch shares and conservation and climate change related programs, and \$87 million in the International Trade Administration, or ITA, for the National Export Initiative.

Last week this subcommittee heard testimony from the director of the National Institute of Standards and Technology, or NIST, Dr. Pat Gallagher. Later this month, we will hold separate hearings on the Economic Development Administration (EDA), NOAA and the U.S. Patent & Trademark Office (USPTO), which will provide us with the opportunity to look more closely at programs within those agencies.

Today's hearing will allow us to touch on issues of Departmental oversight and overarching policy issues affecting these agencies, while also delving into issues and funding related to other Departmental agencies, including the Census Bureau, the International Trade Administration, and the National Telecommunications and Information Administration (NTIA).

The 2010 Decennial Census has officially begun, with enumeration in remote Alaskan villages completed. We look forward to a status report and timeline for the rest of the country, as well as discussions on current concerns, including the effectiveness and cost of Decennial advertising.

Apparently, Census has gotten one thing right, Mr. Secretary, because everyone appears to have seen the Super Bowl ad, whatever one might think of it.

NTIA has significant American Recovery and Reinvestment Act responsibilities in overseeing \$4.7 billion in broadband grant awards. While there are concerns about the delay in first-round awards, it is exciting to contemplate a future where high-speed Internet connections are as common as telephones.

We also will discuss how ITA's proposed National Export Initiative will help promote U.S. exports and protect U.S. jobs from unfair export subsidies.

And finally, the Department has held a number of events and made quite a few announcements in fiscal year 2010. At times, the announcements are made well in advance of any actual implementation, and so details are scarce. The focus appears to be more on getting good press coverage for the Department's efforts and less on the actual benefits to the public, so we intend to get to some of those details today.

There is much to discuss, and Secretary Locke, thank you for coming.

Following the opening statement of Ranking Member Wolf, we will ask you to provide a brief summary of your written testimony, and your written testimony will be made a part of the record.

And now, I will call on Mr. Wolf.

Mr. WOLF. Thank you, Mr. Chairman.

I apologize for being late. I had some veterans in my office I just could not leave.

With that, I will just submit the statement for the record.

[The information follows:]

Opening Statement – Ranking Member Wolf

Welcome back to the Committee Mr. Secretary.

As you know, for many years I have been raising concerns with our country's unsustainable deficit. On the surface your fiscal year 2011 budget request looks as if it makes good progress in reducing government spending by proposing a \$5 billion reduction. However, the reduction is the result of \$6 billion in non-recurring costs from fiscal year 2010 associated with the decennial census. Nearly every other Commerce account is requesting program increases, some very large.

There are especially large increases in NOAA, primarily for the costs of pursuing a new polar orbiting satellite program independent from the Department of Defense.

I hope to work with the Chairman to prioritize the Department's needs within what should rightly be a very austere environment for new spending.

I appreciate that the Administration is proposing a new initiative to double the amount of US exports, which is a laudable goal. However, when we look for new markets overseas we must also do a better job:

- protecting American intellectual property, particularly for dual-use technologies,
- protecting our government and industry information technology networks from cyber attacks initiated overseas; and
- ensuring that our trading partners respect the basic rights of their workers.

I look forward to discussing these and other issues with you today, and again, I am pleased to welcome you and I look forward to your testimony.

Mr. WOLF. Secretary Locke, I want to welcome you. Thank you very much.

Mr. MOLLOHAN. Secretary Locke, as I mentioned, your statement will be made a part of the record, and we invite you to summarize.

OPENING STATEMENT BY SECRETARY LOCKE

Secretary LOCKE. Well, thank you very much, Chairman Mollohan and Ranking Member Congressman Wolf. I am pleased to join you to talk about the President's budget for the Department of Commerce for fiscal year 2011.

With the 2010 census field operations ending this year, the President's \$8.9 billion request decreases overall spending from fiscal year 2010, but funds targeted increases for vital economic activities. Because in these challenging times, the central mission of the Commerce Department is very clear and straightforward, helping American businesses become more competitive so they put more people back to work.

I want to highlight four areas where the Commerce Department's efforts described in the 2011 budget are integral to that goal of putting more people back to work. First, businesses use our unparalleled statistical and technical research to develop new products, identify new markets and make long-term investments. For instance, the National Institute of Standards and Technology, or NIST, provides metrics that enable development of everything from a National Smart Grid, advance manufacturing processes, to airport screening devices and new cyber security measures. NIST also provides consulting services to American manufacturers to become more efficient and profitable so that they become more viable and competitive in a global economy.

Increasingly, businesses are turning to NOAA for its unmatched weather and climate observations, and much of NOAA's 2011 budget increase will finance its added responsibilities to implement the long called for restructuring of the National Polar-orbiting Operational Environmental Satellite System, commonly known as NPOESS. This effort will help us better meet civil and military weather forecasts, storm tracking and climate monitoring requirements.

And at a time when both businesses and the President have called for more accurate and readily available climate information, the fiscal year 2011 budget assigns additional responsibilities NOAA's proposed new Climate Service Office which is the result of a proposed budget-neutral reorganization to bring together its observational and analytical resources, now scattered throughout NOAA, all under one roof.

A second key function of the Commerce Department is overseeing the patent protection that has incentivized American inventors and entrepreneurs for over 200 years. When I came to the Department of Commerce, the Patent and Trademark Office had a backlog of almost 800,000 patent applications and a waiting period of over 3 years just to receive a yes or no on a proposed patent. We have already taken important steps to fix these problems, knowing that every patent application waiting in line could be a new product not going to market and a new job not being created.

And through short-term surcharges and other fee provisions, as well as upgrades to our outmoded IT systems, the 2011 budget will, along with management innovations and employee process improvements, enable the Patent and Trademark Office to grant or deny a patent within 12 months, and our goal is to do this by the year 2014, except for those innovations that are also seeking FDA approval, which takes several years.

Area number three, Commerce provides direct consultation and funding to help communities develop crucial economic infrastructures through the Recovery Act's Broadband Technology Opportunities Program, BTOP. By tomorrow, we expect to announce or will have announced close to a billion dollars to lay or activate over 20,000 miles of high-speed Internet cable lines in underserved communities. And the fiscal year 2011 budget provides critical funding to ensure that all of these projects have rigorous oversight.

Our BTOP program, our broadband technology program is a true public/private partnership because, just as the Federal Government might fund construction of an interstate across the State and then have local communities and governments build the streets and the roads that branch off of it, our infrastructure grants fund super high-speed Internet lines or highways that local providers, the private sector, will then connect to or tap into to bring high-speed Internet service directly to homes and businesses.

The 2011 budget also provides \$75 million to our Economic Development Administration for planning and infrastructure grants to help communities identify their unique economic strengths and then to develop Regional Innovation Clusters similar to what we have seen in Silicon Valley or the Route 128 corridor in Boston.

And area Number four, in foreign countries, the Commerce Department serves as a lead advocate for U.S. companies looking to break into new markets or grow their shares in existing ones. The 2011 budget provides a 20 percent increase to the International Trade Administration, which, among other things, will allow us to hire some 328 new trade specialists, mostly stationed in foreign countries, to help find buyers and customers for U.S.-made goods. And our target is for medium- and small-sized businesses, because when American companies export more, they manufacture more; and when they manufacture more, they hire more people. The International Trade Administration will play a key role in implementing the President's National Export Initiative, which aims to double American exports over the next 5 years and support 2 million new jobs.

And as we implement all these programs, results, cost effectiveness, performance and accountability are paramount objectives. And so we take to heart the Department's managerial challenges and operational issues, as identified by our Inspector General, Todd Zinser, and his staff. His findings are acted upon and used to re-evaluate other operations and serve as benchmarks or metrics of performance improvement.

We are pleased to support and pleased that the President has granted our request in the 2011 budget to have increased funding for the Inspector General for increased oversight of departmental acquisitions and contracts.

So I thank you for the opportunity to come before you today and for your continuing support of the Department of Commerce and its programs, and I look forward to your questions.

Thank you.

[The written statement of Gary Locke, Secretary of Commerce, follows:]

WRITTEN STATEMENT ON THE COMMERCE DEPARTMENT'S
FY 2011 BUDGET BY COMMERCE SECRETARY GARY LOCKE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE,
SCIENCE, AND RELATED AGENCIES
March 4, 2010

Chairman Mollohan, Ranking Member Wolf, and distinguished Members of the Subcommittee, I am pleased to join you today to talk about the Department of Commerce and the President's Budget for Fiscal Year 2011. It has been my privilege to serve the American people for the past year, and I am grateful for President Obama's continued confidence in my ability to lead this great agency. We have accomplished a great deal since the beginning of this Administration, and the Subcommittee has played a critical role both in providing resources and conducting oversight to ensure that the Department achieves its mission.

Having steered the economy back from the brink of a depression, the Administration is committed to moving the nation from recession to recovery by sparking job creation to get millions of Americans back to work and building a new foundation for the long-term prosperity for all American families. To do this, the FY 2011 Budget makes critical investments in the key areas that will help to reverse the decline in economic security that American families have experienced over the past decade.

But even as we meet the challenge of the recession and work to build an economy that works for all American families, we must also change the way Washington does business – fixing programs that don't work, streamlining those that do, cracking down on special interest access, and bringing a new responsibility to how tax dollars are spent. I have been working hard to improve the way the Department of Commerce serves its customers, especially American entrepreneurs and businesses, the backbone of our nation's economy. The Department is focused on strengthening the conditions for economic growth and opportunity by promoting innovation, entrepreneurship, competitiveness, and stewardship. The FY 2011 Budget reflects this ethic and will allow the Department of Commerce to better meet the needs of the American people.

The request of \$8.9 billion will enable the Department to effectively promote strong and equitable trade relationships critical to sustaining our nation's ability to successfully compete in the global marketplace, improve our scientific and technological capabilities, upgrade our capabilities for weather and climate observations and forecasting, and ensure the long-term economic and ecological sustainability of our natural resources. This request is a significant decrease from our FY 2010 appropriation, since major field operations for the Decennial Census will be completed in the current year.

The Decennial Census is an enormous undertaking, and we are urging everyone to mail in their forms this month. An increase of just one percent in the response rate will save the taxpayers roughly \$80 million. The Census Bureau is focusing extensive advertising and partnership activities on hard-to-reach populations, to encourage a high response rate and help meet our goal of achieving the most complete and accurate count of the Nation's

population to date. We have expanded and accelerated those activities, with the Subcommittee's support, using funds provided in the Recovery Act. Our partnership efforts have been well-received – we have already enlisted 207,000 partners. For comparison, at the end of the Census in 2000 we had 140,000 partners. Our decision to advertise during the Super Bowl succeeded in reaching a massive audience – it was the most-watched TV event in history, with 116 million viewers. The results of these activities are promising: in the last three months, the share of people who have heard something about the Census has increased from 35 percent to 75 percent, and the share of people who say they definitely or most likely will complete the Census has gone from 77 percent to 85 percent.

Implementing all our Recovery Act programs effectively and efficiently remains a key priority for the Department this year and in the future. We have completed the Digital TV Converter Box Coupon program and returned unused funds to the Treasury. The pace of our grant and contract awards is increasing, and we remain on schedule to complete all awards this year. By the end of this week, we will have awarded 111 Broadband Technology Opportunity Program (BTOP) grants totaling \$1.1 billion. For example, a \$126.3 million broadband infrastructure grant to the State of West Virginia, combined with an additional \$33.5 million applicant-provided match, will bring high-speed Internet access to this underserved area by expanding the State's existing microwave public safety network and adding about 2,400 miles of broadband fiber. Our second round of grants will focus on expanding Middle Mile broadband infrastructure that connects critical community anchor institutions—such as schools, hospitals, libraries, and public safety agencies—and attracts end-user connections provided by the private sector to consumers and businesses, creating a ripple effect of economic development throughout communities.

Having addressed such critical needs, the FY 2011 President's Budget is designed to help put our country back on a fiscally sustainable path. This will require a high level of budgetary discipline and a number of hard choices and painful tradeoffs. Nonetheless, the Budget includes targeted investments in Commerce programs that meet major national needs, like export promotion that supports job creation, and research and development that can spur new ideas, new products, and new industries.

The Budget provides \$534 million, a 20-percent increase, to the International Trade Administration (ITA), for its role in the National Export Initiative, a broad Federal effort to increase American exports. ITA will strengthen its efforts to promote exports from small- and medium-size enterprises, help enforce U.S. trade law, fight to eliminate barriers to sales of American products and services and improve the competitiveness of U.S. firms. President Obama has issued a challenge to double U.S. exports over the next five years. By increasing the number of U.S. firms that export and enabling them to increase their volume of exports, new higher-wage jobs will be created, and U.S. companies will be better able to compete in the expanding global marketplace.

The Budget includes \$919 million for the National Institute of Standards and Technology (NIST), as part of the President's Plan for Science and Innovation. This proposed

increase reflects the critical role that measurement science, standards, and technology services play in fostering innovation and encouraging economic growth. To support and enhance our world leadership in the physical sciences and technology, the NIST laboratories would address critical challenges in manufacturing, advanced alternative energy sources, cyber security, the Smart Grid and other important areas, and ensure that its facilities meet its needs to continue to produce world-class research. The Budget also includes \$80 million for the Technology Innovation Program, which invests in game-changing new technologies that address critical national needs. The Hollings Manufacturing Extension Partnership will receive \$130 million to continue expanding its services to help smaller manufacturers adopt technological innovations that spur economic growth, and develop new products, expanded markets, process improvements, and more green technology jobs.

The request provides more than \$5.5 billion for the National Oceanic and Atmospheric Administration (NOAA), including investments to improve fisheries and the economies and communities they support, and to help green and blue businesses with a solid foundation of environmental information and stewardship. Much of this year's increase is to fund a major restructuring of the National Polar-orbiting Operational Environmental Satellite System (NPOESS). As it stands, the program is years behind schedule and billions over budget; independent reports and an Administration task force have concluded that the program cannot be successfully executed with the current management and budget structure. However, the need for a successor system of polar-orbiting environmental satellites remains a national priority and is essential to meeting both civil and military weather-forecasting, storm-tracking, and climate-monitoring requirements. The restructured Joint Polar Satellite System will keep what works – common operating and ground systems, run by NOAA – but NOAA will separately procure the spacecraft for its highest priority orbit, as will the Air Force. NOAA's spacecraft procurement will be managed by the National Aeronautics and Space Administration, as has been the case with prior polar satellites and all geostationary satellites, and is fully funded in the NOAA request rather than shared with the Air Force.

Strengthening our knowledge on climate, weather and ecosystem sciences, as proposed in the Budget, will also increase America's competitiveness. For example, the requested increase for the multi-agency Next Generation Air Transportation System would support enhanced weather information that, when fully integrated into the Federal Aviation Administration's operational decision-making process, could significantly reduce flight delays. There are also increases to strengthen NOAA's climate research and observation capabilities, including upgrades to climate science and improved modeling and assessments at the global, national and regional levels. In addition, we recently announced our plans to develop a NOAA Climate Service, and we look forward to working with the Subcommittee toward that goal.

The Budget includes \$2.3 billion for the U.S. Patent and Trademark Office (USPTO) to put the agency on a path to reduce first action pendency to 10 months and total pendency for patent applications to 20 months, implement a new, targeted hiring model, and make critical investments in its information technology, to support companies and innovators seeking to bring new products to market. The Budget also gives USPTO full access to its

fee collections and will strengthen its efforts to improve the speed and quality of patent examinations through an interim fee increase and fee-setting authority to better reflect the costs of providing services. Shorter pendency times at USPTO, in combination with patent reform legislation and other mechanisms for improving patent quality, can reduce legal uncertainty over rights and drive commercialization of new technologies.

In FY 2011, with funding of \$46 million, the National Telecommunications and Information Administration (NTIA) will continue its important policy, spectrum management, and research programs that support emerging technologies and affordable, alternative communications services that can drive economic growth and create jobs. The Administration and NTIA have moved aggressively to create an economic and regulatory environment in which innovations in information and communications technologies can flourish. In addition, as noted above, NTIA will focus on administering the billions of dollars in broadband grants being awarded this year; broadband is a central part of the infrastructure necessary for the economy to create jobs and thrive. The Budget provides \$23.7 million for post-award administration and oversight of BTOP grants for construction and mapping, and for ongoing work with the FCC to maintain the national broadband map.

The Budget includes \$1.3 billion for the Economics and Statistics Administration's (ESA) Census Bureau to process, tabulate, and release 2010 Census data, conduct extensive evaluations of the Census, improve the data collection methods of the American Community Survey (ACS), and begin a continuous update process of the Census Bureau's geospatial and address data, which is expected to produce long-run cost savings for the taxpayer. Understanding the demographic profile and economic structure of the Nation is key to any business or policy decision designed to promote job creation or to improve the economic well-being of American families. For example, the Budget proposes to expand the ACS sample size, which will increase the reliability of ACS data, especially for areas with a population of 20,000 or less. This increased reliability will greatly benefit entrepreneurs and businesses by informing their decisions about where to expand their operations and providing better data on the changing economic, social, and demographic trends of their workforce and customers. It also will lead to more efficient allocations of more than \$400 billion in Federal funds to communities, ensuring that even the smallest of towns, communities, rural areas, and tribal lands get their fair share of funding for schools, transportation projects and job training.

The request also provides \$109 million for ESA's Bureau of Economic Analysis to develop new statistics that provide greater detail on key economic sectors to ensure that regulators, policymakers and businesses have all the necessary data at their disposal to make the most effective investment and economic policy decisions. This includes data on the American family's income, spending, savings and debt. More accessible data will help businesses of all sizes make better investment decisions that can, in turn, lead to job growth. The Bureau will also reinstate statistics on new direct foreign investment into the United States and produce data critical to analyzing the energy sector's contribution to U.S. economic growth, productivity, inflation, the trade balance, and income.

In FY 2011, with funding of \$113 million, the Bureau of Industry and Security's (BIS) Office of Export Enforcement will step up its efforts to prevent illegal exports of sensitive dual-use goods and technologies that could endanger the nation. Enhancements included within a \$10 million increase will strengthen counter proliferation, counterterrorism, and other national security programs and investigations. These funds will allow BIS to expand its field presence and increase coordination and liaison with the intelligence community as well.

The Budget includes \$286 million for the Economic Development Administration (EDA), since competitive, high-performing regional economies are the building blocks of sustainable growth. As part of the Administration's place-based initiative, the Budget targets \$75 million toward planning and matching grants within EDA to support the creation of Regional Innovation Clusters that leverage regions' competitive strengths to boost job creation and economic growth. For example, EDA and NIST's Hollings Manufacturing Extension Partnership are currently partnering with the Departments of Energy, Education, and Labor, as well as the National Science Foundation and Small Business Administration on a joint Federal opportunity announcement for the Energy Regional Innovation Cluster. These agencies have issued a unique joint funding opportunity encouraging consortia from regions across the country to compete for a combined investment of up to \$129 million to accelerate the development of a Regional Innovation Cluster specializing in energy-efficient building technologies.

The \$32 million requested for the Minority Business Development Agency (MBDA) will further implement the Department's responsibilities under the Native American Business Development, Trade Promotion, and Tourism Act of 2000 and the Indian Tribal Regulatory Reform and Business Development Act of 2000. These funds will increase the activities and outreach of MBDA's Office of Native American Business Development and support research on Native American trade promotion and economic disparities.

The Budget provides \$84 million for Departmental Management, including \$17.5 million towards renovation of the Herbert C. Hoover Building, the Department's 73-year-old headquarters in downtown Washington, D.C. This long-term project, developed in coordination with the General Services Administration, addresses major deficiencies in the building's antiquated mechanical, electrical, plumbing, fire safety and security systems. The Subcommittee's continued support for this project will yield great benefits for our working conditions. Also within the Departmental Management account, the Budget provides small increases to improve cyber security by protecting sensitive information from increased malicious activities, and to strengthen our acquisition management workforce that is responsible for oversight of Department-wide activities. We are also requesting \$29 million for the Office of Inspector General, including additional funds to increase its oversight of Departmental acquisitions and contracts, and to support the Council of the Inspectors General on Integrity and Efficiency (established by the Inspector General Reform Act of 2008).

As part of the Administration's line-by-line review of the Budget to identify programs that are outdated, ineffective, or duplicative, we are proposing to terminate the Public

Telecommunications Facilities Program and consolidate support for public broadcasters in the Corporation for Public Broadcasting. The Budget also proposes to eliminate a yearly subsidy to a small number of firms in the worsted wool manufacturing industry that have already received about \$25 million over the past five years. Finally, we would rescind \$43 million of unobligated balances for the Emergency Steel Guaranteed Loan Program, which currently has no active loans, but leave \$5 million in the account in case there are future guarantee requirements.

In closing, the Department of Commerce has a broad mandate to advance economic growth, jobs and opportunities for the American people. While we are currently facing challenging economic times, this Budget provides a blueprint for us to carry out that mandate and help the Nation rise to the challenge and forge ahead. Thank you for the opportunity to come before you today, and for your continuing support of the Department of Commerce and its programs. I look forward to your questions.

CENSUS—2010 DECENNIAL

Mr. MOLLOHAN. Thank you, Mr. Secretary.

Mr. Secretary, the 2010 Decennial is upon us. Could you give us a brief timeline of the upcoming Decennial? When will surveys be mailed? What is the actual Census Day? What happens if people don't return their surveys? Just give us an overview.

Secretary LOCKE. Actually, starting around March 8th, residents will be receiving advance letters notifying them that they are going to be soon receiving the Census form, and around March 15th, they will actually receive those Census forms. Around 11.7 million of those Census forms will be bilingual English and Spanish.

By around March 22, we are going to actually make available to mayors and governors and local government officials, elected officials as well as Members of Congress, an interactive map which will enable people to actually go Census tract by Census tract and see within their communities how people are starting to return those Census forms compared to what happened in the year 2000, so that policymakers, mayors, public officials can do more publicity campaigns, public service announcements, or even target specific areas within their community or their State or their region to ensure that there is a full count.

We are asking that people send back their Census forms around March—excuse me—April 1. And by around April 20th, all those forms not processed, not returned, will then become our targets for what we call the nonresponse follow up, which means people going door-to-door and trying to have the forms filled out then. That activity will actually start May 1st and go all the way through the middle of July.

Mr. MOLLOHAN. How much does that nonresponse follow up cost per visit?

Secretary LOCKE. I can't tell you the exact, because sometimes we may have to go several times, and it depends on location. But for every 1 percent mail-back response, we save the Federal Government approximately \$80 million to \$90 million, which is why we have that unprecedented media campaign.

In the year 2000, when we had the first media campaign, we actually saw an increase in participation rate, reversing a decline of several decades of households not returning the Census form. And of course, this year we are trying to make it even more simple and more convenient to people to fill out. Only 10 questions, should only take about 10 minutes.

[The information follows:]

The average cost per household during non response follow up (NFRU) is \$57.

Mr. MOLLOHAN. How much did the Super Bowl ad cost?

Secretary LOCKE. I think we spent about \$2.5 million, and I think we reached about over 50 percent or 45 percent of all households in America. You compare that with a 30-second ad, and we had three 30-second ads during that Super Bowl, compared to, I think, a cost of almost a half million for one 30-second ad during American Idol, and that reaches only about 10 percent of American households.

[The information follows:]

2010 DECENNIAL CENSUS

The 2010 Census advertising campaign spent \$2.5 million for one 30-second and two 15-second pregame spots, two on air mentions during the pregame show, and a one 30-second ad during the third quarter of the game.

Mr. MOLLOHAN. And how much was that per person that saw it?
Secretary LOCKE. Two cents per person.

Mr. MOLLOHAN. 2.15.

Secretary LOCKE. 2.15. And I know there has been a lot of comment about that Super Bowl ad, along with all the other Super Bowl ads. And it seems like maybe that is the point of it, to foster this discussion. Because I was puzzled by many of the other ads that I saw during the Super Bowl, wondering what their point was. But what we do know is that there was a lot of discussion, both pro and con, about that Super Bowl ad involving the Census, and there was unprecedented chatter among YouTube and other social media. So we got people talking about the Census.

Mr. MOLLOHAN. Well, for 2 cents a person, you got a lot of play on it, didn't you?

Secretary LOCKE. Yes.

Mr. MOLLOHAN. Good. Congratulations.

The cost of the nonresponse follow up, that has been recently revised, and I am just curious. What made it necessary to revise it, if you're able to answer that?

Secretary LOCKE. Well, we are trying to constantly revise that, and we also have a cushion, but we took some of the lessons that we learned from the address canvassing, which was conducted in the spring, when we sent several hundred thousand people to make sure we had the right addresses, documenting that new buildings were there, or buildings may have been demolished, updating really the list of addresses from local governments as well as the Postal Office.

And we had some cost overruns in that particular operation, primarily because we hire people and train them and expect a certain rate of attrition, people who, after 1 day canvassing addresses, saying, this is not for me. I don't want it. I am quitting. Or people who then get another job and say, I am quitting, and I don't need this temporary job from the Census Bureau. It turns out that because of the tough economy, we had a much smaller attrition rate, and so we ended up training more people than we actually needed. And so we are taking that into account in terms of the number of people we will actually hire, building in a revised attrition rate for the non response follow up.

Mr. MOLLOHAN. So you feel this is going well? Do you anticipate any problems? And to the extent you have anticipated any problems, do you have adequate funding to address them?

Secretary LOCKE. We do have a reserve built in. We have had other operations that have come in under budget and ahead of schedule. But we still have almost a half a billion dollars set aside for the nonresponse follow up.

Starting around March 22nd, when we start seeing the initial mail-back of the Census forms, community by community, ethnic group by ethnic group, we will have a better sense of how things are going and how we can redeploy, using local government offi-

cials, nonprofit agencies, churches to get the message out and to be as proactive and as nimble as we can.

Mr. MOLLOHAN. If your mass advertising was a success, how about your targeting specific hard-to-reach groups? What are your strategies with regard to that, and how successful do you think you are being or are going to be?

Secretary LOCKE. We have an unprecedented level of community partnerships, churches, community organizations, nonprofits, corporations, most of the mayors and governors, elected officials. Local elected officials have put together what they call complete count committees, because we rely on community organizations, faith-based organizations, respected organizations within the community to basically buttress and reinforce our message. A lot of concern among immigrant groups about participating, people who are new to this country, who don't understand the history and the constitutional basis for the Census may not want to participate. So it is a challenge to get that message out.

For the first time ever we are sending out the bilingual Census forms in Spanish and English. We have language guides in some 59 different languages, also Census forms printed up in other languages, Vietnamese, Korean, Russian, Chinese, and one other. But it is an unprecedented effort to really try to reach out to people.

Mr. MOLLOHAN. Do you think you are being successful, and do you have any measurement of that to date?

Secretary LOCKE. We do have Gallup polling which shows the awareness of the Census is pretty high.

Mr. MOLLOHAN. What about willingness to participate by these hard-to-reach groups?

Secretary LOCKE. It is fairly high. I think we always would want as close to 100 percent, but right now, I think the indicators are about 80 percent of households plan to participate.

Mr. MOLLOHAN. And is that a general number, or is that—

Secretary LOCKE. That is on average, but we are tracking it ethnic group by ethnic group.

Mr. MOLLOHAN. I am really looking at these hard-to-reach groups, these groups where language challenges, maybe community, cultural issues make it more difficult. Do you have unique strategies to identify those people and to make sure you get as exact an account as possible in those communities?

Secretary LOCKE. We are tracking both awareness by ethnic group, traditionally hard-to-count groups, as well as intent to participate. Then we have unprecedented direct media in different languages, Telemundo, Univision, local newspapers, and radio stations among the different ethnic groups.

Mr. MOLLOHAN. Trying to take the fear out of it where it might exist.

Secretary LOCKE. A lot of it. And that is why the trusted leaders of the community are so critical. It is one thing for a government official to say it, but when church leaders say it, when key members of their local community say it, that has much more power.

Mr. MOLLOHAN. Mr. Wolf.

U.S. PATENT AND TRADEMARK OFFICE

Mr. WOLF. I thank you, Mr. Chairman.

Mr. Secretary, a few months ago, an inventor came to my office to raise concerns that the USPTO put his complete patent application for cryptology software on the Internet. He is prohibited from exporting this product because of its potential military and intelligence capabilities. And he did not want to, I want to make that clear.

Our system of export controls is meaningless if the plans for developing dual-use technologies are posted by the U.S. Government on the Internet. We all know that our country's adversaries and rivals are aggressively working to steal as much of our intellectual property as possible. It is a national security issue. It is a job issue, too, but it should be addressed immediately.

If you need legislation, would you please submit a proposal and maybe some language that the committee could carry.

Are you concerned that patent information on dual-use technologies is on the Internet? And what is your plan for addressing this national security issue?

Secretary LOCKE. Well, I am not aware of that particular situation, and I do know that information, applications, to some extent, are posted on the Internet to make sure that those who might contest the novelty or the uniqueness of that innovation can be heard as we make the determinations about patentability and whether it should be patented.

But obviously, I don't know the extent to which we do reveal or publicize on the Internet or any other method the complete contents of a new technology. And especially, as you say, if it involves military application we need to be very, very careful about that because, on the one hand, the United States Government wants to protect our national security, and we are trying to restrict exports, making sure that items that have strictly military applicability on the list conducted and administered by the Department of State, or even things that are dual-use civilian products that may have military application do not fall into the wrong hands. And as Brent Scowcroft, the former National Security Adviser to President Bush indicated in the study conducted by the National Academy of Sciences a year ago, we need to do a much better job of protecting various technologies that could really do us harm.

Mr. WOLF. Well, could you look into this? Because we have heard from others that the Chinese surf your information and see what ideas are out there and, many times, take it. And we know the cyber attacks—we have some questions on that—come in to find information. So if you could do that, maybe get back to the committee, right away because it may be something that you are not aware of, your people are not aware of that could be corrected without any legislative of language. But if you could let us know, we would appreciate it.

Secretary LOCKE. Thank you.

BUREAU OF INDUSTRY AND SECURITY—EXPORT CONTROL REFORM

Mr. WOLF. We understand the administration has undertaken a multi-agency effort to reform our Nation's export control laws. This could be beneficial exercise because our export control laws are very complicated with Commerce, Energy, State and Defense all playing different roles, depending on the product.

However, I am concerned that business interests may prevail over national security interests. How would these reforms strengthen our ability to prevent our enemies and rivals from stealing dual-use technology that could be used against the United States and our allies, or used against their own people to restrict basic human rights?

Secretary LOCKE. Thank you very much, Congressman Wolf.

And as I indicated, Brent Scowcroft and others authored the report by the National Academy of Sciences and called for major reforms of our export control system that, in many cases, we need to build higher fences around very sensitive technologies that are unique to the United States, manufactured, produced in the United States, that if they fall into the wrong hands could do us harm.

At the same time, the report indicated that there are many other things, civilian items that may have military application, that are readily available by other countries from other companies around the world and that our restrictions oftentimes put our U.S. companies at a disadvantage, especially when those products are readily available almost at Radio Shack or Home Depot, or other companies around the world advertise that they will ship it to a purchaser within the next 24 hours.

And even the head of the European Aerospace Industries Association openly advised members within Europe not to seek any technology that might come from the United States because of the difficult export control regime. That deprives U.S. companies of opportunities to engage in research, to advance their products, and to get revenues so that they can continue to perfect their products, which can then also benefit our military and our national security.

In this export control reform that the President has called for, first and foremost must always be national security. Are we protecting, enhancing our national security? And whatever commercial benefits may come from modernization or reform of the export control system, the number one objective has to be national security. And that has to be paramount.

I can tell you that, for instance, within the Bureau of Industry and Security, when we issue licenses for dual-use exports, we may allow a U.S. Company to export something to, let's say, France. We never really follow up to see if that company in France is improperly re-exporting to a country that is unfriendly to the United States. So what we would like to do within the Department of Commerce is reform that effort, free up people, so that we are actually doing that additional monitoring to make sure that those items that are properly licensed are not falling into the wrong hands.

BIS—CRIME CONTROL TECHNOLOGIES

Mr. WOLF. Well, I would encourage you to do that quickly; 60 Minutes had a piece on that about 3 weeks ago, that precise thing. And if there is anything, again, that the committee can do to give you that authority and that ability, I hope you will let us know.

Crime control and law enforcement technologies can be exported to foreign governments and used to abuse human rights. The Bureau of Industry and Security is currently working to update crime control and law enforcement items contained on the Commerce Control List. In addition, they are working on a more complex

crime control review to address developing technologies, such as biometric identification systems, training simulators and surveillance systems.

What is the status of these efforts? It is not uncommon to hear stories of a dissident in a particular country being tortured with equipment that has been made in the United States and that sometimes an American company, either knowingly or maybe unknowingly, has sold to that company, cattle prods, things like that. Can you update us on where that is?

Secretary LOCKE. Well, our Department of Commerce and Bureau of Industry and Security is very much committed to effectively controlling these dual-use items that also, not just could be used for military application against us and our allies but also could hinder or abuse human rights. And so we are looking at prohibitions on the export of crime-control items to countries such as China and even instruments that could be used for torture. So that is part of our control list, and we take that seriously.

Mr. WOLF. It should not only be China, though. I think that is very good. But Egypt has done some torturing, and you can just go down the line. So I would hope it would be with all the countries that may very well be.

NTIA—CELLULAR DETECTION AND JAMMING TECHNOLOGIES

Secretary LOCKE. Yes, sir.

Mr. WOLF. We understand that contraband cell phones—and the prison system will tell you this—are increasingly being smuggled into State and Federal prisons and used by inmates to orchestrate prison breaks, conduct illegal activity, and harass or intimidate judges, lawyers or former victims. The fiscal year 2010 conference report directs the Department of Commerce to work with the FCC and the Department of Justice to develop a plan to investigate and evaluate how wireless jamming detection and other technologies might be utilized for law enforcement and correction applications in Federal and local prisons. What is the status of this plan, and what is the Department doing?

Secretary LOCKE. We just recently conducted such a test involving the Federal Bureau of Prisons, along with manufacturers, and we did this at the Federal correctional facility here in Maryland.

Mr. WOLF. And what did you find?

Secretary LOCKE. The results are not yet in. But our goal is to make sure that we can jam those cell phones that are somehow being smuggled in to prisons, State or local prisons, and make sure that whatever technology that we use is not hampering cell phone use by, let's say, prison guards or administrators within the prison, or even first responders who might have to come into a prison in a time of a riot or a disturbance.

So we have got to make sure that, whatever we do, it is not hurting the necessary communication of law enforcement individuals who are operating within a prison or who are coming into the prison on an emergency basis. So we don't have a report yet, but we are very interested in getting that.

Mr. WOLF. How close are you to having a report?

Secretary LOCKE. I would have to get back to you, sir. The test was just conducted on over a 3-day period from February 16th to the 19th, so that was only about 2 weeks ago.

[The information follows:]

It is the Administration's view that the use of cell phones by prisoners to carry out criminal enterprises is intolerable and demands an effective solution. The solution may include jamming technology, but we must ensure no harm is done to public safety, Federal and law enforcement activities or to use of cell phones by law-abiding citizens. In December and early January, NTIA's Institute of Telecommunications Sciences in Boulder, Colorado performed radio measurements of a jamming device in a closed environment. These tests were followed by on-site measurements at the Cumberland, Maryland federal correctional facility. Those tests were coordinated with the equipment manufacturer and the Bureau of Prisons and NTIA worked with the Bureau of Prisons to issue final reports on test findings. NTIA released its findings on the Cumberland test in May 2010. In May, NTIA also produced a technical memorandum analyzing the data in these reports. NTIA then issued a Notice of Inquiry seeking public input concerning technologies that could help eliminate contraband cell phones in prisons. Comments on this NOI are due in mid-June. NTIA expects to complete a report by the end of 2010.

Mr. WOLF. Who did the test?

Secretary LOCKE. It was conducted by our NTIA, National Telecommunications Information Administration, along with the Federal Bureau of Prisons.

Mr. WOLF. When do you think you are going to have the final report? And how do you plan on letting the different prison systems know? Is there any particular approach you have in mind or what?

Secretary LOCKE. Well, we will definitely inform the members of the committee and all others who are interested.

I know that, for instance, Senator Mikulski and Senator Hutchison have a strong interest in this, and we will certainly report back to the appropriate committees.

And I think that ultimately we need to share this with law enforcement and prison officials because this is a growing problem, not just in the Federal prisons but the State prisons. Our jurisdiction, of course, can only be over the Federal prisons, but I think we would want to share this with local law enforcement.

Mr. WOLF. Maybe you ought to ask Director Lappin once it is available to get it out to all of the State and local prison systems and to the Governors. But if you could kind of keep us informed.

I have some other questions, but I will pass. And thank you.

Thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Wolf.

Mr. Schiff.

ACCESS TO CREDIT

Mr. SCHIFF. Thank you, Mr. Chairman.

There were a couple of areas that I wanted to raise with you, Mr. Secretary, and if one or either are in a different jurisdiction, that is fine. Let me know that. The first is probably the most recurrent concern that I hear from my constituents in terms of the business climate and the economy—the inability of small business owners to access credit. And I have so many business owners that will tell me that they have had a perfect relationship with their bank for 25 years. They have a perfect credit history. They want to make an investment in equipment or maybe want to make additional hires, and their bank of all that time is telling them they can't do it or

are requiring such onerous conditions that they can't get access to credit, can't meet payroll, certainly can't expand their businesses.

So I would like to get your sense of what you think, within the jurisdiction of Commerce, can be done about this.

The other area that I wanted to raise, which is very important to my constituents as well, many of whom are in the business of producing content that is sold all over the world, and I just met with a group of publishers who are very concerned about the dramatic proliferation of intellectual property theft of published works. But this has been true for a long time in the music industry and film and TV industry. So I would like to ask you about how we can beef up our efforts to go after intellectual property theft.

Secretary LOCKE. Two very important issues.

On the issue of access to credit, we are hearing that in talking to small- and medium-size companies and large companies all around the country. It is a major, major problem because while the big banks have been rescued and are profitable, nonetheless, the regulators appear to be putting enormous pressure on them to be much more conservative with respect to their lending practices, even to companies that have long been very good, who have always repaid their loans and are very, very profitable.

Mr. SCHIFF. Can I just ask you about that? I am sorry to interrupt. I won't interrupt you again. But I do hear that comment made secondhand via the small business owners. They say, well, the bank is telling me the regulators are breathing down their neck, and I have really been curious about that. Is it really the regulators telling them not to lend or to be really, really conservative in their lending? Or is this an excuse being used by some of the banks to hold on to their capital and increase their liquidity on the books? Is it really a problem with the regulators, or are the regulators being the fall guy for the banks?

Secretary LOCKE. Well, it could be a combination of the two. And it would have to depend on a bank by bank situation. Perhaps Treasury officials could, and banking officials are the ones really more appropriate people to really ask or to dive down into to get that information.

But I can tell you that the President, of course, has called for a redirection of some \$30 billion in not used TARP money to be targeted toward community banks with incentives for those community banks, which oftentimes are closest to those small- and medium-size companies who have that relationship with them, familiar with their operations, to make these loans available.

Also, the Small Business Administration has increased its Loan Guarantee Program up to 90 percent, and there is consideration to modifying even that.

And of course, under the National Export Initiative that the President announced, he has called on the Ex-Im Bank to increase the amount of financing available for medium- and small-size business from the current \$4 billion of activity to \$6 billion of activity.

But it is going to require, I think, a very comprehensive holistic approach to address this issue of access to capital.

Mr. SCHIFF. On the President's program, and I support that completely, to use some of these TARP funds to incentivize the small and community banks to lend, will there be conditions placed on

the access of those small and community banks to these funds, in the sense that if they are going to get the funds, they really need to increase their lending portfolio? Because, you know, I have heard secondhand some of the small banks saying, we will take the money, but we are not going to use it to lend. They are just going to hang on to it.

And I think we saw this with some of the big banks that got TARP funds, that they used it to improve their bottom line but not necessarily to get the economy moving. How can, through this program, we ensure that if banks make access to this, that they in fact use it to lend?

USPTO—INTELLECTUAL PROPERTY RIGHTS

Secretary LOCKE. I would have to really defer to Secretary Geithner and others in the Treasury Department for all those details in terms of the checks and balances or the incentives and the requirements.

With respect to the issue of content and publishers, violation of intellectual property rights is a big concern. American companies are losing billions and billions of dollars in lost sales, and actually hurting job creation, whether it is in the music industry or the film industry, and we are focusing on that.

The Vice President has convened a multi-agency task force involving Homeland Security, Justice Department, Commerce, Patent and Trademark Office. And we know that there is a lot of tension even among the new information technology providers in terms of their responsibilities. Are they simply the postmen and should not be liable for what is contained or transmitted over their lines?

So the Department of Commerce, while we help enforce intellectual property rights and in all of our meetings with government officials really press the issue of enforcement of intellectual property rights, nonetheless, we, for instance, the Department of Commerce are hosting a forum of industries, both those who provide, create the content as well as those who transmit that content through to look at this very issue.

Mr. SCHIFF. Thank you Mr. Secretary.

And thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Schiff.

ITA—NATIONAL EXPORT INITIATIVE

Mr. Secretary, the fiscal year 2011 budget proposes a net appropriation of \$534.3 million for the International Trade Administration. Of that amount, the budget requests \$83.5 million for a National Export Initiative. You have referenced that. Does this initiative include an increase in funding for the agency responsibilities associated with challenging unfair trade?

Secretary LOCKE. Yes, it does. Part of that funding for the International Trade Administration under the National Export Initiative includes folks dealing with trade compliance and enforcement.

Mr. MOLLOHAN. How much of this initiative is directed to the responsibility associated with challenging unfair trade?

Secretary LOCKE. About 15 percent of the funds.

Mr. MOLLOHAN. Is this increased funding on imports coming into the U.S. from abroad, or does it just increase funding for challenging unfair trade when the U.S. exports?

Secretary LOCKE. It would be both.

Mr. MOLLOHAN. Can you talk about it separately, and how much is for challenging unfair imports versus—

Secretary LOCKE. Well, excuse me, the 11 percent is more for enforcement and compliance of U.S. trade laws. Then we have another sector of trying to break down market barriers in other countries to U.S. products and services.

Mr. MOLLOHAN. Well, that is what I am trying to tease out of here. How much of the increase will be used for challenging unfair trade on imports, unfair imports?

Secretary LOCKE. That is approximately \$11.8 million or 15 percent of the funds requested for the Department of Commerce.

Mr. MOLLOHAN. Do you agree that the production of a billion dollars, for example, worth of goods in the United States that substitutes for a billion dollars worth of unfairly traded imports creates or preserves just as many jobs as a billion dollars worth of exports?

Secretary LOCKE. That was a pretty complicated question there.

Mr. MOLLOHAN. Do you agree that if you save the number of jobs that it takes to create a billion dollars worth of exports, that that is worth just as much as preventing a billion dollars worth of unfair imports; that for the domestic market it is worth just as many jobs as going out and creating export opportunities worth a billion dollars?

Secretary LOCKE. Oh, very much so. A billion jobs is a billion jobs.

Mr. MOLLOHAN. Well, it is a billion dollars worth of jobs. My point is that we hope that the Commerce Department will focus just as aggressively on unfair imports as we are in trying to break the barriers, unfair barriers that exist to our exports. And there are a lot of industries that are very sensitive to that and felt that not as much attention has been given at Commerce. And so we applaud you for this initiative and hope that it is focusing on unfair imports as well as trying to break log jams that unfairly exist for exports.

Secretary LOCKE. As the President has noted on many occasions, America is perhaps one of the most hospitable countries for investment. We have almost the fewest barriers of any country around the world, and that is why, if we open our markets to products from other countries, it is incumbent upon other countries to reciprocate. And it also means that other countries have to abide by the rules of trade. Otherwise, American companies don't get the advantage or the full measure of whatever bargains and treaties and agreements we make with our countries.

If we are able to create jobs and create new jobs, that is terrific. But if we already have jobs that are here in America, we need to save every single one of those. And if that means making sure that countries are not improperly selling their products at below normal cost, or not taking advantage or having extra advantage because their governments subsidize those products or services, then we need to go after those because we are talking about existing jobs.

And unfair trade practices by other countries that disrupt existing jobs has tremendous impact to the people involved, their families they support, as well as their entire communities.

Mr. MOLLOHAN. Thank you for that affirmation, Mr. Secretary, and we look forward to working with you in ensuring that the administration is really up on full alert with regard to that.

ITA—TRADE COMPLIANCE—ENFORCEMENT

The positions included in the overall trade compliance enforcement increase, will any of those positions work on reducing foreign subsidy programs? In other words, are you increasing your staff to look at foreign subsidy, where foreign subsidy programs exist, and identifying that as unfair competition?

Secretary LOCKE. Well, we do have specialists who look at those various parts.

Mr. MOLLOHAN. Do you have sole jurisdiction over subsidy investigations?

Secretary LOCKE. We don't have people focused on subsidy investigations unless they are part of a complaint that has been filed that we then investigate.

[The information follows:]

TRADE COMPLIANCE—ENFORCEMENT

The Department of Commerce has sole authority for investigating subsidy allegations in countervailing duty proceedings. In addition to the responsibilities for subsidy investigations, the Department also has a team of subsidy experts which research, monitor, analyze, and assess the WTO-consistency of foreign government subsidy practices. These practices are addressed, as appropriate, including through WTO-dispute settlement action, working with USTR. I envision that these enforcement efforts will increase under the NEI.

Mr. MOLLOHAN. Do you agree that, in order to have free trade, currencies must float?

Secretary LOCKE. That is the position of the United States.

ITA—CHINA'S CURRENCY MANIPULATION

Mr. MOLLOHAN. On February 26, 2010, the Wall Street Journal reported that 15 Senators, including six Republicans, sent a letter to you, Secretary Locke, noting serious concerns about the Commerce Department's failure to conclude that China's currency manipulation is, in fact, a countervailing subsidy to its domestic exporters.

The article goes on to state that you made a pledge in December to thoroughly investigate such allegations. The article quotes the President as saying that the U.S. needs "to make sure our goods are not artificially inflated in price, and their goods are not artificially deflated in price; that puts us at a huge competitive disadvantage."

And the article notes that the Federal Reserve Board chairman, Ben Bernanke, "echoed these concerns, calling on China to be more flexible towards its currency." Is the Department investigating the allegations that China's currency manipulation is a countervailing subsidy for its domestic exporters?

Secretary LOCKE. The petitioners in that particular case have filed an amended complaint alleging that the undervaluation of the currency constitutes an unfair subsidy, along with several other al-

legations, and we are investigating that. And I cannot comment because it is under investigation right now.

Mr. MOLLOHAN. My question was only, is that under investigation by the Department?

Secretary LOCKE. Yes.

Mr. MOLLOHAN. When will we hear results of that investigation?

Secretary LOCKE. I believe that it depends on whether or not the petitioners will grant us an extension to add these additional elements into our investigation. If they don't grant us an extension, we have a statutory deadline by which we must respond to the initial set of allegations, and with these additional allegations, that is are very complex in nature, we need to be sure that we have sufficient time.

Mr. MOLLOHAN. Thank you Mr. Secretary.

Mr. Fattah.

CENSUS 2010 DECENNIAL PARTICIPATION

Mr. FATTAH. Thank you, Mr. Chairman.

Mr. Secretary, it is good to see you again.

And let me just, I want to focus in on the Census which is one of the instant matters before your Department.

The Census, plan was essentially developed under the previous administration?

Secretary LOCKE. Much of the work of the Census was planned several years ago, under the previous administration, almost 4 years ago.

Mr. FATTAH. Because there is some noise out in the atmosphere from conservatives with respect to the Obama Census plan—yet this is a plan that was put in place years ago, before the President was sworn in and before you took office, too, in terms of this year's Census, right? There should be no reason for anyone in our country, no matter what their political stripes, to not encourage people to comply with the Census. It is important data that the government needs to go forward, right?

Secretary LOCKE. It is a constitutional responsibility of the government, and it goes all the way back to 1790 under President George Washington. It is the sacred duty of every resident of the United States.

Mr. FATTAH. I just raised it because I heard someone on Fox News, saying that if they had gotten this form, they weren't going to fill it out; that they couldn't encourage anyone else not to fill it out. This person is a judge or a former judge purported to be giving, you know, some overview about this.

But I think that we should be encouraging everyone, wherever they may be to participate in the Census. It is important to the work of the long-term planning for a whole range of issues, transportation, education, and the like.

And I just wanted to see if we could just put on the record that the program of the Census, that is, the short form, the planning for the implementation of this, that you really are the conductor on this train, but, as the conductor on the train, the tracks and the direction of this program was put in place by the former administration, which was a Republican administration. Is that correct?

Secretary LOCKE. That is correct. And, in fact, the questions were all submitted to the Members of Congress, I believe 2 years ago, and approved by the Members of Congress 2 years ago.

Mr. FATTAH. So this nonsense is nonconstructive in terms of doing the important constitutional work that your Department has. And I just wanted to put that on the record. I appreciate you being here.

I thank the Chairman for yielding me time.

Secretary LOCKE. Thank you.

Let me just add that the Census program is really run by career people, nonpolitical people.

Mr. FATTAH. I know, but the political atmosphere sometimes in our city doesn't allow common sense to rise to high places, or when people have responsibility to act responsibly. So thank you.

Secretary LOCKE. Thank you.

Mr. MOLLOHAN. Occasionally.

Mr. Wolf.

Mr. WOLF. I thank you, Mr. Chairman.

I didn't know Mr. Fattah watched Fox News. I think that was interesting.

Mr. FATTAH. I do. I am a big fan.

Mr. WOLF. Oh, good. There you go.

Mr. FATTAH. It is hard to find the news portion thereof; it is colored with so much opinion.

JOB PROTECTION, COMMERCE'S ROLE

Mr. WOLF. I have a couple of questions, and I think we are going to come back. And I don't want to miss the vote.

One thing I would like, and it is not really a question, but have you ever considered, because your job is a very important job, I think the Secretary of Commerce can make a tremendous difference with regard to jobs. And following up with what Mr. Mollohan, the chairman said, have you ever thought of having a tiger team or an advocate team in the Department of Commerce to help small businesses who are looking to protect jobs? For example, a Chinese firm will hire a Case & White up in New York and come in and just pound and pound onto a small business who really can't afford a Wall Street firm or a K Street firm. Have you ever thought of putting together an advocate team that will help people who are going through exactly what the Chairman was saying, where there is a foreign entity coming over, pounding, taking the jobs away? Have you ever given that any thought?

Secretary LOCKE. Well, we do have various groups like that. For instance, we recently created an Office of Innovation and Entrepreneurship reporting directly to me, focusing on the issues of entrepreneurs because, for instance, in the last 30 years, virtually all the net new jobs in America came from entrepreneur start-up companies.

Mr. WOLF. But I mean to protect them in a way that when they, when these high-powered people are coming in? If you are an entrepreneur, you are small; all of a sudden, this foreign interest comes in. They have one of the best law firms in Wall Street coming in. How do you advocate or protect them? Or maybe you

should— would you think about it? Maybe there are some ideas that maybe you and I can chat about.

Secretary LOCKE. Sure.

JOBS REPATRIATION

Mr. WOLF. The second thing was, and I don't know how much time we have left, have you ever given any thought to putting together a repatriation team, a team whereby you would go around the country talking to American companies that are doing business in China and Bangladesh and Mexico and Guatemala, wherever the case may be, and say, we want to repatriate you. Not a Governor from Washington State taking a job from California or vice versa, but getting a job back from China, back from India, back from wherever. You would put together a high-level, bipartisan, nonpartisan team that would go out and meet with the head of Intel and say, hey, we have a great opportunity. Come home. Bring your jobs back home. Have you ever put together a major effort to do that?

Secretary LOCKE. Not in the way that you have described, but we have been having discussions with major industries about what we can do to help them create more jobs here at home.

Mr. WOLF. Well, the best job, though, is a job that is abroad that should have never left a little town in West Virginia or a little town in Virginia, that was taken over by it, and it is gone. And I think to find these American companies who, I believe, if given the right incentive and the right encouragement by the administration and by somebody like you, I would encourage you, if we can talk about it, maybe offline here, putting together a team and picking 25 of the largest American companies, good companies. Generally, the way to bring them back and in the past has been punish, but instead to see if there can be an incentive where there can be an incentive to scatter. Because you may want to come to Martinsville in southern Virginia, whereby you can pay a little less of a salary than you may pay if you are going to move it to the suburbs of New York City. But they want to come home. They want to come back.

But if we could talk about maybe developing an incentive and if you could also have someone call me to see what literature is out there about any major action that has been done by this administration or other administrations in repatriation. Again, I am not talking about Governor of this State stealing from this State, but a Governor or a President or administration looking to go abroad, American companies solely, beginning, who were doing a good job in the United States, who, for whatever reason, moved abroad, to see if we could repatriate them back.

Secretary LOCKE. I will be happy to have that conversation with you.

Mr. WOLF. If you could. Thank you.

With that, Mr. Chairman, I will yield back. And we are going to come back I assume.

Mr. MOLLOHAN. We are coming back from the vote.

ITA—NATIONAL EXPORT INITIATIVE

Mr. Secretary, in the National Export Initiative, you propose \$4.4 million for increased outreach and guidance to small and medium

enterprises. And that includes a new Nationwide Export Education and Awareness Campaign and a National Series of Export Conferences and a Program of Assistance Outreach and Education tailored to the small and medium enterprises. This is a worthy goal. This is a worthy initiative. This, I am sure, works well in some places, this whole notion of really trying to mine companies who are not sophisticated exporters and are small- to medium-sized and to try to pull—it is a mine-pull program. It is not easy. I wish you all the success in the world.

My first question has to do with the statement that accompanied our fiscal 2010 omnibus where we directed ITA to provide a report to the Committee on Appropriations, not later than 60 days after enactment, on the status of the current program, the pre-National Export Initiative program. And you can reference the language, the omnibus language in the conference report. But we haven't yet received the report. The question is, why not? And when can we expect it?

What I am really interested in is telling you how strongly this committee will actually support this initiative. And we will be looking to see what reality is with regard to it after a short period of time. We recognize, those of us who are from economies that are extraction and manufacturing, how important it is to get this small- and medium-size business entrepreneurial engine going in, hopefully, a lot of diversified kind of economies. But getting access to that international market, and I can tell you I have personally been involved with, in a serious real way, with trying to help other entities facilitate those relationships, is not easy to do.

So I will be really interested to see what this National Export Initiative ends up looking like. I will be very interested to see your report, and to work with you on it, and to support it in this bill, and look to your request, which will make judgments, obviously, to the extent which we support it on performance. I think I would like to, before we recess here for the vote—and we will be coming back right after these three votes to finish up. And it won't take very long to finish up after we come back.

EMERGENCY STEEL GUARANTEE LOAN PROGRAM

The Emergency Steel Guarantee Loan program, Mr. Secretary. The fiscal year 2011 request, proposes to reduce the Emergency Steel Guarantee Loan program by \$43.1 million. And Congress just extended the authorization for this program in the 2010 omnibus. What is the administration's rationale for reducing the Emergency Steel Guarantee Loan Program nearly 90 percent?

Secretary LOCKE. We have not had any loan activity on that for several years. The loans have all been paid back. There has been no activity, no loans. Only three loans have been made through the program, none since the year 2000.

Mr. MOLLOHAN. Well, if we approved your request and then there were a need, particularly in this current economic climate, then you wouldn't have any money to effect the program?

Secretary LOCKE. Well, there are no outstanding loans. There have not been any requests, even in the last year.

Mr. MOLLOHAN. I know, but we are looking prospectively. We are looking into 2011.

Secretary LOCKE. That is why we have proposed leaving at least some money in the account.

Mr. MOLLOHAN. But the money you have in the account is less than a placeholder. I mean, I can't imagine a situation that could exist that would actually be benefitted by \$5.2 million.

Secretary LOCKE. That is the administration's position, and we have just looked at the course of the history of the program since its inception.

Mr. MOLLOHAN. Well, let me ask you this, do you think it is possible that some steel companies in the next year might have a need and be able to participate in the Emergency Steel Guarantee Loan Program? Do you think that is possible?

Secretary LOCKE. That is possible. That is why we have left some funds in the account.

Mr. MOLLOHAN. What will that, if you were, if we were to approve your request, what would the \$43.1 million, how would you redirect that? Is any of it going to be used for import trade enforcement programs?

Secretary LOCKE. Well, that is all part of the funds that go into the Department, and that includes funding for all the enhancements including the National Export Initiative. So I can't say that it was this dollar that went into this program because once it goes into the kitty, how do you know which dollar is funding which?

Mr. MOLLOHAN. Well, it is not here, and it is there, so—well, we will be looking at this very closely and working with you.

And we will return after the third vote, Mr. Secretary, and should finish up within a half hour of that.

Secretary LOCKE. Okay. Thank you.

Mr. MOLLOHAN. The hearing will resume.

Mr. Wolf.

Mr. WOLF. Thank you, Mr. Chairman.

JOBS REPATRIATION

Following up, could you have someone—and I know how busy you are—call me next week who you think is the most knowledgeable person in the Department on this issue? I would love to see us put together a repatriation program. And because I think there has been a tendency to just criticize and condemn, and maybe to flip it the other way around and see what incentives could be granted. I think most of these companies would really, like to have an opportunity to kind of come home.

And I know, as a Governor, you have probably been in competition with different Governors to get someone to come to your State versus another—this would be different. This would be to get an American company to come to the United States and maybe to your State, maybe to another State, but on an incentive basis. So if you could have somebody call me, I would appreciate it. And if there is something that we could maybe put some language in here that would do something that would kind of help you.

USPTO—TELEWORK

One other thing. When you came by, you mentioned about PTO and telework. And, for the record, the Department is interested in creating a long-distance telework pilot program. We understand

that such a program could increase employee recruitment, and retention. Is there a legislative fix or language that the committee could carry that would give you that ability to have more people to telework than USPTO currently does? If you recall the conversation that we had.

Secretary LOCKE. Right. We are really proud that the Patent and Trademark Office, of all the Federal agencies and bureaus, perhaps has the most number of people, the largest percentage of people who telecommute or telework. But there is a Federal requirement that they come back to the home office a couple of times a month, I believe. And so when we have a lot of people on the West Coast and around the country doing patent work, it is burdensome and actually cuts into their productivity to have them come back into Washington, D.C.

So I believe that that is being addressed under the patent law that is being contemplated both in the House and the Senate.

Mr. WOLF. Contemplated. Is that passing or is that just contemplated?

Secretary LOCKE. Well, they have a manager's amendment in the Senate, and the House Members are conferring with the Senate.

[The information follows:]

PATENT LAW AND TELEWORK

The Administration supports developing a travel expenses test program proposal to provide agencies with the flexibility to enhance telework opportunities for employees.

Mr. WOLF. Will there be a bill this year?

Secretary LOCKE. You are a better predictor of that than I am.

HUMAN RIGHTS AND ECONOMIC TRADE WITH CHINA

Mr. WOLF. Well, maybe you could give the Chairman some back up language that, if that were not the case, that could help you do this.

The last issue, your assessment as to the current economic trade relationship with China. About a decade ago, when Congress was considering most-favored-nation trading status, which I voted against. Many urged its passage and said it would strengthen the rule of law and accelerate domestic reforms. Ten years have passed and conditions are worse today in China than they have been in the last 20 years.

Economically, they are booming. The Uighur population is having a very, very tough, tough time. Tibet, and I was disappointed that the President didn't meet with the Dalai Lama the first visit; I am glad he did the second time. But what they are doing to Tibet—have you ever been to Tibet?

Secretary LOCKE. I have never had a chance. I have always wanted to go to Tibet.

Mr. WOLF. I have been to Tibet. I went in with a young Buddhist monk. I went in with a trekking group, not as a Congressman. They didn't know what I did. I got a clean passport. We went back into the bowels of the monasteries. And what they are doing, they are literally bulldozing large portions of Lhasa. Lhasa is almost turning into a Chinese city and not a Tibetan city. They are destroying the culture.

A large number of Catholic bishops now, it is 34, I think the latest figure is 35, are under house arrest. Protestant pastors.

We had a hearing in the Tom Lantos Human Rights Caucus about 2 and a half months ago. One of the lawyers that we had as a witness was arrested when he got back. His family was arrested. And we just have to do a better job of advocating and connecting with regard to human rights and religious freedom. And I am not going to get into too much of the detail.

It does trouble me, though, that the insensitivity of the previous administration and of this administration and of this Congress, of the Republicans in this Congress, and of the Democrats in this Congress, the issue of human rights and religious freedom means less today than it ever has. The number of people, we used to have Congressman Lantos and Henry Hyde and the giants that used to speak out. Now it is almost like no one even cares.

And so I am not asking you a question. I would hope that the administration could be very aggressive in advocating for human rights, religious freedom, and for people that are being persecuted because of their faith or because of their belief. And that is not a question. It is a statement for the record. With that, I will just maybe, Mr. Chairman, I will just end and yield back.

Secretary LOCKE. Congressman Wolf, let me just say that I accompanied the President on his most recent trip to China and was there when he was meeting with President Hu Jintao and Premier Wen Jiabao, and I can say that he did raise those issues of human rights. I have always raised it in all my meetings with top government officials, indicating that the strength of America is our diversity of thought, of opinion, religion and ethnic groups, and that they should embrace that as well. I can tell you the President did address those issues and raised those issues of human rights of the different ethnic minorities within China.

Mr. WOLF. I would think, though, and I would urge you, the next time you go to China, and I will give you the telephone number and I will put you in touch with the people, if you would go to a house church and worship, not with a recognized church, with a house church, whether it be the Catholic underground church or the Protestant, it doesn't matter. They would love to have you there.

Secondly, when we advocate for them it isn't enough to do it privately. It needs to be done publicly. It is like when you are in Congress and you are running for office, somebody says to you, I am really for you. Now, I am just not for you so much that I want to be identified to have my name down, and but I am really for you.

Well, if you can't be with me publicly, then—so I think when the President goes and you go, it is important to speak out. It is important we have good relations. It is important we trade, but to advocate publicly, to stand, and so I would ask you, I am not going to put you on the spot, but I would ask to consider and if you are interested, call us, and we will put you in touch with the people, that the next time you go, that you go and worship with a house church. And I think to have, particularly, you would send such a message, it would resonate, and you wouldn't have to come out and make a press statement or say anything. Just by showing up physically there would really give hope to some of the people. So if you want to do that, just give us a call. We will put you in touch with them.

Anyway, thank you for your testimony.

Thank you, Mr. Chairman.

Secretary LOCKE. Thank you, Congressman.

Mr. MOLLOHAN. Thank you, Mr. Wolf.

Mr. Ruppertsberger.

Mr. RUPPERSBERGER. Mr. Secretary, first, there are three areas if I have time I would like to get into, and it is STEM education, the issue of ITAR, and also the weather satellite, NPOESS.

INTERNATIONAL TRAFFIC IN ARMS REGULATIONS AND EXPORT
CONTROL SYSTEMS

First thing, let me start with ITAR. The ITAR was what happens a lot in Congress, unintended consequences as a result of the Chinese getting some of our equipment. When we passed a law, the existing ITAR law right now, that is in existence, the United States controlled about 73 percent of the space industry. As a result of ITAR, we control about 27 percent and slipping as we speak. I believe not only does this hurt commerce, but it hurts national security.

We were able to get a bill passed in the House, one of my other committees is Intelligence, and we worked with the Foreign Relations Committee, Congressman Berman, to get a bill passed, which basically takes the jurisdiction away from the State Department into Commerce. And then the list would be really more controlled by Commerce and the President on what could be and what could not be on the list. I mean, there are some ridiculous provisions in the list; a wooden table that doesn't impact anybody. But it is really something that the entire space industry in the United States, whether the larger groups or the smaller or whatever, is really being put at a disadvantage to the point that our allies and non allies are now selling our equipment, ITAR free they call it.

So the bill is now in the Senate, in the Foreign Relations Committee, Senator Kerry's committee. I would like to know what your position or the administration's position is, and whether or not you can help us move this forward. The President has given different speeches that he wants to deal with ITAR. But from where we sit, it is almost a no-brainer. And then that list that is controlled by the President and Commerce would then come back to Congress for a final say.

Do you have any comments on the ITAR issue?

Secretary LOCKE. I cannot give you a comment now. I am not familiar with the legislation that you just referenced.

But I can tell you that the President is very supportive of reforming our export control regime. And there was a Presidential Study Directive that was completed. We are beginning to meet with Members on the Hill to talk about the administration strategy and ideas.

And it really comes from the report authored by Brent Scowcroft, the former National Security Advisor to President Bush, who said that our export control systems are irretrievably broken and that we don't protect enough those technologies that really warrant more protection, and then we have undue and unnecessary restrictions on other items that actually hurt our national security and our economic competitiveness.

And you talk about satellites. Mr. Edelstenne, who is president of the European Aerospace Industries Association, has openly written and opined to all the members of the association that none of them should use any technology from U.S. companies because of our export control regime and the uncertainty it would provide, that would come with trying to incorporate U.S. technology.

Well, that actually hurts our national competitiveness, our national security, because if our defense industries and those involved in high technology don't have opportunities in which to build products and provide services, then they are not able to receive the revenues for further R&D or even opportunities to perfect their products which ultimately can be used for our national security.

Mr. RUPPERSBERGER. I appreciate your answer. I would like someone from your staff to get with my staff. This is a consensus within the industry. We know we have to keep certain things secret. But when you take an industry in the United States from 73 percent to 27 percent and slipping, it is something that we have been working on for 10 years, and I think it is time we move forward, so I really would like someone from your staff to get with my staff and work maybe a strategy with the Senate.

The Senate doesn't object to it. It is just a lot of things happen in the Senate that we don't understand, and they are not moving a lot. So let's see where that goes.

WEATHER SATELLITES

The second issue, and I am not going to get into it. This isn't your realm. It is more in other areas, about what happened in other areas with NASA and the President's new program, which we all have an issue with, about whether or not we don't move forward with manned space. And you know, we control the world because we control the skies. And Russia and China are that close to us, so we really have to work close with the administration.

But the weather satellites, they were really controlled by both the, I think, Commerce and by Defense.

Secretary LOCKE. Defense Department.

Mr. RUPPERSBERGER. And now Defense gave it over to you, and then you all came in and you cancelled the program. It is called NPOESS. And you know, it is a concern at this point on why this was done. And when I had—who is the science advisor?

Secretary LOCKE. John Holdren.

Mr. RUPPERSBERGER. Holdren. I was questioning him and I think I believe it was this committee about, what are we going to do? You know, we have two older satellites in the barn, so to speak, but, you know, when you are talking about moving forward in the research and development and staying, again, ahead of Russia and China, but just generally, I think the answer was, well, we are going to rely a lot more on the Europeans. Well, that just doesn't get it for me. I mean, we are a strong country. We have been dominant in space, and we can't afford to take any slip at all in where we are moving ahead.

Do you have any opinion on the NPOESS program? Supposedly it has been cancelled, and I think there is going to be a lot more work that we need to do working together, Congress and the administration on this issue.

Secretary LOCKE. Thank you, Congressman.

We are not cancelling the program. This is a very troubled program that started originally with six satellites, and it has been cut down to four satellites. The original cost for the six satellites was about \$8 billion. It is now, for even the four satellites, gone up to I think \$14 billion. And it keeps climbing.

A whole host of different studies, Inspector General, GAO audit reports on this program, and in fact, expert review panels involving experts and leaders from the space industry have looked at this. And they basically said it had to be completely restructured or completely abandoned. And I read those reports upon becoming Secretary of Commerce and immediately brought this to Mr. Holdren and others within the White House, and we have finally been able to prevail and follow those recommendations of the expert panels, and we are restructuring it.

So NOAA will be working with NASA at the Goddard Space Flight Center to focus on our two satellites, and Defense Department will focus on its two satellites. And NOAA will still operationalize or focus on the operations, the information gathering from all the satellites. But instead of a 50/50 cost share, where we were paying half of the development of the Defense Department's satellites and they are paying half of the development and cost of our NOAA satellites, especially the afternoon satellites, we will separate our ways. We will now have NASA in charge of the acquisition of the afternoon satellites on behalf of NOAA and the management of the development of the satellites and the instruments. So we are going our separate ways.

[The information follows:]

The JPSS decision severs NOAA from an open-ended liability of having to fund 50 percent of a contract that it had limited control over. By placing NOAA in charge of the afternoon orbit and providing funds to develop JPSS, NOAA can exercise greater control over the management of the contracts. The JPSS budget of \$11.9 billion gives NOAA high confidence that the program will be implemented and protects NOAA's non-space portfolio from the risks to uncontrolled cost growth that was evident under the NPOESS program.

Each year, NOAA works with the Administration and Congress to create a balanced portfolio of programs to address the Nation's most critical needs. NOAA undergoes an extensive planning process to ensure the highest priorities are addressed in its annual request within the constraints of the current fiscal environment. NOAA's FY 2011 Budget request of \$5.6 billion includes investments to strengthen NOAA's science, promote economic development, strengthen energy and security, sustain oceans and coasts, and protect lives and livelihoods.

Satellites are our most critical observing platforms that provide data to support all of NOAA's mission priority areas ensuring continuity of space-based climate, weather, and ocean observations. The FY 2011 Budget Request of \$2.2 billion for satellite systems supports national priorities for: improving weather forecasts and disaster warnings; ending overfishing and transforming fisheries management, protecting and recovering species and habitat; strengthening climate science and services; enhancing the vitality of coastal communities and ecosystems; and strengthening Arctic science and stewardship.

Mr. RUPPERSBERGER. I can understand that.

But, on the other hand, when you take Defense satellites and intelligence satellites and you have the NASA satellites, which includes NOAA and the weather satellites, there is not enough money for all. And, if anything, I would think that the three areas, and that Defense will push back more than anyone, DOD, is we have got to start collaborating and maybe using certain Defense or

intelligence satellites for weather or whatever. It just has to be done.

The other issue we need to focus on, too, is commercial. The other countries, European countries who don't put the money into the satellites that we have throughout the years, are using commercial, and it is about half the price. And they are getting the same pictures we are getting throughout the world, including issues involving terrorism.

So I would hope that when you meet, that we would really focus on the issue of collaboration between DOD, between intel and NASA, and then we are going to have to really decide where we are going to go; what is going to be commercial, what is not. But I just don't want to rely on other countries for what we get out of these satellites. That, I think, puts the United States at a disadvantage.

STEM EDUCATION

On STEM, as we know, we are having issues in our country with younger generation going to, being out of math and science and engineering, whatever. China just last year, I think, graduated over 660,000 rocket scientists, mathematicians and engineers. I think we were about 66,000. Now the good news is that we are still ahead curriculum wise, but they are gaining on us. China's gaining on us in a lot of different areas.

A program that I have been working on in my area, and I represent NSA, they are in my district and Fort Meade, all of those different areas, is trying to start focusing on middle school, on high school and getting some testing and developing and regional, because I am from the Baltimore region, and to get these students who have aptitude and test them in the area of math and science and whatever and start working them in a kind of a STEM school possibly maybe on the campus of NSA or NASA, which is up the street, so to speak, and to get them involved early so that they can learn the culture and the intern programs.

Now, I know you all work on these type of programs I think in your Regional Innovation Clusters and areas like that. But most of it is either college or postgraduate. I would hope you would consider really starting to focus and working on the middle school and high school and identifying these students in an early way.

I met with a group today that I have been working with for years at Fort Meade, NSA, the Anne Arundel County Education System. They have put together a program that we are going to start involving UMBC, which is one of the top technology schools in the country, University of Maryland, Baltimore Campus, and they are going to come together and bring students in from different regional areas, as long as we find them money, but the education component and the business component coming together. And this is so important to our future and in the area of science and technology and engineering, which also deals with the issue of space.

In the old days, when Russia came out with Sputnik, we responded by putting a man on the moon in 8 years, and there was enthusiasm. It was when astronauts were as popular as NFL football players. Americans were behind the program. I think Americans just aren't getting into the fact that we just go back and forth

to the Space Station, especially if we are going to have to hitch a ride with Russia now.

But we need to start generating more activity in the area of space, because Russia and China are communist countries, and they will take their best and say, you are working in space, whether you like it or not.

So I really think and I would hope that Commerce can start focusing and working, and we are going to look at it from a DOD point of view and whatever, start focusing and helping us on the middle schools and the high schools involving STEM. Could you consider doing that? What is your opinion on it?

Secretary LOCKE. I would love to be part of those discussions. In a lot of my meetings and speeches in front of business groups, I keep emphasizing to them, maybe it is my former hat as Governor, that the business agenda must always include the education agenda, especially in math and science and engineering.

[The information follows:]

STEM ACTIVITIES

The Department of Commerce has a number of existing Science, Technology, Engineering and Mathematics (STEM) Education programs within the National Institute of Standards (NIST) and Technology and the National Oceanic and Atmospheric Administration (NOAA).

NIST's primary STEM education program is the prestigious NIST National Research Council Postdoctoral Research Associateships program. NIST also supports the 12-week Summer Undergraduate Research Fellowship (SURF) program, which brings in about 130–150 students each summer to work with NIST researchers. In addition, NIST offers teacher training through the NIST Summer Institute for Middle School Science Teachers, a collaboration between NIST and local school districts. Teachers use their experiences at NIST to enhance their curriculum, with end goals of helping students acquire the necessary STEM skills to successfully compete in a global economy and explore opportunities in STEM fields.

Also at NIST, education organizations have been eligible to participate in the Malcolm Baldrige National Quality Award process since 2001. In that period there have been eight education Baldrige Award Recipients—five were K–12 school systems and three were high education institutions. Additionally, the Baldrige Education Criteria for Performance Excellence are used by educational institutions for self-assessments and guidance.

NOAA STEM education activities focus on connecting educators, students (K–12 through postgraduate). The programs include competitive national and regional education grants, the Ernest F. Hollings Scholarship Program, the Dr. Nancy Foster Scholarship Program and the Educational Partnership Program with Minority Serving Institutions.

Through competitive educational grants, NOAA partners with organizations such as the American Meteorological Society and National Science Teachers Association to provide professional development for K–12 teachers in atmospheric, climate and ocean sciences. These grants also support partnerships with organizations such as the National Aquarium in Baltimore and the Maryland Science Center to reach diverse audiences and promote STEM literacy.

The Ernest F. Hollings Scholarship Program supports undergraduate training in oceanic and atmospheric science, research, technology, and education and fosters multidisciplinary training opportunities. In addition, the Educational Partnership Program partners with minority serving institutions to increase the number of undergraduate students, particularly from under-represented communities, who are trained and graduate in sciences directly related to NOAA's mission.

The Dr. Nancy Foster Scholarship Program recognize outstanding graduate students in marine biology, oceanography, or maritime archaeology, particularly by women and minorities, and encourages independent graduate-level research by providing financial support, through a competitive grant process, of graduate studies in those fields.

Mr. RUPPERSBERGER. Again, whoever is going to contact my staff on the first issue. We have some programs we have been talking

with the Gates Foundation for the other—I mean, the business community wants a workforce. And they will be willing to work with us when we put together the appropriate programs that are solid and have the curriculum that is necessary and proved by education components.

And I have to leave. I am sorry, we have another hearing. Thank you for your testimony.

Mr. MOLLOHAN. Thank you, Mr. Ruppertsberger.

Mr. Ruppertsberger gets to more hearings than any Member of the United States Congress. We appreciate his service on this committee.

Mr. Secretary, let me reinforce Mr. Ruppertsberger's comments about STEM education. We are all over that in this committee, and we are really going to do some things in some of the science accounts that will try to create some prototype programs for STEM and really get down to it. We are anxious for agencies, NSF, to come up here and say they have made some progress and actually tell us how to make the improvements that they say have not been made for 20 years.

COMMERCE REPORTS NOT TIMELY

Mr. Secretary, I have in my hand a list of reports that the committee has directed the Department of Commerce to submit. Most of them are pretty small reports. Here is one, "Census: Inspector General's Recommendations Regarding Implementation." I can only imagine, by the time we get that report, events will have overtaken the purpose of the report.

We are going to take this really seriously if Commerce isn't, and we will reflect our seriousness about them in the 2011 bill. If Commerce is responsive, as I am sure you want them to be, just not being there very long, that would be a really good thing, and that might be something you want to pay attention to.

Secretary LOCKE. We are aware of it, and we are trying to get on top of it and trying to get these to you as soon as we can, sir.

Mr. MOLLOHAN. Well, your office has the responsibility to do this. If they can't do it, perhaps that should be looked at closely.

NTIA—PUBLIC TELECOMMUNICATIONS FACILITIES, PLANNING AND CONSTRUCTION

The National Telecommunications and Information Administration's PTFPC, Public Telecommunications Facilities and Planning and Construction, account, this administration has zeroed that account out.

Secretary LOCKE. Yes.

Mr. MOLLOHAN. The last administration zeroed that account out. And I would hope that this administration would be sympathetic to the needs that the Public Telecommunications Facilities Planning Construction account address, and I am really surprised to see it zeroed out.

Now, that is one of the places where we requested a report. We haven't received it. And let me start out with that. Why haven't we received that report?

Secretary LOCKE. We are in the process of finalizing that report to your committee, sir.

Mr. MOLLOHAN. And who is working on it? What different levels of government and different entities are looking at that finalization of it?

Secretary LOCKE. I can just tell you that it is simply within the administration.

Mr. MOLLOHAN. You can't tell me anything more than that? Or do you want me to tell you where it is?

Secretary LOCKE. Well, it involves NTIA and other agencies within the administration that also have to review and comment on our drafts. And so it is a back-and-forth process.

Mr. MOLLOHAN. Is this at OMB right now?

Secretary LOCKE. I cannot tell you if it is exactly at OMB, but I know that it is making the rounds.

Mr. MOLLOHAN. I would just encourage you to be more sympathetic to the professional comment than to the budgetary commenters on this, because our request went to the question of, what is the difference between the two accounts? There is some assertion that, gee, they are the same; they are overlapping. That is not our experience, and we are fairly experienced with this. And it probably would be disappointing to come back and have it initiated, defining the differences, the distinctions between the two programs, and having come back and say, there is no distinction between the two programs. It is really something that you might want to look at.

Do you believe, are you familiar enough with these programs to make judgments about whether they duplicate each other or not?

Secretary LOCKE. I am not personally familiar with these programs.

Mr. MOLLOHAN. For the record, would you submit a comment on that question, in addition to the letter we have asked, in response to my question are they duplicating?

Secretary LOCKE. Sure.

[The information follows:]

Since the establishment of the Corporation for Public Broadcasting (CPB) digital transition program in 2001, the CPB has built a program that, in many ways, parallels the efforts of Public Telecommunications Facilities Planning and Construction (PTFP) program. There are strong similarities between the types of grants that PTFP and CPB fund. For example, in fiscal year 2009, 64 percent of PTFP grants and 68 percent of PTFP grant dollars were awarded to projects eligible for CPB support. Similarly, over the last three fiscal years, approximately 80 percent of the digital transition grants that CPB has funded could have been funded by PTFP.

However, although the programs overlap, they do differ in their respective eligibility requirements and in the scope of the projects they each fund. The major difference is that, unlike PTFP, which only has the authority to award grants for “planning and construction” (which includes equipment purchases), CPB has the ability to fund programming and content as well as equipment. Other differences are noted below.

CPB has a policy of only funding “CPB qualified” stations, a category which only consists of stations that are already on the air, broadcast at full power, and have reached a certain level of staffing, audience, and financial support. PTFP has the authority to fund the costs associated with establishing new noncommercial broadcast stations. Since the FCC opened an application window in 2007 for new non-commercial educational radio licenses, PTFP has been awarding grants to build these stations. These new stations are particularly important in unserved rural areas, including Indian reservations. In February 2010, the FCC adopted an order that gives tribes a priority to obtain broadcast radio licenses in tribal communities. Native American organizations are preparing to build some 45 public stations in the next three years that would provide services, including emergency alerts, in areas of the U.S. without any broadcast service. PTFP is the only source of Federal funding for these projects.

PTFP also funds emergency equipment replacement for noncommercial stations where there has been a catastrophic loss of service. These projects are the result of lightning strikes, severe weather, fires, tower collapse and other unforeseen events. CPB does not provide funds for this purpose.

PTFP specifically funds replacement equipment for public television and radio stations; stations would need to use funds from its Community Service Grant for general station purposes to fund the station’s equipment needs.

Reading services for the print-handicapped rely on PTFP for their equipment needs. Across the United States, reading services provide a free lifeline to people whose vision has deteriorated in

addition to the blind. The reading services are programmed by volunteers who read local newspapers, including advertisements, as well as magazines and other material. Since many of the print-handicapped are elderly and low-income, computer technology is out of their reach. Reading services are being disenfranchised by the digital television and digital radio conversions. Before the conversion, these reading services used the sidebands of public television and radio stations; after the conversion digital television sidebands no longer exist and digital radio is using much of the sideband capacity for multiple program streams. PTFP is the only federal source of funding for the reading services and their clients to access new technology that will use the digital capacity of television and radio to continue to provide this lifeline free over-the-air service.

PTFP funds the Pan-Pacific Educational and Cultural Experiments by Satellite (PEACESAT) project, which provides satellite-delivered education, medical, and environmental emergency telecommunications to many small-island nations and territories in the Pacific Ocean region.

The Administration's intention is to reduce costs by not funding duplicative functions in the two programs.

EDA—REGIONAL INNOVATION CLUSTER

Mr. MOLLOHAN. The administration has apparently announced a multi-agency funding opportunity to sport an Energy Regional Innovation Cluster. And our understanding is that there are three Commerce, Justice, Science agencies that are included in this initiative, and two of those agencies are within your Department. We don't know very much about this initiative, just what we have really read on the Department of Energy Web site. Could you describe the goals and the vision for this initiative?

Secretary LOCKE. Let me see. I have some paperwork on those. I can try to find that.

One of the projects that I am aware of dealing with the energy-efficient building technologies is a consortium or partnering of six agencies, including Commerce's Economic Development Administration. And it is our intent, within EDA, to provide \$5 million toward what would be about a \$129 million grant to accelerate the development or to help put together a regional innovation cluster focusing on these energy-building technologies. But it would involve Energy, I believe Department of Education, Small Business Administration. I can't remember.

[The information follows:]

Regional Innovation Cluster

BRIEFING MEMORANDUM

TO: OFFICE OF THE SECRETARY
FROM: EDA
SUBJECT: REGIONAL INNOVATION CLUSTERS/ ENERGY REGIONAL
INNOVATION CLUSTER
DATE: 3/25/2010

Background

The Interagency Regional Innovation Clusters Taskforce (the "Taskforce") is charged with developing a replicable and sustainable model of a coordinated federal and regional effort to facilitate the development of a regional innovation cluster, which may be an effective framework for promoting sustainable economic development.

A Regional Innovation Cluster^(RIC) is a geographically-bounded, active network of similar, synergistic or complementary organizations engaged in or with a particular industry sector, with active channels for business transactions, communications, and dialogue that share specialized infrastructure, labor markets and services and that are located within a defined geographic region. A RIC's region may cross municipal, county, and other jurisdictional boundaries. A RIC often encompasses local universities, government research centers, and/or other research and development (R&D) resources, which serve as catalysts of innovation and drivers of regional economic growth. In addition, participants in the RIC may have strategic partnerships with entities outside of the RIC's geographic region. A successful RIC will leverage the region's unique competitive strengths and find ways to nurture networks for business financing, business-to-business sales, education, and workforce development. These networks work in concert with local governments, venture capitalists, private banks, workforce investment boards, non-profit organizations, institutions of higher education (including community colleges), and other public and private agencies and institutions.

The Taskforce consists of policy and program level staff from the Departments of Energy, Labor, Commerce (Economic Development Administration, National Institute of Standards and Technology's Manufacturing Extension Partnership) and Education, as well as the Small Business Administration and the National Science Foundation.

Due to the critical roles that basic and applied energy research play in attaining two key national strategic objectives—attaining American energy security and reducing America’s carbon footprint—the Taskforce selected the Energy Efficient Building Systems Regional Innovation Cluster Initiative, which will be centered around a DOE Energy Efficient Building Systems Design Hub (the “Buildings Hub”), as its first pilot project. The goals of this first pilot project are:

1. Promote innovation in science and technology generally and, with respect to the energy Buildings Hub, promote energy efficient building systems, designs and best practices.
2. Create and retain “Good Jobs”¹
3. Eliminate the gap between supply and demand of skilled workers in the energy-efficient building sector through job training and education.
4. Increase regional gross domestic product (GDP);
5. Develop and demonstrate sustainable and efficient solutions to achieve U.S. energy security objectives, reduce the U.S.’s carbon footprint, and attain other national strategic objectives;
6. Enhance the U.S.’s economic, technological, and commercial competitiveness on the global stage; and
7. Develop a replicable and sustainable model for a coordinated federal and regional effort to facilitate the development of regional innovation clusters.

Over the last three months, the Taskforce has worked to harmonize the disparate legislative and programmatic mandates of each participating agency in support of the cluster. This initiative uses existing agency programs; this way, each agency is disbursing the funds appropriated to it. Although not every participating federal agency will award funds for the first pilot project, RIC best practices call for redeploying federal funds in a more efficient and effective manner that links, leverages, and aligns program goals and outcomes. The Taskforce is pursuing an aggressive schedule to prepare the joint funding opportunity announcement (FOA) for issuance in early February. This will set the stage for a Principal’s level announcement of a \$120+ million joint Funding Opportunity Announcement (FOA) for the Energy Efficient Building Systems Regional Innovation Cluster Initiative.

Only one Proposal from a Consortium will be selected for funding under the joint FOA. Each Consortium will submit one Proposal, which shall include four Applications for funding, supplemented with the Consortium’s Overarching RIC Narrative; that is, each Consortium will consist of four Co-Applicants (some of whom may be the same entity or entities), where each Co-Applicant individually applies for federal assistance to one of the participating funding agencies, but where the Co-Applicants combine the four applications into a unified Consortium Proposal. The DOE Co-Applicant on the winning Proposal will receive the DOE grant funds, the EDA Co-Applicant on the winning Proposal will receive the EDA funds, the NIST/MEP Co-

¹ Jobs that increase workers’ incomes; narrow wage and income inequality; provide safe and healthy workplaces, particularly in high-risk industries; comply with applicable laws governing wages and overtime pay; are open to all eligible job-seekers; and provide necessary skills and training to prepare workers to succeed in the high-growth and emerging careers that will result from a Regional Innovation Cluster.

Applicant on the winning Proposal will receive the NIST/MEP funds, and the SBA Co-Applicant will receive the SBA funds.

Energy Regional Innovation Cluster (E-RIC)

The mission of the Taskforce is to facilitate growth of a regional innovation cluster that will develop, expand, and commercialize innovative energy-efficient building systems technologies, designs, and best practices for national and international distribution. Specifically, the E-RIC will focus on systems-based approaches to designing, building, and operating commercial and residential buildings and will integrate relevant economic, behavioral and policy studies for optimal technology deployment.

Participating Agencies, Programs and Funds

- ***Department of Energy*** is contributing the Energy-Efficient Building Systems Design Hub (“Buildings Hub”), funded at up to \$22 million for the first year and up to \$25million a year for the following four years. The Buildings Hub will bring together top researchers from multiple scientific and engineering disciplines as well as the social sciences in an integrated team, for the specific purpose of making a substantial long-term impact on our nation’s energy and environmental security through the development and deployment of advanced energy efficient buildings technologies.
- ***Department of Commerce/Economic Development Administration*** is making available up to \$3 million in Public Works and Economic Development funds and up to \$2 million in Economic Adjustment Assistance funds.
- ***Department of Commerce/NIST*** is making up to \$500,000 for a one-year award, with the possibility of adding additional amounts of up to \$500,000 per year for two additional years, available to enhance the services of an existing DOC-funded MEP Center to provide services to businesses associated with or that emerge from the E-RIC.
- ***Small Business Administration*** is making up to \$300,000 available for a one-year award, with three 1-year options for renewal grants of up to \$300,000, to enhance the services of existing SBA-funded Small Business Development Centers and to encourage regional collaboration and development of specialized entrepreneurial and small business training that supports the E-RIC.

The Department of Labor, the Department of Education, and the National Science Foundation will not make grant funds available as part of this FOA. However, these agencies will support linkages between the funding programs described above and complementary existing grant programs at DOL, ED, and NSF.

Next Steps

Going forward, the NEC has asked DOE and EDA to co-chair the E-RIC interagency working group. The major next step for the interagency group is to outline the internal guidelines and operational details for coordinating the E-RIC project.

Mr. MOLLOHAN. What is the request in your agency, and how does it break down?

Secretary LOCKE. \$5 million.

Mr. MOLLOHAN. Total, from Department of Commerce?

Secretary LOCKE. Right. That is, we would make that much money available for this if there is an entity which applies for it and is accepted.

Mr. MOLLOHAN. How does that break down? What agencies in the Commerce Department are going to be involved in this?

Secretary LOCKE. Economic Development Administration.

Mr. MOLLOHAN. It is my information there were two agencies involved.

Secretary LOCKE. I am not aware of that. We can get back to you.

Mr. MOLLOHAN. Okay.

Secretary LOCKE. Also NIST. I am sorry.

Mr. MOLLOHAN. I wish we could follow up a little bit with this program. Just give me, what are the goals of this program?

Secretary LOCKE. Well, the point of Regional Innovation Clusters is to really try to develop the strengths of communities, creating almost like research parks, the way that—Silicon Valleys or Route 128 corridor. And we are interested in—

Mr. MOLLOHAN. But how does \$5 million—an Energy Regional Innovation Cluster? What is that?

Secretary LOCKE. Focusing on new technologies and involving energy that might go for manufacturing new materials, building materials.

Mr. MOLLOHAN. What is the “it”? Is this a grant program to a nonprofit, to an academic institution?

Secretary LOCKE. It depends on the proposal that each regional applicant might put together. It could be a consortium of colleges, universities, economic development associations, research entities, nonprofit or for-profit. It really depends on the existing strengths of a particular region, what their assets are, what they would use this funding for to build out and complement. So it is really—just as the whole notion of Regional Innovation Clusters is to determine the strengths and look at the gaps of an area as they pursue whatever their economic vision might be, whether it is in biomedical research; do they need more training? Do they need some infrastructure? Do they need some facilities? Do they need telecommunications assets, et cetera, et cetera? Or, for instance, it could be a Regional Innovation Cluster focusing on tourism and the different sets and skills and organizations and training that would be required for that.

Mr. MOLLOHAN. Well, we look forward to it.

Secretary LOCKE. But this one is focusing on energy-efficient building technologies, whether it is insulation, new materials, components, et cetera, et cetera.

NIST—NATIONAL INNOVATION MARKETPLACE

Mr. MOLLOHAN. We will look forward to additional information forthcoming on the program.

The National Innovation Marketplace, in last week’s NIST hearing, we discussed the National Innovation Marketplace. And we understand that is a new initiative in the Manufacturing Extension

Partnership Program, and we have learned that EDA has a role in this initiative as well. Can you describe the goals and vision of the National Innovation Marketplace, and what is that?

Secretary LOCKE. I would have to get back to you on that. I am sorry.

[The information follows:]

NATIONAL INNOVATION MARKETPLACE

The National Innovation Marketplace (NIM) involves the translation of emerging technologies into business applications, market opportunities, and the adoption of new products. It does so by allowing sellers, buyers, investors and distributors of new products and technologies in all industries to connect with each other through a web-based tool. The tool also connects manufacturers with sources of new technologies to improve their manufacturing processes or for adoption into new and improved products. EDA does not have a formal role in the NIM.

Mr. MOLLOHAN. Sure.

USPTO—DEPARTMENTAL OVERSIGHT

Mr. Secretary, the United States Patent and Trademark Office, let's explore the funding difficulties associated with that, the budgeting difficulties associated with that.

You know, we had a fiscal crisis with regard to USPTO in 2009, and they had to come back to Congress as a result of the economic downturn and some other issues. Since Director Kappos will be testifying before this subcommittee at the end of March, it is not my intent to dwell too deeply into this subject matter. We have a high regard for him. We consider him to be really a straight shooter, and we look forward to his testimony before our committee.

However, I would like to ask you a bit about the Department's role in oversighting USPTO. You know, there is an agreement out there someplace in space that USPTO will through some process have access to the funds that it—the fees that it generates to operate. I don't think, I hope that was never intended to preclude their submitting a requirements-based budget, but they haven't. We have required that this year. We look forward to that.

I think that is a first step in understanding, what are their needs? Certainly, their needs aren't necessarily related in any budgetary sense to what their fees collections are. So it seems like a really bad budgeting process, and it has proved to be a very bad budgeting process; because they guess what their fees are going to be, we appropriate it, and then they are in excess of that or they are below that.

When they are below that, it costs us. We get scored for that. It costs us a lot of money, which means that EDA doesn't get funded. They are shortchanged or somebody else is shortchanged. And it also means the USPTO probably doesn't have the money to run its operations.

So we are looking for a process where, like every other agency, USPTO submits a budget request which reflects what their needs are. Hopefully the authorizers, which are considering this issue, will come up with a fee funding scheme that really works and we will be interested in seeing and inputting into that process.

But it became evident during the crisis that the Commerce Department considered itself to have essentially no oversight respon-

sibilities. It was a pass-through. The USPTO just passed through its budget. Has that changed?

Secretary LOCKE. That is changing.

And that is one of the unusual situations that the new management team at the Department of Commerce has come across, that USPTO for a long time has traditionally considered itself semi-autonomous from Commerce Department central management or even our budgeting processes.

So we are reviewing a new requirements-based budgeting process for the USPTO. And David Kappos has been terrific in and is welcoming involvement of the top managers and the management of the Commerce Department, because, as you recalled, in the late summer, when the funding crisis arose, it was the people from the Department of Commerce that had to help intervene in that situation and help provide leadership to get them through that. And we very much appreciate the support that you and your committee provided in giving them temporary funding flexibility and relief, borrowing authority. In the end, it wasn't necessary, but it really demonstrated the shortcomings in terms of reporting and budgeting within the Department or the U.S. Patent and Trademark Office.

So we are trying to get a handle on it, and Dave Kappos is doing a terrific job. We have a huge backlog. We also have some excess fees that are now being generated because of some of the management efficiencies and the reworking, the whole labor-management cooperative processes that have been undertaken, as well as just applying paralegals to take care of things that are sitting out there that could be easily remedied, which we can then issue the patent, collect more fees and use that to replace people who are retiring.

Because of the dire budget situation, with a lot of the retirements of the workforce, we don't have—we are really not able to fill those spaces. And so our goal of trying to get the approval or determination down to one year by year 2014 is in jeopardy unless we have access to all those fees. And we appreciate the willingness of you and your staff and the committee staff to work on that.

That is why the President's 2011 budget assumes some additional fee-setting authority and other temporary fee provisions, along with updating our IT systems. I mean, here it is the agency that patents and protects innovation perhaps it is under-utilizing the very things that they approve that are out there that can help them do a more efficient job.

So it is a very—we have a very comprehensive program that we have embarked upon to reduce that backlog and get the processing down to within a year.

NOAA CLIMATE SERVICE

Mr. MOLLOHAN. Okay. Well, we look forward to that. And perhaps this will be the year that we will, first of all, know what their budget requirements really are, and put in place a fee funding scheme that really works. And we look forward to working with you on that and the authorizers as well.

NOAA Climate Service, Mr. Secretary. On February 8th, the first day the Federal Government closed as a result of the blizzard's aftermath, the Department of Commerce and the National Oceanic

and Atmospheric Administration announced the intent to reprogram and create a NOAA Climate Service. The subcommittee will go into the details of the NOAA Climate Service with Dr. Lubchenco on the 17th of this month. But since the announcement was made jointly, I would like to ask you a few questions about the process.

Why was the announcement made on the day that the Federal Government was closed?

Secretary LOCKE. Well, that was already the date that had been planned. In fact, the employees were going to be convened in a big meeting at NOAA headquarters to receive that information. When the government closed down, we weren't sure how many people were coming to work and how many weren't. And it was primarily an announcement to the press and various stakeholders, so it was conducted by conference call. So we felt people would still be available whether they were at work or at home to participate in that.

Mr. MOLLOHAN. You know, I don't know who you briefed, but the Appropriations Committee wasn't briefed.

Secretary LOCKE. I don't know who all was briefed. We were told that we had been informing people even weeks before of our intent to try to do this, and I don't know exactly how finalized a version of the reorganization people were informed of. But I do know that, in our meetings with NOAA, that they were indicating that they very much needed to, and wanted to, inform key Members of Congress, including the various appropriating committees. I do know that there was a lot of outreach to a lot of the staff to inform them of what was coming and what was being contemplated.

Again, we do know that it is a work in progress, and we want to consult with the Members of Congress on the final design. There is no final design for this but really a concept, some tentative ideas on which people and which units would be moved from the various scattered offices within NOAA into a one-stop shop or one-roof climate service.

Recognizing that, that is why, for instance, nothing would move until the beginning of the next fiscal year so that, depending on what the Members of Congress say, then we can line up with the next fiscal year.

Mr. MOLLOHAN. Is that the goal, one roof, one shop?

Secretary LOCKE. Yes. We have so many functions data that is collected with respect to climate from, probably about over a dozen different line agencies or offices within NOAA.

Mr. MOLLOHAN. When you make that reference, are you talking about just within NOAA? Or are you talking about—

Secretary LOCKE. We are just talking about the NOAA functions, making it easier and more convenient for stakeholders or members of the public or government officials to access whatever information we now collect with respect to climate.

Mr. MOLLOHAN. So you will have a discreet service, and folks will know that NOAA has stood up a climate service?

Secretary LOCKE. Yes.

Mr. MOLLOHAN. What about other agencies or departments in the government? Are you coordinating this effort with them and to the extent—

Secretary LOCKE. Yes. We coordinated this with the office of Mr. Holdren, of Science and Technology, the White House, and even the Department of Interior, because they also have a lot of collection and data regarding climate.

Mr. MOLLOHAN. You describe it as a concept, but you announce it as a program. What is next? Are you seeking an authorization?

Secretary LOCKE. Yes. We need approval from the Congress for this reorganization.

Mr. MOLLOHAN. Do you have an authorization before an authorizing committee in the House of Representatives?

Secretary LOCKE. We believe that we have the authority under the National Climate Act. But we certainly would welcome the input and the approval of the appropriating committees.

Mr. MOLLOHAN. Well, this is just an inquiry of what the status of it is and what you think you have to do to move forward. Are you going to seek a reprogramming, or are you going to submit and have an amended budget request up here for this purpose?

Secretary LOCKE. It would be reprogramming, but not to take effect until the beginning of the next fiscal year to make it easier so that we are not having to amend existing budgets.

Mr. MOLLOHAN. Okay. Well, that is all right. We will follow up with it. Do you have a current package? Is it with the Department, or is it with OMB, to flesh out this concept?

Secretary LOCKE. We have proposals. It has not been fully fleshed out. Still with consultation, even with the employees and the various labor groups. So we have a proposal, but it has not been finalized.

ITA—TRADE COMPLIANCE—SUBSIDY INVESTIGATION

Mr. MOLLOHAN. Okay. Well, we are very interested in this, and so we look forward to working with you on it.

Mr. Secretary, we are coming down to the——

Secretary LOCKE. Mr. Chairman, because I know you have a great interest in this, and I want to make sure there is enough time if you want to follow up on it. I want to clarify my earlier statement regarding the International Trade Administration and the allegations about currency manipulation and how that ties in. The International Trade Administration is reviewing that allegation and will be making a determination whether or not to initiate an investigation of that particular allegation.

Mr. MOLLOHAN. You don't have an investigation ongoing at the time?

Secretary LOCKE. That is not yet ongoing. They are still making determination as to whether or not to initiate such investigation. I want to make sure we are clear on that.

[The information follows:]

TRADE COMPLIANCE—SUBSIDY INVESTIGATIONS

Our determination on whether to investigate this allegation is not dependent upon whether an extension is requested in the case.

EDA—PUBLIC WORKS FUNDING LEVEL

Mr. MOLLOHAN. Thank you for that.

Recently we had a hearing of the EDA grant program, Economic Development Administration's grant programs, Mr. Secretary, and we had five grantees from around the Nation sitting down there testifying, most of them very favorably, testifying about their experiences with EDA. And they provided ideas for improving the programs. It was very valuable testimony.

We find that we have these interested stakeholders in these programs, and they come. And we have hearings, and it really is enlightening. We will go into these issues in depth with your fine Assistant Secretary Fernandez. And he is scheduled to testify next week, so we look forward to that. However, I would like to focus on a couple overarching issues with you today.

The grantees were very appreciative of the Economic Adjustment Assistance program and its flexibility, but they also agreed to the person that the Public Works Funding should not be reduced to increase the Economic Adjustment Assistance, the EAA, funding levels.

Now, every year, again, in the past administration—and I encourage you folks to sit down to distinguish yourself in some policy way from the past administration—the past administration tried to rob Peter to pay Paul in the same way you have; robbing Public Works in this manner to fund the Economic Adjustment Assistance. I had no problem with the Economic Adjustment Assistance. As a matter of fact, I am increasingly convinced that it provides the flexibility that you advertise when you come here and testify before the committee.

On the other hand, I think you are going to find a lot of resistance to reducing, changing much the Public Works projects. And the interest in that remains very high out there in the stakeholder community, also in the congressional community here.

So I guess what we ask is, why do you repeatedly propose to eliminate Public Works to fund this program? Because at some point, you are going to jeopardize—and people are going to—

Secretary LOCKE. I understand that concern.

Mr. MOLLOHAN [continuing]. Not be very responsive to your EAA funding.

Secretary LOCKE. I understand that concern.

And as you noted, it is reduction of the Public Works Fund and transferring virtually all of that over to the Economic Assistance Program. Yes, the EAA program does have greater flexibility, and the EAA also funds infrastructure projects very similar to what the Public Works account also funds.

Mr. MOLLOHAN. Yes. But if you funded it that way, you would be funding less Public Works, right?

Secretary LOCKE. There is that possibility that there could be actually less Public Works projects funded by merging it into the Economic Adjustment Assistance.

Mr. MOLLOHAN. It would be more than a possibility. I mean, it would actually have to happen because you are going to be siphoning off funds to the other activities. So almost by definition you would be funding less Public Works projects. And that is not something that is very attractive up here.

Secretary LOCKE. Well, we are adding to the current funding within the Economic Adjustment Assistance account. And that does

not necessarily—because the pie is now bigger—does not necessarily mean that we will fund less Public Works projects within this larger account.

Mr. MOLLOHAN. Well, then, let's just all fund it out of the Public Works account then.

Secretary LOCKE. I understand that.

Mr. MOLLOHAN. And if flexibility is the issue, really, then why don't you give that flexibility to the Public Works accounts?

Secretary LOCKE. That is a possibility, too.

Mr. MOLLOHAN. Okay. Well, we look forward to working with you. And I think that expresses our concern about this. It does not express an opposition, however, to the Economic Adjustment Assistance account. We are going to be looking at that and working with Assistant Secretary Fernandez. I look forward to working with him on it.

Secretary LOCKE. He is a very, very—

Mr. MOLLOHAN. Impressive young man.

Secretary LOCKE. Very, very impressive person.

Mr. MOLLOHAN. We have a couple other questions we are going to submit for the record for you. And thank you very much for your testimony here today. We appreciate your appearing, and we look forward to working with you, Mr. Secretary.

The hearing is adjourned.

Chairman Alan Mollohan
Questions for the Record

Bureau of the Census – Status, Revised Estimates and Media Purchases

1. Please provide a brief time-line of the upcoming Decennial. When will surveys be mailed? What is the actual Census day?

Answer:

DATE	ACTIVITIES
January 25 to April 30	Conduct Enumeration of Remote Alaska
February 17 to 19	USPS delivers Update/Leave Advance Letter Packages
February 26	Open Questionnaire Assistance Centers in Update/Leave areas
March 1 to 26	Conduct Update Leave operation
March 4 to September 8	Questionnaire Check-in and Data Capture
March 8 to 10	USPS delivers Mailout/Mailback Advance Letters
March 15 to 17	USPS delivers Initial Questionnaires Packages
March 19	Open remaining Questionnaire Assistance Centers and all Be Counted Centers
March 22 to 24	USPS delivered Reminder Postcard
March 22 to April 12	Conduct Enumeration at Transitory Locations
March 22 to May 29	Conduct Update Enumerate/Remote Update Enumerate operation
March 29 to 31	Conducted Service-Based Enumeration
April 1	Census Day
April 1 to May 14	Conduct Shipboard Vessel Enumerations
April 1 to May 21	Conduct Group Quarters and Military Enumeration
April 1 to 3	USPS delivered Blanketed Replacement Questionnaires
April 6 to 10	Targeted Replacement Questionnaires shipped to

	USPS (USPS delivery will begin upon receipt on a flow basis)
April 11 to August 13	Conduct Coverage Follow-up
May 1 to July 10	Conduct Nonresponse Follow-up
July 24 to August 25	Conduct Vacant Delete Check
December 31	Deliver Apportionment Counts
March 30, 2011	Deliver Redistricting Data Products

2. What happens if people don't return their surveys?

Answer: Households that do not return their Census questionnaire are included in the Nonresponse Follow-up (NRFU) operation. In this operation, enumerators visit each of the nonresponding households and attempt to collect respondent information. The operation is conducted from May 1 through July 10.

3. How much does it cost, on average, for each Non-Response Follow Up visit to a home that has not returned its survey?

Answer: We will make up to 6 attempts to acquire information on a household that has not returned a census questionnaire. On average, it will cost \$57 for each household that has not returned a completed questionnaire.

4. How much does the Bureau estimate the total Non-Response Follow-Up operation will cost? Has this been recently revised, and why was it considered necessary to revise it?

Answer: The FY 2010 enacted budget for NRFU is based on cost estimates using a number of components that were developed early in the decade or were revisited when the decision was made to go back to paper operations. The components include staff productivity, the number of cases requiring follow up, and cost drivers such as salary and mileage. The baseline budgeted for NRFU was \$2.74 billion.

However, as the census approached, our knowledge of these components improved based on new experiences and data from operations like Address Canvassing and Group Quarters Validation. We worked with a panel of experts in both headquarters and field operations to determine the impact of this information on cost drivers. We also revisited a number of Census 2000 observations and experiences. This process led us to identify components that could remain as part of the original estimate and those that needed to be updated. For instance, based on an assessment of current employment and economic conditions, we decided to maintain the 2009 hourly salary levels, rather than increase them in FY 2010 according to the original plan. The components

that emerged as areas for the greatest concern due to high uncertainty and impact on cost were workload and productivity. Working with subject matter experts, we developed several likely alternative cost scenarios for these components. A distribution of costs ranging from a low of \$1.94 billion to a high of \$2.83 billion was developed. We determined a revised cost estimate of \$2.33 billion was reasonable and fell towards the center of the range of the possible cost estimates.

This analysis indicates that NRFU operations can very likely be completed within the original budget despite recent changes in the economy and other external factors that we believe will increase NRFU workload and lower productivity.

5. Is the Bureau continuing to reexamine non-response follow-up related operations? Could this cost estimate increase?

Answer: The Census Bureau continues to monitor changing external conditions and will update the estimate as more information becomes available. However, as stated in the previous response, the Census Bureau believes that the current funding level will be sufficient. Of course, much of the cost is dependent on workload, which is highly dependent on the mailback response rate.

Apparently everyone saw – and has an opinion about – the Census ads during the Super Bowl. Some people love the ads, and some people have criticized the Bureau for spending money on advertisements encouraging census participation during the Super Bowl.

6. How much did the Bureau pay CBS and how many spots did it purchase during the Super Bowl and pre-game activities?

Answer: Our media buy with CBS consisted of one 30-second ad in the 3rd quarter of the Super Bowl for \$2.5 million. CBS provided added value in the form of two more 30-second ads in the pre-game show and an additional two to three 12-second vignettes featuring James Brown delivering a message on behalf of the Census. We believe that the Super Bowl ad along with the message delivered by James Brown, who was the host of the day, carried great weight with viewers.

7. How many viewers watched the Super Bowl? What was the cost per person of all three ads combined? How much is that per person?

Answer: The Super Bowl was the most-watched TV event in history with 116 million viewers. That means we spent a little over two cents (.0215 dollars) per viewer – an excellent result. Nielsen estimates 113 million people watched the Census Bureau ad, making it the 9th most watched commercial of all time. There is no other television program that has the potential to reach as many people as

the Super Bowl. Running an ad once in the Super Bowl has the potential to reach 45% of adults 18 and over.

The Super Bowl is also the only program where viewers tuned in to see the commercials as the program itself. Commercials that air on the Super Bowl have a multiplier effect. Advertisers are mentioned in multiple news media outlets and viewers will typically look to view them online almost immediately after airing. Therefore, airing once in the Super Bowl creates significant buzz leading to additional viewing potential. The ad was viewed on our YouTube site almost 400,000 times after the game.

8. What are the cost-benefits associated with such advertising, and how they are determined?

Answer: Our contractor reviewed all campaign research (audience segmentation, Census Barriers, Attitudes, and Motivators Survey (CBAMS) mindsets), and compared this information with industry data (Simmons) to determine how each audience -- and segments within each audience -- consumed media. Simmons is a national consumer study widely used as a "standard" in the marketing and communications industry that produces representative measures of consumer behavior and attitudes to products/services, brands and media, as well as in depth demographic lifestyle and psychographic characteristics.

Then, the contractor evaluated the media (television, radio, newspapers, etc.) based on ability to deliver the recommended gross ratings points and appropriate message for each audience. After negotiations, media and specific programming was recommended for purchase and Census Bureau approval.

The Census Bureau is spending about \$1 per person on our combined promotion and outreach efforts. It costs just \$.42 cents to mail back the census form in a postage paid envelop. It costs taxpayers \$57 per person to send a census taker door-to-door to collect the same information if they did not mail it back. Promotional and outreach efforts were heavily focused on increasing the number of households to mail back their form when they received it in March. We consider reaching a 72 percent mail-back participation rate (the same rate as Census 2000) to be a great success, and a result to which the advertising campaign contributed.

GAO's Robert Goldenkoff, Director, Strategic Issues, testified on February 23rd that "overall, the Bureau's readiness for a successful headcount is mixed." Ongoing performance issues are affecting key IT systems, essentially a workflow management system essential for the Bureau's field operations and a payroll processing system used to pay more than 1 million temporary workers.

9. What were the results of the December 2009 performance test the Bureau conducted with each system?

Answer: The test demonstrated that the network is fully adequate, as less than 15 percent of the available bandwidth was used when an estimated 100 percent of the anticipated load on the network was applied - mimicking peak NRFU operations. Application challenges were revealed during the test, particularly for the payroll system known as the Decennial Applicant, Personnel and Payroll System (DAPPS) and the workflow control system known as the Paper Based Operations Control System (PBOCS). However, this testing provided an unprecedented opportunity for decennial field applications to be "sampled" by the actual end users, leading to application performance improvements that have since been implemented. This testing also allowed us to focus management attention intelligently, clarifying resource issues, both human and technological, in time to ensure we put the right resources in the right places for 2010 Census Operations. As a result, both the DAPPS and PBOCS systems have been reconfigured with significantly increased hardware capacity, and system tuning has improved reliability and performance.

10. What is the status of these systems currently? What is being done to resolve any outstanding problems?

Answer: For our most recent status update and action summary on the Paper-Based Operations Control System (PBOCS), please see the following letter from Director Groves to Chairman Clay of the Subcommittee on Information Policy, Census, and National Archives dated May 19, 2010.

[The letter follows.]



UNITED STATES DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. Census Bureau
 Washington, DC 20233-0001
 OFFICE OF THE DIRECTOR

May 19, 2010

The Honorable William Lacy Clay
 Chairman
 Subcommittee on Information Policy, Census,
 and National Archives
 Committee on Oversight and Government Reform
 U.S. House of Representatives
 Washington, DC 20515-6143

Dear Chairman Clay:

Thank you for your letter of May 13, 2010, concerning the status of our key decennial census systems and operations. Although we discussed these matters at our meeting last week, this letter more formally responds to your questions on this matter.

The Paper Based Operations Control System (PBOCS) is a web-based, address-driven, database that the Census Bureau uses to manage the assigned work of hundreds of thousands of census workers to ensure a complete, secure, and accurate 2010 Census. The database feeds into other Census Bureau software systems, and it is used to manage local census worker assignments, print materials, accept and transfer completed work to the three processing centers, and track progress and performance.

I have, at every opportunity, reported to your subcommittee, to the Government Accountability Office (GAO), and to the U.S. Department of Commerce's Office of Inspector General (OIG) my concerns about the stability and reliability of the PBOCS. I meet with key staff from GAO and OIG at least twice a week to discuss their concerns, to convey our assessment of the readiness and stability of the system, and to keep them apprised of the steps we have taken to manage and deal with problems, issues, and the continued risks to our largest field operation—Nonresponse Followup (NRFU).

When the U.S. Census Bureau made the change to a paper-based NRFU operation two years ago, it recognized that the PBOCS would require development in a compressed time-frame. This required a strategy for developing the system in phases and testing the system close to when elements would be implemented.

Let me assure you that these matters are getting daily attention by me, Deputy Director Mesenbourg, and the Associate Directors for Decennial Census, Field, and Information Technology. Ensuring that the PBOCS is providing necessary and sufficient support for our field operations, and that it is completed on time and on budget, is our highest priority.

The system has been used in production since early February. I note that PBOCS was effectively used to manage the work of census workers as they counted people living in remote Alaska and to update our address list while leaving a questionnaire for households during our Update/Leave operation. It was also used successfully to manage the Group Quarters Advance Visit operation and the Enumeration of Transitory Locations operation. In addition, PBOCS is currently in use

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for the Group Quarters Enumeration, the Update/Enumerate operation, as well as for the NRFU operation.

We have established key processes to monitor the program. The 2010 Census Application Readiness and Infrastructure Stability (ARIS) group and the PBOCS Steering Committee both meet on a daily basis to resolve resource issues and decide priorities. These groups contain both career technical staff of the Census Bureau and highly skilled external consultants.

The volume of work in the NRFU operation is proving to be challenging for the system, but a number of fixes focusing on system stability have been put in place in recent weeks with the help of high-level technical engineers from the vendors whose hardware and software solutions are part of the PBOCS. The heavy use of this system began two weeks ago when we produced millions of pages of worker assignment materials. Despite many challenges, thanks to a lot of hard work by many people, I note that this activity was completed on the original schedule, and assignments were provided to census workers for their May 1 start.

The PBOCS has been running more dependably over the last week, but there are still intermittent problems. We fixed a major issue causing a slowdown in assigning Assignment Areas to crew leaders that was causing a major backlog in the field. As of the first week in May, this checkout function has been performing well. We implemented additional stability measures recommended by engineers, and the system has been more stable.

As a result of these and other efforts, last week (the week of May 10) we were able to increase (from 4 to 10) the number of concurrent users of the system in our 494 Local Census Offices, and we were able to make considerable progress on our ability to assign and check-in work being completed by our field workers. However, additional tasks were being added during this time, which led to some performance problems over the last weekend. One of these additional tasks was preparing completed questionnaires for shipment to our data capture centers. This involves some intensive use of the PBOCS database in order to ensure the system knows what forms are being shipped and in what container.

Because of the demands all these activities were putting on the system, we had to reduce (to 2) the number of concurrent users on the system for the last several days. We are examining some procedural changes that may mitigate this problem and allow an increase in the number of simultaneous users in the LCOs. As of this morning (May 18), I note that we have increased the number of concurrent users to 4 per LCO (about 2,000 users nationwide). This is important because there is a large backlog of completed cases in the LCOs now ready to go to our data capture centers, and (a) we want to get these materials out of the LCOs because they do not have the space nor staff in place to store and keep track of this large volume of materials, and (b) the data centers are now slightly behind schedule because they have not received the expected volume of enumerator forms for data capture.

Another critical activity supported by the PBOCS is the selection and assignment of cases for the NRFU reinterview operation. The NRFU enumerators meet with their crew leader on a daily

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basis to have their work reviewed for quality and completeness and to ensure uniform interview procedures. We also systematically and independently reinterview a randomly selected percentage of each enumerator's completed cases and match the data they collected to the data collected in the reinterview process. Local Census Office managers can also select additional cases for reinterview to further investigate a particular enumerator's work, and we conduct automated statistical tests on all work to uncover suspicious or unexpected patterns.

Currently, as planned, the PBOCS is automatically selecting and assigning cases for the reinterview operation, and the independent interviews are taking place. Completed cases are being returned to the office as well. Although we believe we may have solved this issue already, up through yesterday we were experiencing some problems with the integration between PBOCS and the system being used to manage the comparison of reinterviews with original interviews (the Matching Review and Coding System).

Despite the challenges we are facing and managing on a daily basis, I can report that both the NRFU production operation and the reinterview operation are progressing close to our expectations. As of May 17, NRFU production progress (percentage of workload finished and checked in) was about 3 percentage points lower than projected (19.1% actual, versus our projection of 22.5% by that date). Also as of May 17, spending on NRFU production is below projection (34.3% actual, versus our projection of 41%). The PBOCS has selected completed NRFU cases for reinterview, as planned, and reinterview cases are being completed and checked in slightly ahead of projection (4.6% actual, versus our projection of 0% by May 17), but slightly over budget (17.4% actual, versus our projection of 16.8% by that date).

In closing, let me address your question about the potential impact of these system problems on the accuracy of the 2010 Census. We are not out of the woods in our efforts to achieve a strong 2010 Census. However, we have no evidence now that the difficulties we are experiencing will have a negative impact on the quality of the 2010 Census. I promise to report to you immediately if this judgment ever changes. I hope this letter, and our meeting last week, has conveyed to you the level of effort and commitment we have made to overcome these challenges, and that we are always mindful of the need to keep our primary objective in focus—to count everyone once, only once, and in the right place.

As I mentioned at our meeting, I would like to brief you and the ranking member the week of May 24 on activities that have occurred since our last meeting. In that next meeting, it might be useful to have GAO and OIG representatives present, to provide you with a comprehensive perspective on the 2010 Census status.

Thank you for your continued interest and support.

Sincerely,



Robert M. Groves
Director

Director Goldenkoff reports that the rollout of key enumeration activities is generally on track, and the Bureau has taken action to address some previously identified problems.

11. What steps has the Bureau taken to reduce the number of unreadable fingerprint cards of temporary workers?

Answer: The Bureau has been working closely with the FBI to drastically reduce the unreadable fingerprint rate and to improve the background check process. For example, we have improved the fingerprint training, and FBI-recommended lotion has been added to the fingerprint kits in an effort to make more fingerprints readable. More importantly, the Census Bureau is now using Livescan devices in every practical case to collect two more sets of fingerprints from employees who still have unreadable prints. One-thousand seventeen units have been delivered to headquarters and to the regions. All 494 Local Census Office (LCOs) have at least one Livescan unit.

12. How much has the Bureau budgeted for fingerprinting in fiscal year 2010 and does this funding level include the proposed digital capture?

Answer: The Census Bureau currently estimates that it will spend \$123.3 million for fingerprinting in FY 2010. This includes the Livescan devices.

Although the overall request for the Census is \$6 billion lower for fiscal year 2011, there are some increases requested with significant policy impacts.

13. What is the rationale for increasing the American Community Survey sample size from 2.9 to 3.5 housing units annually, which would cost an additional \$44 million?

Answer: The initiative builds upon the foundation laid by the nationwide implementation of the American Community Survey (ACS) in FY 2005 and will achieve improved data quality and reliability to produce statistics that are used for policy, decision-making, and the annual allocation of more than \$400 billion of Federal funds. In FY 2011, the Census Bureau will begin to improve the reliability of the ACS estimates at the tract level by increasing the sample to 3.5 million addresses (approximately 2.5 percent of the population) and by conducting 100 percent follow-up for all sampled addresses in Remote Alaska and small American Indian, Alaska Native, and Hawaiian Homeland areas. In addition, a series of data quality improvements will begin in an attempt to further reduce survey error, including annual field interviewer training and observation, additional efforts to improve response rates for telephone data collection, conducting enhanced review of multiyear estimates, and expanding research and evaluation activities.

An investment to improve the reliability of ACS data increases the ability of all users, and particularly the federal agencies for whom ACS questions are asked, to detect changes from year to year. Further, at the tract level, this investment will lead to more equitable allocation of Federal funds across all communities and population subgroups. Further, improving data quality and reliability of statistics, especially at the census tract level and for small and mid-size areas (less than 20,000 population), will offer a more accurate portrait of community and small group characteristics. This will result in better decision-making at the local level, such as placement of infrastructure by local governments in locations where it is most needed. Increasing the reliability of ACS estimates also will benefit entrepreneurs and businesses by informing their decisions about where to expand their operations and will provide better data on the changing economic, social, and demographic trends of their workforce and customers.

The Small Area Income and Poverty Estimates (SAIPE) Program provides an excellent example of the benefits of increasing the ACS sample. The SAIPE program provides estimates of income and poverty statistics for all counties and states, and over 14,000 school districts, regardless of size. SAIPE program estimates are made possible by combining direct survey estimates, such as the ACS, with administrative records sources, such as tax information. SAIPE estimates are used for the administration of Federal programs, as well as the basis for allocating over \$14 billion annually as part of the No Child Left Behind Act of 2001. A primary input to the SAIPE model is data from the ACS. An expanded ACS sample is the key to improving SAIPE data, which will result in more small school districts having a better chance of obtaining accurate and equitable allocations of Federal funds.

14. There is also a \$26 million initiative to update the Master Address File and the TIGER digital mapping system continuously throughout the decade. What advantages will this have for the 2020 decennial?

Answer: The Geographic Support System (GSS) initiative supports improved address coverage (particularly in rural areas), continual update of roads and other spatial data, and enhanced quality measures for addresses and spatial data that are part of Census Bureau geographic programs. These activities are designed to allow the Census Bureau to pursue a targeted address canvassing operation for the 2020 Census (as opposed to a 100 percent effort). The more targeted the 2019 Address Canvassing operation can be, the more this initiative can save. A continuously updated address list will also increase the efficiency of field staff working on current (ongoing) surveys. The expanded GSS enables the Census Bureau to meet address and geospatial requirements of the 2020 Decennial Census, as well as the annual American Community Survey and other current statistical surveys.

Continuous address updates are planned in all communities. Source data for urban area updates will expand from our current reliance primarily on the U.S. Postal Service Delivery Sequence File to include local government supplied and vendor address information. In assuring a national address framework, a particular focus is on rural communities without city-style addresses and on Puerto Rico which has unique addressing characteristics. In addition to address data from partners and vendors, address information is augmented through field data collection, and change detection techniques.

The financial impact of these activities could be offset by cost savings if a targeted 2019 Address Canvassing operation is determined feasible (a determination to be made by 2015), thus avoiding a full spatial data accuracy improvement program in preparation for the next decennial census. Planned assessments of address quality will track the success of improvements to the MAF/TIGER database and determine the feasibility and magnitude of a targeted Address Canvassing operation for the 2020 Census.

Maintaining accurate and complete street networks reduce cost to the taxpayer by making census and survey operations more efficient by enabling census takers to find and enumerate assignment areas quickly. Accurate streets also improve census data by helping to ensure that housing units fall into the correct census block for tabulation. This program would halt the degradation of positional accuracy and attributes of geographic data and captures new street growth to ensure data currency to support census and survey operations.

Census Scams

Unfortunately, there have been reports of scams perpetrated by individuals or groups representing themselves as conducting the 2010 Decennial Census, and in some cases, using documents that purport to be the actual survey itself. The intent is to obtain money or personal identification from the victims.

15. What is the Census Bureau doing to combat this activity?

Answer: The Census Bureau is working proactively and has taken several steps to prevent such scams: 1) protecting the Census Bureau and 2010 Census name and brand on the Internet; 2) working with Better Business Bureau; 3) enhancing the Census Bureau's website to get the word out; 4) working with the media; and 5) working with the Federal Trade Commission.

To help with our brand protection, we entered a contract with MarkMonitor toward the end of September 2009. MarkMonitor provides us the capability to track websites as they are registered and notifies us of any that appear to be Census-related. We review these reports and work with our Office of General Counsel to determine what, if any, actions would be warranted, up to and including having the site taken down. Since the contract was awarded, MarkMonitor has identified

774 sites with the word Census in the domain name or that used terms that could be relevant or used by the 2010 Decennial process. Of those 774, only 200 are currently active, and no phishing sites have been identified. We continue to monitor this activity.

The Census Bureau has signed a national partnership agreement with the Better Business Bureau (BBB). Through this official partnership, the BBB posts information about the 2010 Census in their weekly tip sheets to the media. The Census Bureau also hosted a Webinar with the 123 BBB local offices to ensure BBB representatives are on message and informed when talking about the 2010 Census. Our local media specialists are directly in touch with the BBB local offices to provide a unified message and accurate information about potential census scams. The BBB has also posted 2010 Census items on their Web site, including notifying the public that a fake e-mail purported to be from the BBB was a scam.

The Census Bureau has put a fraud/phishing link on our web pages, including the main agency site as well as the 2010 Census home page. This link allows people who feel they may have been a victim or potential victim of fraud or phishing to contact us for information. The information submitted is reviewed by the Census Bureau's Computer Incident Response Team (CIRT), which forwards it to the appropriate area for action. To date, most of this activity has been people questioning current and annual survey activities and not Decennial issues. In all of these cases, the CIRT forwards the information to the appropriate program area who then contacts the individual to answer their questions. The Census Bureau has posted this information on our Web site (www.2010census.gov), including information about how to recognize a census taker and how to recognize a census scam.

Our Public Information Office is working proactively with the media, specifically consumer affairs reporters to whom the public often turns to when uncertain about the legitimacy of a census-related mailing or questionnaire, to get the word out to the public about how to identify a census taker and what to do if a person thinks he or she is the victim of a scam.

The Census Bureau, working with the Federal Trade Commission (FTC), will refer possible scam victims to the FTC website or its toll free phone number. The FTC will investigate all types of scams (mail, phone, and internet).

International Trade Administration – Pre-Petition Process

The Department of Commerce (DOC) is in charge of initiation of antidumping (AD) and countervailing duty (CVD) investigations under Section 701 and 731.* The DOC is supposed to have an informal, pre-petition review process in order to assist the petitioners in perfecting their petitions prior to filing. In recent years, however, there has been a decrease in pre-file petitions by petitioners with legal representation. This is reportedly due to a perception that the pre-file process has actually added significantly to the costs of litigation for injured domestic industries and workers and has extended the length of investigations.

* Title VII of the Tariff Act of 1930 (19 U.S.C. 1671 et seq.) as amended.

16. Have these issues been reviewed by an independent consultant? If so, what was the outcome of that review?

Answer: As a result of an FY2007 OMB Program Assessment Rating Tool (PART) evaluation of Import Administration's (IA) antidumping and countervailing duty program, ITA committed to hiring an independent firm to conduct a program review of IA. Following a competitive procurement process, ITA contracted with CACI/the Wexford Group International to evaluate certain functions, and structural and organizational aspects of IA's programs. Specific areas of interest included:

- Planning and evaluation tools emphasizing strategic planning and performance;
- Suitability of the current organization structure and available resources to address current and future fluctuations in workload;
- Effectiveness of existing management practices, tools and metrics; and
- Identification and feasibility of opportunities to measurably enhance or improve IA program functions and activities through the use of supplemental external contract support.

The recommendations set forth by CACI are being used to improve IA program operations and to promote more effective and efficient program administration. While CACI's program review covered pre-petition counseling, this IA activity was not the primary area of focus. The 2009 report noted the importance of the unit's counseling services in extending the benefits of trade remedies to potential petitioners, particularly small- and medium-sized businesses that are unable to afford legal assistance in evaluating whether to pursue an AD or CVD case and prepare and file a petition. The report did note that certain trade law firms with a long history of filing trade cases stated that, in many instances, they no longer availed themselves of the petition counseling unit's services and believed that the process needed improvement to be more efficient, similar to the counseling process of the International Trade Commission. CACI/Wexford Group recommended that the Department reach out to the International Trade

Commission, IA's Steel Import Monitoring and Analysis Unit, and industry representatives to discuss best practices and seek suggestions for improvements in the petition counseling process.

It should be noted that use of petition counseling services, including the review of draft petitions, is completely voluntary and provided free of charge to any potential petitioner. While the Department is committed to continually reviewing how Commerce services can be improved and have asked that IA consider the CACI/Wexford recommendations to that end, the Department is confident that our petition counseling staff provide considerable value to U.S. industries seeking to understand whether the AD and CVD laws are the appropriate tools to address the commercial problems they face and to determine what is needed in order to get a case successfully launched. Most law firms representing U.S. industry petitioners continue to provide draft petitions for the Department's consideration to learn which aspects of their claims may need to be strengthened in order to meet the standards for initiation required by law and to clarify other issues in order to streamline and facilitate later investigation. Further, small- and medium-sized enterprises, particularly those without counsel, continue to avail themselves of petition counseling, finding that it provides them with the guidance they need to evaluate and pursue a trade remedy case – something they thought might be unattainable, in part, because of the cost of legal assistance. In 2009, *pro se* petitioners, assisted by the Petition Counseling Unit, successfully obtained trade relief when the Department imposed AD and CVD orders on commodity matchbooks from India and AD duty orders on HEDP acid from China and India. Commerce has been tracking its performance on petition counseling sessions for a number of years and it is a performance indicator which is important to our strategic goals. This includes the number of new AD/CVD petition counseling sessions conducted by IA staff, which was 71 in fiscal year 2009. In addition, we track the number of continued AD/CVD petition counseling sessions, which was 174 in FY2009.

17. What steps is the Department planning to take in response to the review?

Answer: The Department has already begun to act on the report's recommendations. IA officials have met with their International Trade Commission counterparts in the first of several technical exchanges aimed at obtaining a better understanding of each agency's practices with the goal of improving both the process and customer satisfaction. The Petition Counseling Unit has also met with the Steel Import Monitoring and Analysis Unit within IA to discuss successful customer service practices that may be applicable to both units. The Department also intends to reach out to industry representatives and past petitioners, including small- and medium-sized enterprises, as well as trade law firms, to solicit their thoughts on possible improvements to the petition counseling and initiation process.

18. What would be the effect of changing the process to allow the disciplinary teams that handle the actual investigations to also handle the pre-petition filings and post-petition initiation issues, similar to the process of the International Trade Commission?

Answer: Currently, the processes between the two organizations are very similar. In almost all cases, the Commerce teams reviewing the draft petitions include the analysts and managers that will eventually be conducting the investigation, along with members of the Petition Counseling Unit, representing the Office of Policy, and attorneys from the Office of the Chief Counsel. This same team reviews the petition, once it is officially filed, for initiation purposes. Although the Petition Counseling Unit coordinates the process on behalf of the agency, the team as a whole reviews the petition and provides comments to the petitioner. In addition, all major issues, complex questions or substantive issues raised by parties, including the petitioner, would be raised to the Deputy Assistant Secretary or Assistant Secretary level. The decision to initiate an investigation or to decline to initiate an investigation is made by the Assistant Secretary. Many of the team level processes were instituted in the past several years in response to suggestions from the industry and their legal representatives.

It should be noted that there are substantial differences in complexity between the pre-initiation and initiation reviews by the two agencies. As the administering authority, the Department of Commerce is the sole agency responsible for initiating an antidumping or countervailing duty investigation. All aspects of the petition including industry support, allegations of dumping or subsidization, the scope of the petition, injury and causation, must be reviewed by the Department to determine whether the standards for initiation have been met. While the International Trade Commission does provide guidance on injury, the domestic like product and scope of the petition as part of its pre-initiation process, it is not the agency involved in reviewing the petition for initiation.

Upon formal initiation of an AD or CVD investigation, Commerce's role is the impartial administration of the antidumping and countervailing duty trade laws. We conduct all investigations in an open and transparent manner, and do so in strict accordance with our domestic laws and international obligations.

International Trade Administration**Fraud and False Statements – During Investigations and Administrative Review**

19. In cases of fraud or false statements by a respondent in an unfair trade investigation, what tools does Commerce have for holding a respondent's legal counsel accountable for any false certifications they make?

Answer: The Department is not aware of any false statements having been made to it by counsel during any of its unfair trade investigations. If such a situation arose, Import Administration (IA) could refer the matter to the Inspector General's Office for consideration. If evidence warranted further action, the IG's Office could refer the matter to the Department of Justice for proper handling.

20. Is the Department aware of complaints that there are attorneys who repeatedly provide false certification in an attempt to assist their clients in defrauding the Commerce Department?

Answer: No. There have been no specific allegations or evidence submitted against an attorney alleging that the attorney provided false certifications as part of defrauding the agency during an investigation or review.

21. Has the DOC taken disciplinary action against attorneys or consultants who have participated in the preparation and submission of false information?

Answer: Although the Department itself cannot take any disciplinary action against attorneys or consultants, Commerce assists its partner agencies to fully investigate any evidence of the submission of false information by an individual, not just attorneys/consultants. For example, our litigation support to U.S. Customs and Border Protection and the Department of Justice effectively led to a 2006 conviction in a case involving the mislabeling of Vietnamese frozen fish. That conviction, however, involved principals of the company and not attorneys.

22. Is there a process for applying sanctions or for referral to bar associations for the filing of false certification of accuracy by counsel? If not, should there be such a process?

Answer: At this time, The Department does not have a process for imposing sanctions unless a violation of an Administrative Protective Order arises. To the extent an attorney believes that opposing counsel has violated some ethical obligation, the first obligation to report such behavior rests with the complaining attorney.

23. Doesn't the lack of such a process incentivize bad actors to shop for attorneys who will certify fraudulently?

Answer: The Department is not aware of such behavior by counsel who appear before it. Moreover, lack of a specific process does not excuse any attorney from his/her obligations and/or liability under the civil and criminal codes regarding false statements to the government, as well as any ethical obligations they have as members of their respective bar association(s).

National Export Initiative – Staffing Requirements

Of the 251 FTE requested in the National Export Initiative (NEI), 51 will be based in headquarters, 30 will be in the domestic field, 50 will be overseas Foreign Service Officers (FSO), and 120 will be locally engaged staff (LES).

24. Why is one-fifth of the requested staff increase in headquarters?

Answer: ITA has a balance of both headquarters and overseas staff that work to support U.S. businesses in expanding their businesses overseas and enforcing U.S. trade laws. In fact, ITA's currently has 43 percent of their staff located at headquarters. This reflects the fact that much of ITA's programmatic work is done here at headquarters: Import Administration (IA), Market Access and Compliance (MAC) and Manufacturing and Services (MAS) are almost completely located here at headquarters. Only the U.S. & Foreign and Commercial Service (CS) has a large field component. So, compared to ITA as a whole, a far greater percentage of the NEI increase in staff (80 percent) is going to the field.

MAC's portion of the NEI has a good balance between headquarters staff, overseas officers, and LES. The centerpiece of MAC's program in the NEI is increasing trade compliance officers overseas. MAC will place 8 officers overseas, who bring in-depth knowledge of trade agreements and the ability to advocate for U.S. market access goals with foreign governments. Along with the overseas officers will be eight LES who provide critical assistance with translation, administration, and skill in uncovering trade barriers that are hidden in foreign government regulations. To meet the anticipated workload associated with the new overseas officers, MAC will hire an additional six country and issue desk officers in headquarters. The headquarters staff will work with U.S. firms to find and remove trade barriers, analyze identified barriers, and participate in teams that coordinate efforts by the Commerce Department and other USG agencies to remove foreign barriers to trade.

MAC's other two programs under the NEI will have a total of seven headquarters staff. These officers will perform two key roles – outreach to U.S. firms and workers and developing programs to pre-empt foreign trade barriers. The

outreach effort will inform U.S. firms and workers of their rights under the 200+ trade agreements signed by the United States, and will serve as a feeder system to direct trade problems faced by exporters to the Trade Compliance Center. Pre-empting foreign trade barriers is a collaborative approach with other USG agencies to help developing countries establish pro-growth and anti-corruption trade policies. Past experience shows that it takes considerably more effort to undo trade barriers after they are put in place.

A key component of the NEI is its focus on trade compliance and enforcement. As part of this initiative, IA plans to increase the number of personnel in foreign field offices that will enable IA to more closely monitor and intervene, as appropriate, in foreign trade cases, especially those targeting U.S. competitiveness policies, as well as foreign governments' use of trade-distorting subsidy programs. To complement this effort, we will also enhance our trade compliance/enforcement efforts at headquarters to support our active defense of U.S. commercial interests in foreign trade remedy actions and assist U.S. companies who are impacted by foreign unfair trade practices. Establishing these additional resources at headquarters is an essential component of safeguarding U.S. competitiveness. For example, recent foreign trade remedy actions have targeted U.S. exports in several important sectors, including biodiesel, steel products, chicken, and autos.

While MAS has no staff presence outside of headquarters, MAS will conduct NEI activities throughout the United States, such as sustainable manufacturing best practices conferences. MAS' programs will be driven from headquarters to take advantage of efficiencies and save money.

CS operates several client-facing programs based out of Headquarters. Examples are: Trade Information Center (TIC), Advocacy Center, International Buyer Program (IBP), Trade Missions, and Corporate Partners. These programs will be the primary recipients of increased FTE at Headquarters.

25. Of the 30 planned domestic field agents, are any Foreign Service officers?

Answer: Initially, some of the domestic field staff will be Foreign Service Officers serving a mandatory domestic rotation at the beginning of their careers. These rotations normally last two years, but we expect all 30 new domestic positions will be full-time federal employees.

26. If so, why would Foreign Service officers be assigned to domestic positions?

Answer: As part of their professional development, Foreign Service Officers are required to serve a domestic field tour in the early years of their career to learn the needs of our U.S. client base and how the domestic field assists American companies. It also promotes effective cooperation between our domestic and

international operations. We anticipate keeping this rule in place as we implement the NEI.

27. Please explain why the number of FTE in the NEI request is almost half Locally Engaged Staff?

Answer: The NEI request will bolster LES staff in the markets that offer the greatest export potential for U.S. firms. The expertise and contacts of LES are essential to helping U.S. companies successfully export U.S products and services. Under the direction of U.S. Commercial Service Officers, the LES provide critical support services to U.S. companies, especially SMEs. They have key contacts in the target industries and local government, as well as in-depth knowledge of local market opportunities and conditions. The assistance of the LES is frequently cited by CS clients as a key factor in their export success and consequent hiring of additional workers in the U.S. to fulfill these export orders.

28. Where will the new staff be located overseas and why?

Answer: CS has not yet completed its strategic workforce planning process for determining where new staff will be located. In the President's FY 2011 Budget, ITA identified markets where we may open new offices. We are also looking at current staffing shortages in existing priority markets overseas.

Other Agencies and Organizations Involved

Other Departments and organizations are also involved in the NEI.

29. Please explain which agencies are involved and how this multi-agency initiative will increase exports and provide jobs for Americans.

Answer: The NEI is designed to address challenges that U.S. companies, especially SMEs, face – such as the lack of information on how to export, the inability to get export financing, and overcoming barriers to foreign market entry. The Trade Promotion Coordinating Committee (TPCC), which consists of 20 federal agencies responsible for export promotion, establishes and implements the Administration's trade promotion priorities. The TPCC is chaired by the Secretary of Commerce and its Secretariat is housed in CS. Executive Order 13534 of March 11, 2010, sets out the operating parameters for the NEI and establishes the President's Export Promotion Cabinet (EPC), which is tasked with developing and coordinating the implementation of the NEI in conjunction with the TPCC. The agencies that are part of the EPC are listed below:

- (a) the Secretary of State;
- (b) the Secretary of the Treasury;
- (c) the Secretary of Agriculture;
- (d) the Secretary of Commerce;

- (e) the Secretary of Labor;
- (f) the Director of the Office of Management and Budget;
- (g) the United States Trade Representative;
- (h) the Assistant to the President for Economic Policy;
- (i) the National Security Advisor;
- (j) the Chair of the Council of Economic Advisers;
- (k) the President of the Export-Import Bank of the United States;
- (l) the Administrator of the Small Business Administration;
- (m) the President of the Overseas Private Investment Corporation;
- (n) the Director of the United States Trade and Development Agency; and
- (o) the heads of other executive branch departments, agencies, and offices as the President may, from time to time, designate.

Secretary Locke's inaugural TPCC Principals meeting in October 2009 laid the groundwork for a comprehensive, government-wide export promotion strategy, and established six new working groups based on the greatest potential to stimulate job creation. The six working groups are: Advocacy, Analysis and Data, Alternative Energy, Brazil/India/China, Next Tier Markets and Small Business. At the second TPCC Principals Meeting in March 2010, the TPCC agreed to continue the work of the six working groups and create a seventh working group to create recommendations for NEI Priority #8, Export Promotion of Services.

In the NEI, the President challenged the nation to double exports and create up to two million jobs over the next five years. While this is a national goal, the TPCC agencies are focusing on specific actions that each government agency can take, separately or together, to create an optimal environment to achieve the President's goal. For example, currently less than one percent of U.S. businesses export goods or services. The Commerce Department, working with the Small Business Administration, Department of Agriculture, and Export-Import Bank (among other TPCC agencies), is devising a nationwide marketing campaign aimed at SMEs that introduces them to the export-related services available through the federal government. If that one percent figure can be increased to 1.5 or 2 percent over the next five years, export sales will increase, as will the number of jobs created. In September, the EPC, through the TPCC, will deliver a report to the President with actionable recommendations stemming from the TPCC working group meetings to implement the eight objectives detailed in the NEI.

30. What is the total level of funding requested for the NEI across all the participating agencies? How many jobs will this total funding level support?

Answer: The Administration is seeking increases to a number of other TPCC agency budgets in order to support more U.S. jobs through exports, including:

- \$78.5 million funding increase for ITA to help U.S. companies export by expanding CS staff overseas and improving ITA technology solutions. The funds will also increase trade promotion services, such as trade missions and outreach increasing export awareness, and making it easier for U.S. companies to export.
- \$54 million funding increase for USDA programs that promote U.S. agricultural exports by developing and maintaining overseas markets and reducing foreign trade barriers and other practices that hinder U.S. agricultural exports.
- \$21 million increase for Ex-Im Bank to be able to process export loans more quickly and increase its ability to help small businesses by expanding its staff and utilizing technology more efficiently. The Administration also approved a program budget of \$92.7 million compared to a level of \$58 million for FY 2010, a 60 percent increase. Since Ex-Im collections exceed its expenses there is no appropriations request.
- \$5.6 million for the Small Business Administration's (SBA) Office of International Trade, which helps support SBA's export financing programs.
- \$1 million increase for USTDA to promote investment in clean energy projects.

It is difficult to predict the total number of jobs that would be created from dollars invested by each of the participating agencies. The goal is to engage all stakeholders in the U.S. to address this challenge together, broadening and deepening the base of U.S. exporters and raising awareness of the export assistance available, which will help create jobs.

31. What increase in exports do you anticipate could result from the initiative?

Answer: It would be difficult, if not impossible, to quantify the effects of the many components of the initiative on exports. We believe that the initiative targets the areas where the Federal government can get the most "bang for its (export promotion) buck" and will generate benefits far in excess of costs.

32. With respect to ITA's NEI funding request, how do the components work together and are the individual components scalable? Are all the components strictly necessary?

Answer: The NEI is a comprehensive and integrated government and ITA-wide proposal, with limited scalability, in which the various parts of the increase support one another.

ITA will play a critical role in implementing the President's NEI and ITA's FY11 budget request is designed to meet his challenge. ITA's contribution to the President's NEI leverages our infrastructure and programs to focus on key factors that will contribute to domestic job creation. ITA's request of 131 FTE and \$78.5 million (including 110 locally-engaged staff overseas) will implement an agency-wide, comprehensive, multi-year program.

The President's NEI calls for an expansion of trade advocacy by educating more U.S. companies about exporting and connecting them with prospective foreign business partners, providing small businesses more access to export financing, and continued rigorous enforcement of international trade laws to help remove trade barriers.

To support the President's NEI, the United States needs a comprehensive export promotion strategy that addresses five critical areas:

(1) Growing more competitive U.S. firms: Without a competitive domestic industry base, there is little basis for growth in exports. Enhancing competitiveness involves the removal of impediments to business and the development of public-private partnerships (e.g., placing trade specialists at top Manufacturing Extension Partnership centers). By identifying the key obstacles to competitiveness and by assisting companies in navigating those barriers, ITA can provide critical support to U.S. businesses.

(2) Further reduction of potential foreign barriers to U.S. exports: Each trade barrier represents a financial loss, as well as lost opportunities for American companies to expand their production or service capabilities, hire additional workers, or pursue investment opportunities. Enhancing ITA's domestic and international capacity to identify and address trade barriers in support of U.S. companies is essential to U.S. economic growth and prosperity.

(3) Increasing the number of export-ready firms: One of the biggest challenges facing U.S. economic growth today is finding ways to encourage more U.S. businesses, especially SMEs to take advantage both of improved access to foreign markets and expanding business opportunities in a growing world economy. In order for these businesses to export for the first time, break into new markets, or expand their current export footprint, they need focused and

tailored assistance through ITA's global network to understand the nuts and bolts of exporting and identify sales opportunities and follow-up afterwards. We know that currently 97 percent of exporters are SMEs, but they only account for 30 percent of the value of exports. We know there is great potential here – out of the 12,335 export successes ITA recorded in FY09, 85 percent were reported by SMEs.

(4) Expanding U.S. exports in key emerging markets and sectors: Growth in key foreign markets in Asia, the Middle East, and Africa will help drive global economic recovery. Export-intensive, high growth industry sectors provide significant opportunities for U.S. SMEs, in particular, to grow revenues and create jobs by exporting. ITA is well-positioned to provide on-the-ground, timely assistance to target underserved markets, reach new-to-market and new-to-export SMEs that can serve those markets through expanding and leveraging current ITA programs and developing new marketing tools.

(5) Enhancing protection for U.S. firms from unfair trade practices at home and abroad: Efforts to enhance U.S. commercial competitiveness and to maximize the potential of U.S. exporters can be thwarted by unfair and illegal practices of governments and firms abroad. Only with a level playing field can U.S. companies strengthen and develop the capacity to expand into new export markets or maintain market share. To neutralize such unfair barriers and advantages, ITA could tap into and expand the full range of Commerce's legal, analytical and commercial expertise to provide a robust and comprehensive program of services to assist U.S. exporters and confront foreign unfair trade practices, protectionist measures and intellectual property right infringements.

ITA's FY11 budget request addresses these five critical areas that could make a significant contribution to domestic job creation. More specifically, ITA's programs, people, and infrastructure will support the President's NEI with a budget increase through nine specific proposals.

National Telecommunications and Information Administration
– Broadband Technology Opportunities Program (BTOP)

In the American Recovery and Reinvestment Act, \$4.7 billion was appropriated to NTIA for the Broadband Technology Opportunities program, or BTOP. To date, approximately \$1 billion has been obligated through this program for broadband grants.

33. Have all of the first round awards been announced? If not, by when will that occur?

Answer: Yes. As of May 2010, NTIA has announced 82 awards totaling more than \$1.2 billion in grants for broadband infrastructure, public computer centers, and sustainable broadband adoption projects. Additionally, NTIA has awarded 54 grants under the Broadband Mapping program totaling approximately \$102 million to fund broadband mapping and planning activities.

34. Why have the first round grants taken a year to award?

Answer: Since the passage of the Recovery Act, NTIA has been working expeditiously to establish a new program from the ground up consistent with Congress' directive to award funds as quickly as possible to stimulate investment and job creation, as well as to ensure that taxpayer funds are spent in the most responsible manner possible. From our initial startup activities, including staffing a program office, developing grant program rules and regulations, procuring program support services, and coordinating grant processing activities with other Department of Commerce agencies, in little more than a year NTIA has processed a large volume of applications and awarded over \$1.2 billion in grants to expand broadband infrastructure, invest in public computer centers, and promote sustainable broadband adoption. These investments will help bridge the technological divide, boost economic growth, create jobs, and improve education and health care across the country. For the second grant round, the agency released its second Notice of Funds Availability (Second NOFA) as planned, received 867 applications, and remains on track to award all BTOP grants by its statutory deadline.

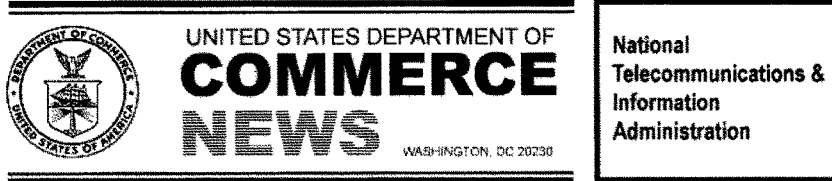
Given the significant constraints and challenges presented by the Recovery Act, NTIA has effectively balanced its obligations to protect taxpayer funds and make grants as expeditiously as practicable.

35. When are the second round applications due? Has the application process been revised at all to eliminate some of the problems encountered in the first round?

Answer: Round Two applications for Public Computer Center (PCC) and Sustainable Broadband Adoption (SBA) projects were due March 15, 2010 and applications for Comprehensive Community Infrastructure (CCI) projects were due March 26, 2010. I am pleased to report that the agency received 867 applications requesting more than \$11 billion in funding in Round Two. Also, NTIA announced on May 13, 2010 a limited reopening of its Round Two CCI application window for certain state and local governments to apply for broadband stimulus funding to support public safety projects.¹ The potential

applicants are the state and local governmental entities that the Federal Communications Commission (FCC) recently permitted to deploy public safety broadband systems using the 700 MHz public safety broadband spectrum. The application window will be open from June 1st, 2010 8:00 am EDT until July 1, 2010 5:00 pm EDT.

[The announcement follows:]



For Immediate Release
May 13, 2010

CONTACT: Jessica Schafer 202-482-5670
or press@ntia.doc.gov

NTIA TO ACCEPT ADDITIONAL PROPOSALS FOR BROADBAND PROJECTS TO IMPROVE PUBLIC SAFETY COMMUNICATIONS

Agency Announces Limited Reopening of BTOP Application Window for State and Local Governments Recently Granted FCC Authority to Deploy Public Safety Broadband Systems

WASHINGTON – The Commerce Department’s National Telecommunications and Information Administration (NTIA) today announced that it will provide an opportunity for certain state and local governments to apply for broadband stimulus funding to support public safety projects. The potential applicants are the state and local governmental entities that the Federal Communications Commission (FCC) recently permitted to deploy public safety broadband systems using the 700 MHz public safety broadband spectrum. NTIA’s decision supports the American Recovery and Reinvestment Act’s goal of improving public safety communications and provides that community with the opportunity to obtain funding for an initial set of networks that will help lay the groundwork for a nationwide, interoperable public safety broadband network.

“The FCC has just cleared the way for a number of state and local governments to deploy new public safety broadband systems,” Assistant Secretary for Communications and Information and NTIA Administrator Lawrence E. Strickling said. “Given the administration’s commitment to improving the communications networks of our fire, police and rescue personnel, NTIA is offering these governments the opportunity to apply for broadband stimulus funding to help build their networks. We hope to receive strong proposals that merit investment in order to advance the deployment of a nationwide, interoperable public safety broadband network that makes America safer.”

Applications in the second round of NTIA’s Broadband Technology Opportunities Program (BTOP), funded by the Recovery Act, were due in late March 2010. On May 11, 2010, the FCC adopted an Order granting conditional waiver authority to various state and local governments to use 700 MHz spectrum to deploy public safety broadband systems on a local or regional basis. These governments may have previously been discouraged from filing BTOP applications because they did not have the legal authority to use the spectrum. As a result of this significant development, and given the national priority of improving public safety communications, NTIA will accept applications for infrastructure projects from the affected parties from June 1, 2010 to July 1, 2010. The agency will publish an official notice and further details in the Federal Register.

The Recovery Act provided a total of \$7.2 billion to NTIA and the Department of Agriculture's Rural Utilities Service (RUS) to fund projects that will expand access to and adoption of broadband services. Of that funding, NTIA will utilize \$4.7 billion for grants to deploy broadband infrastructure in the United States, expand public computer center capacity, and encourage sustainable adoption of broadband service. NTIA will announce all grant awards by September 30, 2010.

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The full text of the notice as submitted to the Federal Register is available here:
http://www.ntia.doc.gov/frnotices/2010/FR_BTDP_ApplicationReopening_05132010.pdf

Prior to developing the rules for the second round of funding, NTIA and the Department of Agriculture's Rural Utilities Service (RUS) released a second joint request for information seeking public comment on ways to enhance the applicant experience through targeted revisions to the first NOFA. RUS and NTIA received approximately 225 comments from institutions and individuals on a wide range of topics, and these comments played an important role in developing the second NOFA.

Based on the comments received and the experience gained from administering the first round of funding, NTIA made a number of changes to the program. The goals of these changes are to increase efficiency, sharpen the program's funding focus, and improve the applicant experience. Major changes and improvements include:

- **Separate BTOP and BIP Applications for Increased Efficiency.** In the first round, RUS and NTIA issued a joint NOFA, giving applicants the option to file applications with both programs jointly. For the second round of funding, RUS and NTIA issued separate but coordinated NOFAs to better promote each agency's distinct objectives. RUS and NTIA, therefore, eliminated the joint application process, which was burdensome for some applicants. Eliminating this process will also help NTIA review applications in a timely manner. RUS and NTIA will continue to collaborate to maximize the impact of available federal funding, to best leverage the experience and expertise of each agency, and to avoid geographic overlap in projects funded by the two agencies.
- **Focus on "Comprehensive Community" Infrastructure Projects for Maximum Investment Impact.** With respect to infrastructure projects, NTIA's top priority is to fund "comprehensive communities" projects, focusing on middle mile broadband projects and the connection of key community anchor institutions as a way of maximizing the benefits of BTOP funds. In adopting this approach, NTIA restructured the Broadband Infrastructure category of the first NOFA into the Comprehensive Community Infrastructure (CCI) category.
- **Improved Online Application Process.** NTIA made numerous adjustments to the online application system to streamline the intake of information and make the process more user-friendly. These included reducing the number of attachments to be uploaded with the application, eliminating the proposed funded service area mapping tool, and modifying the service area delineations from Census blocks to Census tracts and block groups. The online application portal underwent substantial testing and verification to mitigate problems associated with congestion on the system during the first round. As a result, the online system performed as planned and successfully

allowed Round Two applicants to submit their proposals without any significant performance issues.

- **Clarifying NOFA Provisions.** NTIA clarified a number of NOFA provisions. For example, NTIA revised BTOP's eligibility factors, which now use just three criteria – eligible entities, fully completed application, and matching – as the gating factors to determine whether an application is eligible for consideration. NTIA has also removed some factors from the eligibility requirements that are more effectively evaluated during the expert review and due diligence phases of application consideration. Additionally, NTIA clarified the process for requesting waivers from several statutory and programmatic obligations.

36. If an application has not been successful in the first round, can a revised application be submitted in the second round?

Answer: Yes. (See next answer.)

37. Why will NTIA still be awarding funds from the first grant round after the deadline for the second round applications closes, since that will require some successful first round awardees to reapply unnecessarily?

Answer: The statutory obligation to award all BTOP grants by September 30, 2010 required the agency to continue to process a small number of Round One awards while at the same time accepting Round Two applications. Applicants that remained in consideration for a Round One award were informed of their status and given the choice of whether to apply again in Round Two. Prior to the application window closing, NTIA had awarded the vast majority of Round One projects and announced a small number of remaining grants before the end of April. To assist applicants preparing a Round Two application to determine where Round One projects have been and/or may be awarded, on March 2, 2010, NTIA posted a list of awarded and pending Round One BTOP Sustainable Broadband Adoption, Public Computer Center, Middle Mile Infrastructure, and Last Mile Infrastructure applications. NTIA also urged Round Two applicants, in preparing their applications, to consult the Second NOFA (released on January 22, 2010), read the Round Two Grant Guidance, examine answers to frequently asked questions, watch recorded public workshops, study maps depicting service areas already funded with Recovery Act broadband funds, and study Round One award summaries. All of these materials are available at www.ntia.doc.gov/broadbandusa. NTIA has made every effort to ensure that potential Round Two applicants had sufficient information on which to base their decision to apply.

38. How are applicants notified about whether their applications are successful?

Answer: Successful applicants are notified in writing or via email by NTIA's BTOP Grants Offices – serviced by the National Oceanic and Atmospheric Administration (NOAA) and the National Institute of Standards and Technology (NIST) – as well as through a congratulatory phone call from the Program Office. The Department also notifies Members of Congress from the successful applicant's district and state prior to notifying the applicant of an award. Unsuccessful applicants are notified in writing by the Program Director.

39. When will NTIA begin to award the second round of grants, and by what date will that process conclude?

Answer: NTIA intends to announce BTOP Round Two awards on a rolling basis starting in July 2010. All grants will be awarded by September 30, 2010.

40. The NTIA budget proposes an increase of \$23.7 million for BTOP administration and oversight. Can you elaborate on why this amount of funding is needed? Why is legislation required?

Answer: Both the authorization and the funding for BTOP expire on September 30, 2010. The Recovery Act (which authorized BTOP) does not provide spending authority or funding for the administration and oversight of BTOP-funded projects beyond this date. In its Fiscal Year 2011 Budget to the Congress, the Department of Commerce requested approximately \$23.7 million for administration and oversight of BTOP. This funding is critically important to ensure that NTIA can effectively administer and monitor BTOP grants beyond September 30, 2010, and to ensure that taxpayer dollars are spent consistent with the Recovery Act's purposes. Without additional funding there is a risk of waste, fraud, and abuse of Federal funds. And a lack of adequate post-award funding may place in jeopardy our ability to achieve the economic stimulus benefits of the Recovery Act. This problem was raised in the Department of Commerce Inspector General's 2010 Annual Report released on April 8, 2010.² The Recovery Act requires that BTOP projects be substantially complete within two years of the award date. The Program's rules require projects to be fully complete within three years of the award date. Effective monitoring and oversight of more than \$4 billion in grants will require significant resources, both human and otherwise, to ensure that recipients meet their commitments, comply with program and federal grants administration rules, achieve the purposes established by Congress in the Recovery Act, and use taxpayer dollars appropriately and responsibly.

Appropriations, Authorizations, Obligations, and FTE

41. Please provide a table showing a ten year history of for each appropriation and by major program element, from fiscal year 2001 to fiscal year 2010, with requested and enacted budgets. Include supplemental and additional

appropriations, such as the American Recovery and Reinvestment Act, within a separate column for each appropriate fiscal year and footnote the table to show the relevant public law.

Answer: Please refer to the following table:

DEPARTMENT OF COMMERCE
SUMMARY OF REQUEST, ENACTED AND ACTUAL BUDGET AUTHORITY
(dollars in thousands)

	2001 Request	2001 Enacted	Supplemental Appropriations	2002 Request	2002 Enacted	Supplemental Appropriations	2003 Request	2003 Enacted
DEPARTMENTAL MANAGEMENT:								
Salaries and expenses.....	32,340	35,841	0	37,652	42,428	5,176 3/	49,796	44,662
HCHB renovation & modernization.....	0	0	0	0	0	0	0	0
Security/Digital Department.....	18,066	0	0	0	0	0	0	0
Na'l Intellectual Property Law Enforcement Coordination Council	0	0	0	0	0	0	0	0
Emergency oil & gas quarantined loan program account.....	0	0	0	-115,000	-5,200	0	0	0
Emergency steel guaranteed loan program account.....	0	0	0	-10,000	0	0	-96,000	-920
TOTAL DM, Federal Funds.....	51,406	35,841	0	37,348	37,228	5,176	47,724	43,742
OFFICE OF THE INSPECTOR GENERAL.....	22,726	19,956	0	21,176	20,176	0	24,021	20,501
ECONOMIC DEVELOPMENT ADMINISTRATION:								
Salaries and expenses.....	29,188	27,938	0	30,557	30,567	0	32,660	30,565
Economic development assistance programs.....	417,750	420,951	0	335,000	335,000	2,000 2/	317,235	288,115
Economic Development Revolving Fund.....	0	0	0	0	0	0	0	0
Discretionary.....	0	0	0	0	0	0	0	0
TOTAL EDA, Federal Funds.....	446,938	448,889	0	365,557	365,567	2,000	349,895	318,680
BUREAU OF THE CENSUS:								
Salaries and expenses.....	173,826	156,681	0	168,561	169,424	0	215,716	181,810
Periodic censuses and programs.....	545,379	272,306	0	374,835	321,376	0	522,360	369,067
TOTAL CENSUS, Federal Funds.....	719,205	429,187	0	543,396	490,800	0	737,576	550,877
ECONOMIC AND STATISTICAL ANALYSIS:								
Salaries and expenses.....	54,713	53,626	0	62,515	62,515	0	76,466	71,689
INTERNATIONAL TRADE ADMINISTRATION:								
Operations and administration.....	357,147	333,708	0	329,590	345,547	1,000 3/	377,180	409,513
U.S. TRAVEL & TOURISM PROMOTION.....	0	0	0	0	0	0	0	0
BUREAU OF INDUSTRY AND SECURITY:								
Operations and administration.....	71,554	64,711	0	66,893	70,849	1,756 3/	103,311	74,167
MINORITY BUSINESS DEVELOPMENT AGENCY:								
Minority business development.....	28,156	27,254	0	28,381	28,381	0	28,792	28,718
NATIONAL OCEANIC & ATMOSPHERIC ADMIN:								
Operations, research & facilities.....	1,973,389	2,121,415	57,700 1/	2,248,309	2,327,447	7,550 3/ 4/	2,359,119	2,363,059
Coastal and Ocean Activities.....	0	0	0	0	0	0	0	0
Procurement, Acquisition and Construction.....	635,222	749,746	0	764,861	844,552	7,200 4/	811,387	754,096
Fisheries promotional fund.....	0	0	0	0	0	0	0	0
Promote & develop fishery products & research.....	-68,000	-68,000	0	-68,000	-68,000	0	-75,000	-85,000
Fishing vessel & gear damage comp. fund.....	0	0	0	0	0	0	0	0
Fishermen's contingency fund.....	951	950	0	952	952	0	954	1
Foreign fishing observer fund.....	191	191	0	191	191	0	191	1
Coastal zone management fund (discret. rary).....	0	3,193	0	0	0	0	0	0
Coastal zone management account (formerly FVOG).....	6,628	1,265	0	287	287	0	37	285
Pacific Coastal Science Recovery.....	160,000	109,736	0	110,000	157,419	0	110,000	129,155
Coastal Impact Action Fund.....	100,000	148,070	0	0	0	0	0	0
North Pacific Marine Research Institute Trust Fund - Emergency at	0	0	5,000 1/	0	0	0	0	0
Marine Mammal Unusual Event Mortality Fund.....	0	0	0	0	0	0	0	0
Medicare-Eligible Retiree Healthcare Fund.....	0	0	0	0	0	0	0	0
Fisheries Disaster Assistance Fund.....	10,000	0	0	0	0	0	0	0
TOTAL NOAA, Federal Funds.....	2,818,381	3,068,208	62,700	3,066,600	3,362,848	14,750	3,206,594	3,274,957

DEPARTMENT OF COMMERCE
SUMMARY OF REQUEST, ENACTED AND ACTUAL BUDGET AUTHORITY
(dollars in thousands)

	2001 Request	2001 Enacted	2001 Supplemental Appropriations	2002 Request	2002 Enacted	2002 Supplemental Appropriations	2003 Request	2003 Enacted
PATENT AND TRADEMARK OFFICE:								
Spending Authority from PY	254,889	254,889	0	282,300	282,300	0	100,000	165,687
Less rescissions	0	0	0	0	0	0	0	0
Less transfers	0	0	0	0	0	0	0	0
Salaries and expenses	783,843	783,843	0	856,700	845,200	1,500 3/	1,264,908	1,008,630
Less fees and carryover	-1,151,587	-1,151,587	0	-1,345,894	-1,345,894	0	-1,528,908	-1,204,357
TOTAL, PTO, Federal Funds	-112,855	-112,855	0	-208,893	-218,393	1,500	-182,000	-30,040
TECHNOLOGY ADMINISTRATION:								
Salaries and expenses	8,716	8,062	0	8,238	8,238	0	8,147	8,022
Public Enterprise Revolving Fund	0	0	0	0	0	0	0	0
Salaries and expenses	8,716	8,062	0	8,238	8,238	0	8,147	8,022
NATIONAL TECHNICAL INFORMATION SERVICE:								
NTIS Revolving Fund	0	0	0	0	0	0	0	0
Info. Products & Services Trust Fund	0	0	0	0	0	0	0	0
NATL INSTITUTE OF STANDARDS & TECH:								
Salaries and expenses	331,308	311,647	0	347,006	325,839	42,100 3/ 4/	397,722	356,793
Scientific & tech. research & services	338,004	250,285	0	119,286	291,022	0	120,849	284,760
Salaries and expenses	35,879	34,802	0	20,893	63,616	1,225 3/	54,494	65,670
Construction of research facilities	7,800	282	0	282	282	0	4,482	282
Working Capital Fund	712,891	537,016	0	487,447	680,751	43,325	577,547	707,505
TOTAL, NIST, Federal Funds	1,087,002	1,133,550	0	1,174,412	1,361,428	46,650	1,076,645	1,154,630
NATIONAL TELECOMMUNICATIONS & INFO ADMIN:								
Salaries and expenses	20,315	11,412	0	14,054	14,054	0	17,547	14,604
Public tele. facilities, planning & construction	110,075	43,404	0	43,466	51,716	8,250 3/	43,586	43,273
Endowment for Children's Educational TV	0	0	0	0	0	0	0	0
Library assistance grants	95,119	45,400	0	15,503	15,503	0	224	15,402
ARRA - Broadband Technology Opportunities Program	0	0	0	0	0	0	0	0
ARRA - Digital To-Analog Converter Box Program	0	0	0	0	0	0	0	0
SUBTOTAL, NTIA, discretionary	225,509	100,216	0	73,023	81,273	8,250	61,357	73,279
OFFSETTING RECEIPTS:								
Discretionary:								
USTTA	0	0	0	0	0	0	0	0
Fisheries finance, negative subsidy receipts	0	0	0	0	0	0	0	0
Emergency Share, negative subsidies	0	0	0	0	0	0	0	0
Unsettled claims	0	0	0	0	0	0	0	0
NOAA ORF - Navigation Service Fees & Fishing Finance Program	-34,000	0	0	0	0	0	0	0
TOTAL, DOC Discretionary Funds	5,370,589	5,074,019	62,700	4,750,575	5,235,570	77,757	5,342,762	5,553,050

1/ FY 2001 Supplemental Appropriations provided in P.L. 106-246.
 2/ FY 2002 Supplemental Appropriations provided in P.L. 107-38.
 3/ FY 2003 Supplemental Appropriations provided in P.L. 107-117.
 4/ FY 2004 Supplemental Appropriations provided in P.L. 108-284.
 5/ FY 2005 Supplemental Appropriations provided in P.L. 108-324.
 6/ FY 2006 Supplemental Appropriations provided in P.L. 108-13.
 7/ FY 2006 Supplemental Appropriations provided in P.L. 108-148.
 8/ FY 2006 Supplemental Appropriations provided in P.L. 108-234.
 9/ FY 2007 Supplemental Appropriations provided in P.L. 110-28.
 10/ FY 2008 Supplemental Appropriations provided in P.L. 110-452.
 11/ FY 2008 Supplemental Appropriations provided in P.L. 110-329.
 12/ FY 2009 Supplemental Appropriations provided in P.L. 111-3.

DEPARTMENT OF COMMERCE
SUMMARY OF REQUEST, ENACTED AND ACTUAL BUDGET AUTHORITY
(dollars in thousands)

	2004 Request	2004 Enacted	2005 Request	2005 Enacted	2005 Supplemental Appropriations	2006 Request	2006 Enacted	2006 Supplemental Appropriations	2007 Request	2007 Enacted	2007 Supplemental Appropriations
DEPARTMENTAL MANAGEMENT:											
Salaries and expenses.....	57,191	46,790	56,021	47,466	0	53,532	46,660	0	56,999	47,121	0
ICRIS provision & indemnification.....	0	0	0	0	0	30,000	0	0	18,000	0	0
Supplemental Paperwork.....	0	0	0	0	0	0	0	0	0	0	0
Non-Federal Property Law Enforcement Coordination Council	0	0	0	0	0	0	0	0	960	0	0
Emergency oil & gas guaranteed loan program account.....	0	0	0	0	0	0	0	0	0	0	0
Emergency vessel guaranteed loan program account.....	-25,948	52,168	-35,012	0	0	-50,168	0	0	-48,602	0	0
TOTAL DM Federal Funds.....	31,243	68,558	21,009	47,466	0	33,364	46,660	0	27,392	47,121	0
OFFICE OF THE INSPECTOR GENERAL:											
ECONOMIC DEVELOPMENT ADMINISTRATION:											
Salaries and expenses.....	33,377	29,694	30,565	30,075	0	26,584	29,691	0	29,700	29,882	0
Economic development assistance programs.....	331,027	278,416	299,762	253,985	0	0	250,741	0	287,467	250,741	0
Economic Development Revolving Fund:											
Discretionary.....	0	0	0	0	0	0	0	0	0	0	0
TOTAL EDA, Federal Funds.....	364,404	308,110	320,327	284,060	0	26,584	280,432	0	327,167	280,623	0
BUREAU OF THE CENSUS:											
Salaries and expenses.....	220,905	192,761	220,425	196,110	0	220,029	195,500	0	184,067	196,647	0
Periodic censuses and programs.....	441,953	416,050	608,171	548,668	0	657,356	606,363	0	694,092	696,365	0
TOTAL CENSUS, Federal Funds.....	662,858	608,811	828,596	744,778	0	877,385	801,863	0	878,159	893,012	0
ECONOMIC AND STATISTICAL ANALYSIS:											
Salaries and expenses.....	84,756	73,115	86,400	76,831	0	85,277	79,278	0	80,482	76,751	0
INTERNATIONAL TRADE ADMINISTRATION:											
Operations and administration.....	382,123	329,716	393,513	388,257	0	395,925	393,830	0	408,782	395,706	0
U.S. TRAVEL & TOURISM PROMOTION.....	0	0	0	9,866	0	0	3,949	0	0	3,949	0
BUREAU OF INDUSTRY AND SECURITY:											
Operations and administration.....	78,165	66,904	76,516	67,480	0	77,000	75,029	0	78,582	75,383	0
Minority business development.....	29,467	28,528	34,461	29,500	0	30,727	29,641	0	29,641	29,725	0
MINORITY BUSINESS DEVELOPMENT AGENCY:											
Operations, research & facilities.....	2,457,300	2,695,549	2,459,841	2,868,480	23,970 5/ 6/	2,608,168	2,801,849	172,200 7/ 8/	2,567,843	2,990,828	170,400 9/
Coastal and Ocean Activities.....	0	-2,500	0	0	0	0	0	0	0	0	0
Procurement, Acquisition and Construction.....	842,399	960,881	898,510	1,042,122	13,970 5/ 6/	965,051	1,106,172	68,400 7/ 8/	1,024,467	1,085,032	0
Fisheries promotional fund.....	0	0	0	0	0	0	0	0	0	0	0
Promote & develop fishery products & research.....	-75,000	-82,000	-79,000	-85,000	0	-77,000	-87,000	0	-77,000	-79,000	0
Fishing vessel & gear damage comp. fund.....	0	0	0	0	0	0	0	0	0	0	0
Fishermen's contingency fund.....	956	-603	956	492	0	0	0	0	0	0	0
Foreign fishing observer fund.....	191	-671	181	0	0	0	0	0	0	0	0
Coastal zone management fund (discretionary).....	0	0	0	0	0	0	0	0	0	0	0
Fisheries finance program account (formerly FVOC).....	287	989	287	1,368	0	60	2,259	0	0	-717	0
Pacific Coastal Salmon Recovery.....	90,000	89,052	100,000	88,216	0	90,000	66,571	0	66,825	66,571	0
Coastal Impact Assistance Fund.....	0	0	0	0	0	0	0	0	0	0	0
North Pacific Salmon Research Institute Trust Fund - Emergency	0	0	0	0	0	0	0	0	0	0	0
North Pacific Salmon Research Institute Trust Fund - Minority Fund	0	0	0	0	0	0	0	0	0	0	0
Medicare-Eligible Retiree Healthcare Fund.....	0	0	0	0	0	0	1,645	0	2,012	1,820	0
Fisheries Disaster Assistance Fund.....	0	0	0	0	0	0	0	0	0	0	0
TOTAL NOAA, Federal Funds.....	3,326,133	3,960,707	3,380,785	3,936,668	37,940	3,586,279	3,911,482	242,600	3,864,147	4,064,534	170,400

DEPARTMENT OF COMMERCE
SUMMARY OF REQUEST, ENACTED AND ACTUAL BUDGET AUTHORITY
(dollars in thousands)

	2004 Request	2004 Enacted	2005 Request	2005 Enacted	Supplemental Appropriations	2006 Request	2006 Enacted	Supplemental Appropriations	2007 Request	2007 Enacted	Supplemental Appropriations
PATENT AND TRADEMARK OFFICE:											
Spending Authority from PY	0	0	0	0	0	0	0	0	0	0	0
Less rescission	0	0	0	0	0	0	0	0	0	0	0
Indirect cost transfer	0	0	0	0	0	0	0	0	0	0	0
Less cost transfer	1,404,130	1,231,046	1,533,407	1,554,755	0	1,703,300	1,683,086	0	1,842,966	1,771,000	0
Less fee and carryover	-1,803,814	-1,271,462	-1,533,407	-1,563,200	0	-1,703,300	-1,683,086	0	-1,842,966	-1,771,000	0
TOTAL, PTO, Federal Funds	-49,684	-450,354	0	-8,446	0	0	0	0	0	0	0
TECHNOLOGY ADMINISTRATION:											
Salaries and expenses	8,015	6,343	8,294	6,460	0	4,200	5,823	0	1,485	2,020	0
Public Enterprise Revolving Fund	0	0	0	0	0	0	0	0	0	0	0
Salaries and expenses	8,015	6,343	8,294	6,460	0	4,200	5,823	0	1,485	2,020	0
NATIONAL TECHNICAL INFORMATION SERVICE:											
NTIS Revolving Fund	0	0	0	0	0	0	0	0	0	0	0
Infr. Products & Services Trust Fund	0	0	0	0	0	0	0	0	0	0	0
NATL. INSTITUTE OF STANDARDS & TECH:											
Scientific & tech. research & services	379,849	336,185	413,886	375,864	0	416,797	398,234	0	482,502	439,021	0
Industrial technology services	38,607	207,770	39,190	244,043	0	46,600	176,624	0	46,332	116,619	0
Manufacture for Innovation Infrastructure Protection	0	0	0	0	0	0	0	0	0	0	0
Construction of facilities	69,590	64,271	59,411	72,518	0	58,890	173,655	0	67,988	58,686	0
Working Capital Fund	7,772	282	8,952	2,900	0	9,470	1,300	0	9,450	1,300	0
TOTAL, NIST, Federal Funds	465,818	608,508	521,469	695,325	0	531,965	747,809	0	586,282	674,326	0
NATIONAL TELECOMMUNICATIONS & INFO ADMIN:											
Salaries and expenses	18,869	14,055	22,101	17,200	0	21,450	17,837	0	17,837	18,062	0
Public tele. facilities, planning & construction	2,538	19,335	2,538	21,478	0	2,000	21,719	0	0	21,728	0
Endowment for Children's Educational TV	0	-45	0	0	0	0	0	0	0	0	0
Information Infrastructure Grants	0	0	0	0	0	0	0	0	0	0	0
Information Infrastructure Technology Grant	0	13,847	0	0	0	0	0	0	0	0	0
ARPA - Digital To-Analog Converter Box Program	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL, NTIA, discretionary	21,407	47,182	24,639	38,678	0	23,450	39,556	0	17,837	39,790	0
OFFSETTING RECEIPTS:											
Discretionary	0	0	0	0	0	0	0	0	0	0	0
USTA	0	0	0	0	0	0	0	0	0	0	0
Fisheries finance, negative subsidy receipts	-1,000	-4,026	-3,959	-6,000	0	-2,000	-26,000	0	-3,482	-5,000	0
Emergency Shell	0	0	0	0	0	0	0	0	0	0	0
Less other proposals	0	0	0	0	0	0	0	0	0	0	0
NOAA ORE - Navigation Services Fees & Fishing Finance Progra	0	0	0	0	0	0	0	0	0	0	0
TOTAL, DOC Discretionary Funds	5,407,210	5,823,386	5,716,259	6,334,434	37,940	5,952,814	6,410,129	249,600	6,138,995	6,604,042	170,400

1/ FY 2001 Supplemental Appropriations provided in P.L. 106-246
 2/ FY 2002 Supplemental Appropriations provided in P.L. 107-38
 3/ FY 2003 Supplemental Appropriations provided in P.L. 107-117
 4/ FY 2004 Supplemental Appropriations provided in P.L. 108-282
 5/ FY 2005 Supplemental Appropriations provided in P.L. 108-324
 6/ FY 2006 Supplemental Appropriations provided in P.L. 109-13
 7/ FY 2006 Supplemental Appropriations provided in P.L. 109-146
 8/ FY 2006 Supplemental Appropriations provided in P.L. 109-234
 9/ FY 2007 Supplemental Appropriations provided in P.L. 110-26
 10/ FY 2008 Supplemental Appropriations provided in P.L. 110-25
 11/ FY 2008 Supplemental Appropriations provided in P.L. 110-26
 12/ FY 2008 Supplemental Appropriations provided in P.L. 111-5

DEPARTMENT OF COMMERCE
SUMMARY OF REQUEST, ENACTED AND ACTUAL BUDGET AUTHORITY
(dollars in thousands)

	2008 Request	2008 Enacted	Supplemental Appropriations	2009 Request	2009 Enacted	Supplemental Appropriations	2010 Request	2010 Enacted
DEPARTMENTAL MANAGEMENT:								
Salaries and expenses.....	58,693	44,264	0	60,583	53,000	0	64,000	58,000
Health and incidentals.....	4,300	3,722	0	7,367	5,000	0	22,500	22,500
Security/Digital Div.....	0	0	0	0	0	0	0	0
Natl Intellectual Property Law Enforcement Coordination Council	1,000	0	0	1,021	0	0	0	0
Emergency oil & gas guaranteed loan program account.....	0	0	0	0	0	0	0	0
Emergency steel guaranteed loan program account.....	-48,607	0	0	-48,607	0	0	0	0
TOTAL D.M. Federal Funds.....	15,386	48,016	0	20,354	58,000	0	86,500	80,500
OFFICE OF THE INSPECTOR GENERAL	23,426	23,023	3,906 10/	24,766	27,800	16,000 12/	27,000	27,000
ECONOMIC DEVELOPMENT ADMINISTRATION:								
Salaries and expenses.....	32,800	30,832	0	30,832	32,800	0	38,000	38,000
Economic development assistance programs.....	170,000	243,400	500,000 10/ 11/	92,800	240,000	150,000 12/	246,000	255,000
Economic Development Revolving Fund:								
Discretionary.....	0	0	0	0	0	0	0	0
TOTAL EDA, Federal Funds.....	202,800	274,232	500,000	123,632	272,800	150,000	284,000	283,000
BUREAU OF THE CENSUS:								
Salaries and expenses.....	202,838	202,838	0	233,588	233,588	0	259,024	259,024
Periodic censuses and programs.....	1,027,406	1,027,406	207,000 10/	2,908,262	2,905,262	1,000,000 12/	7,115,707	6,965,707
TOTAL CENSUS, Federal Funds.....	1,230,244	1,230,244	207,000	3,138,850	3,138,850	1,000,000	7,374,731	7,224,731
ECONOMIC AND STATISTICAL ANALYSIS:								
Salaries and expenses.....	85,000	80,275	0	90,121	90,821	0	105,000	97,255
INTERNATIONAL TRADE ADMINISTRATION:								
Operations and administration.....	412,431	405,172	0	417,256	420,431	0	440,265	446,765
U.S. TRAVEL & TOURISM PROMOTION:								
BUREAU OF INDUSTRY AND SECURITY:								
Operations and administration.....	78,776	72,855	0	83,176	83,676	0	100,342	100,342
MINORITY BUSINESS DEVELOPMENT AGENCY:								
Minority business development.....	28,701	28,623	0	28,623	29,825	0	31,000	31,500
NATIONAL OCEANIC & ATMOSPHERIC ADMIN:								
Operations, research & facilities.....	2,843,866	2,831,980	0	2,849,253	3,128,044	230,000 12/	3,145,137	3,412,778
Coastal and Ocean Activities.....	0	0	0	0	0	0	0	0
Procurement, Acquisition and Construction.....	979,863	871,964	0	1,232,660	1,243,647	600,000 12/	1,391,279	1,358,353
Fisheries promotional fund.....	0	0	0	0	0	0	0	0
Promote & develop fishery products & research.....	-77,000	-77,900	0	-79,000	-79,000	0	-104,600	-104,600
Fishing vessel & gear damage comp. fund.....	0	0	0	0	0	0	0	0
Fishermen's contingency fund.....	0	0	0	0	0	0	0	0
Foreign fishing observer fund.....	0	0	0	0	0	0	0	0
Coastal zone management fund (discretionary).....	0	0	0	0	0	0	0	0
Fisheries finance program account (formerly FVOG).....	0	235	0	0	0	0	0	0
Pacific Coastal Salmon Recovery.....	66,825	66,933	0	35,000	80,000	0	50,000	80,000
Coastal Impact Assistance Fund.....	0	0	0	0	0	0	0	0
Marine Mammal Research Funds.....	0	0	0	0	0	0	0	0
Marine Mammal Research Trust Fund - Emergency	0	0	0	0	0	0	0	0
Marine Mammal Research Trust Fund - Mandatory Fund	0	0	0	0	0	0	0	0
Medicare-Eligible Retiree Healthcare Fund	1,820	1,802	0	1,934	1,674	0	1,934	1,822
Fisheries Disaster Assistance Fund	0	0	0	0	0	0	0	0
TOTAL, NOAA, Federal Funds.....	3,815,404	3,865,914	0	4,035,847	4,373,970	830,000	4,465,750	4,748,353

DEPARTMENT OF COMMERCE
SUMMARY OF REQUEST, ENACTED AND ACTUAL BUDGET AUTHORITY
(dollars in thousands)

	2008 Request	2009 Enacted	Supplemental Appropriations	2009 Request	2009 Enacted	Supplemental Appropriations	2010 Request	2010 Enacted
PATENT AND TRADEMARK OFFICE:								
Spending Authority from PY	0	0	0	0	0	0	0	0
Less rescissions	0	0	0	0	0	0	0	0
Direct cost transfers	0	0	0	0	0	0	0	0
Salaries and expenses	1,915,552	1,915,500	0	2,074,773	1,863,460	0	1,930,361	1,887,000
Less fees and carryover	-1,515,532	-1,515,500	0	-2,074,773	-1,900,950	0	-1,930,361	-2,003,008
TOTAL, PTO, Federal Funds	0	0	0	0	-7,800	0	0	-116,008
TECHNOLOGY ADMINISTRATION:								
Salaries and expenses	1,557	93	0	0	0	0	0	0
Public Enterprise Revolving Fund	0	0	0	0	0	0	0	0
TOTAL, Technology Administration	1,557	93	0	0	0	0	0	0
NATIONAL TECHNICAL INFORMATION SERVICE:								
NTIS Revolving Fund	0	0	0	0	0	0	0	0
Inter. Products & Services Trust Fund	0	0	0	0	0	0	0	0
MATL INSTITUTE OF STANDARDS & TECH.	491,267	444,397	0	528,700	475,225	240,000 12/	521,680	517,750
Scientific & tech. research & services	46,332	135,040	0	2,000	170,000	0	194,600	194,600
Industrial technology services	0	0	0	0	0	0	0	0
Manufacturing and Infrastructure Protection	93,865	160,460	0	99,000	532,000	360,000 12/	116,500	147,000
Construction of research facilities	12,500	1,250	0	12,300	2,275	0	6,160	2,250
Working Capital Fund	643,964	742,177	0	640,000	1,179,500	600,000	849,350	861,600
TOTAL, NIST, Federal Funds	18,581	17,466	0	18,445	16,218	0	19,599	19,599
NATIONAL TELECOMMUNICATIONS & INFO ADMIN:								
Salaries and expenses	0	18,900	0	0	18,400	0	0	20,000
Public tele. facilities, planning & construction	0	0	0	0	0	0	0	0
Endowment for Children's Educational TV	0	0	0	0	0	0	0	0
Information Infrastructure Grants	0	0	0	0	0	0	0	0
ARRA - Digital-to-Analog Converter Program	0	0	0	0	0	4,590,000 12/	0	0
ARRA - Digital-to-Analog Converter Box Program	0	0	0	0	0	584,295 12/	0	-128,000
SUBTOTAL, NTIA, discretionary	18,581	35,266	0	18,445	34,618	5,274,295	19,599	-48,001
OFFSETTING RECEIPTS:								
Discretionary:								
USITTA	0	0	0	0	0	0	0	0
Fisheries finance, negative subsidy receipts	-3,270	-4,145	0	-1,144	-4,816	0	-5,969	-6,929
Emergency Steel, negative subsidies	0	0	0	0	0	0	0	0
Emergency Steel, negative subsidies	0	0	0	0	0	0	0	0
NOMA CRF - Navigation Service Fees & Fishing Finance Progr	0	0	0	0	0	0	0	0
TOTAL, DOC Discretionary Funds	6,553,000	6,831,742	710,000	6,624,896	9,699,175	7,870,295	13,795,968	13,700,108

- 1/ FY 2001 Supplemental Appropriations provided in P.L. 106-246
- 2/ FY 2002 Supplemental Appropriations provided in P.L. 107-39
- 3/ FY 2002 Supplemental Appropriations provided in P.L. 107-117
- 4/ FY 2003 Supplemental Appropriations provided in P.L. 108-296
- 5/ FY 2005 Supplemental Appropriations provided in P.L. 108-324
- 6/ FY 2005 Supplemental Appropriations provided in P.L. 108-113
- 7/ FY 2006 Supplemental Appropriations provided in P.L. 109-148
- 8/ FY 2006 Supplemental Appropriations provided in P.L. 109-234
- 9/ FY 2007 Supplemental Appropriations provided in P.L. 110-23
- 10/ FY 2008 Supplemental Appropriations provided in P.L. 110-25
- 11/ FY 2008 Supplemental Appropriations provided in P.L. 110-28
- 12/ FY 2008 Supplemental Appropriations provided in P.L. 111-5

42. Which programs, projects, or activities (PPA) proposed in the budget are unauthorized? For each such unauthorized PPA, what was the last authorization (public law reference); the last fiscal year of authorization; and the authorized funding level in the last fiscal year of authorization? What was the amount of the appropriation provided for each such PPA for the last fiscal year in which it was authorized?

Answer: Please refer to the following table:

DEPARTMENT OF COMMERCE
 APPROPRIATIONS NOT AUTHORIZED BY LAW
 (dollars in thousands)

UNAUTHORIZED APPROPRIATIONS	<u>LAST YEAR OF AUTHORIZATION</u>	<u>AUTHORIZED \$ IN LAST YEAR</u>
<u>Economic Development Administration</u>		
<u>Salaries and Expenses</u>		
Public Works and Economic Development Act of 1965, P.L. 108-373, expired 9/30/08	FY 2008	Such sums as necessary
<u>Economic Development Assistance Programs</u>		
Public Works and Economic Development Act of 1965, P.L. 108-373, expired 9/30/08	FY 2008	425,000
Trade Adjustment Assistance, P.L. 110-89, expired 12/31/07	FY 2008	Such sums as necessary
<u>International Trade Administration</u>		
Export Promotion, P.L. 103-392, expired 9/30/96	FY 1996	Such sums as necessary
<u>Bureau of Industry and Security</u>		
Export Administration Act of 1979, P.L. 106-508, expired 8/20/01	FY 2001	Such sums as necessary
Defense Production Act Reauthorization of 1993, P.L. 108-195, expired 9/30/09	FY 2009	Such sums as necessary
<u>National Oceanic and Atmospheric Administration</u>		
<u>Operations, Research and Facilities</u>		
<u>National Ocean Service</u>		
Coral Reef Conservation Act, P.L. 106-562, expired 9/30/04	FY 2004	16,000
Coastal Zone Management Act, P.L. 104-150, expired 9/30/99	FY 1999	55,100
Hydrographic Services Improvement Act, P.L. 107-372, expired 9/30/07	FY 2007	148,219
Marine Protection, Research, Preservation & Sanctuaries Act Title II & III, P.L. 106-513, expired 9/30/05	FY 2005	40,000
Estuary Restoration Act, P.L. 106-457, expired 9/30/05	FY 2005	76,500
<u>National Marine Fisheries Service</u>		
Endangered Species Act Amendments of 1988 P.L. 100-478, expired 9/30/92	FY 1992	6,750
Marine Mammal Protection Act P.L. 103-238, expired 9/30/99	FY 1999	14,768
International Dolphin Conservation Program Act P.L. 105-42, expired 9/30/01	FY 2001	6,800
NOAA Marine Fisheries Program Authorization Act, P.L. 104-297, expired 9/30/00	FY 2000	110,470
<u>Oceanic and Atmospheric Research</u>		
National Sea Grant College Program, P.L. 107-299, expired 9/30/08	FY 2008	103,000
<u>Procurement, Acquisition and Construction</u>		
<u>National Ocean Service</u>		
Marine Protection, Research, Preservation & Sanctuaries Act Title II & III, P.L. 106-513, expired 9/30/05	FY 2005	6,000
<u>Pacific Coastal Salmon Recovery</u>		
Pacific Salmon Fishing, P.L. 111-8, expired 9/30/09	FY 2009	90,000
<u>National Institute of Standards and Technology</u>		
<u>Scientific & Technical Research & Services</u>		
America COMPETES Act, P.L. 110-69, expires 9/30/10	FY 2010	584,800
Earthquake Hazards Reduction Act, P.L. 108-360, expired 9/30/08	FY 2009	14,640
<u>Industrial Technology Services</u>		
America COMPETES Act, P.L. 110-69, expires 9/30/10	FY 2010	272,300
<u>Construction of Research Facilities</u>		
America COMPETES Act, P.L. 110-69, expires 9/30/10	FY 2010	49,700
<u>National Telecommunications and Information Administration</u>		
<u>Telecommunications Authorization Act of 1992, P.L. 102-538, expired 9/30/93</u>		
Salaries and Expenses	FY 1993	17,900

43. Provide end-of-year FTE data for each department/agency/office component for each of the last five fiscal years. For fiscal year 2010, provide the current on-board FTE level and end of year (EOY) planned levels. For fiscal year 2011, provide anticipated EOY FTE levels.

Answer: Please refer to table.

DEPARTMENT OF COMMERCE
SUMMARY OF FULL-TIME EQUIVALENTS (FTEs)
Fys 2005 - 2011

	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 On Board FTE	2010 EOY Estimate	2011 EOY Estimate
DEPARTMENTAL MANAGE ENT:								
TOTAL, DM.....	834	815	795	800	814	857	904	938
OFFICE OF THE INSPECTOR GENERAL.....								
TOTAL, IG.....	115	118	124	113	117	153	185	157
ECONOMIC DEVELOPMENT ADMINISTRATION:								
TOTAL, EDA.....	207	168	164	160	170	197	210	210
BUREAU OF THE CENSUS:								
TOTAL, CEN.....	8,433	8,778	8,418	9,051	26,660	42,447	111,205	12,317
ECONOMICS AND STATISTICAL ANALYSIS								
TOTAL, ESA.....	543	543	536	524	529	538	562	616
INTERNATIONAL TRADE ADMINISTRATION:								
TOTAL, ITA.....	2,237	2,085	1,990	1,875	1,861	1,673	1,903	2,054
BUREAU OF INDUSTRY AND SECURITY								
TOTAL, BIS.....	362	353	366	357	330	319	364	395
MINORITY BUSINESS DEVELOPMENT AGENCY:								
TOTAL, MBDA.....	96	94	88	74	82	83	100	103
NATIONAL OCEANIC & ATMOSPHERIC ADMIN:								
TOTAL, NOAA.....	12,600	12,784	12,639	12,699	12,840	12,877	13,047	13,181
PATENT AND TRADEMARK OFFICE:								
TOTAL, PTO,	6,825	7,446	8,291	8,962	9,594	9,490	9,614	10,098
UNDER SECRETARY FOR TECHNOLOGY POLICY								
TOTAL, TA.....	28	14	7	1	0	0	0	0
NATIONAL TECHNICAL INFORMATION SERVICE.....								
TOTAL, NTIS.....	157	144	131	122	119	121	150	150
NATL INSTITUTE OF STANDARDS & TECH:								
TOTAL, NIST.....	2,753	2,738	2,753	2,812	2,881	2,969	3,200	3,343
NATIONAL TELECOMMUNICATIONS & INFO ADMIN:								
TOTAL, NTIA.....	259	248	254	262	262	290	367	268
Total	35,449	36,328	36,556	37,812	56,259	72,115	141,801	43,830

44. What is the annual average cost of a fully-loaded FTE in fiscal years 2010 and 2011, by agency and for the Department itself?

Answer: Please refer to table.

Department of Commerce
Average Salary for FY 2010 & 2011
(Dollars in thousands)

	FY 2010		FY 2011		FY 2010		FY 2011	
	Total Salaries	Total Salaries	Total FTE	Total FTE	Avg Salary & Benefits	Avg Salary & Benefits		
DEPARTMENTAL MANAGEMENT								
Salaries and expenses	28,345	31,823	188	208	150.8	153.0		
National Intellectual Property LE Coord Council Working Capital Fund*	0	0	0	0	0.0	0.0		
HCHB Renovation	90,141	89,885	569	583	158.4	154.2		
	653	701	5	5	130.6	140.2		
OFFICE OF INSPECTOR GENERAL	31,233	21,587	181	157	172.6	137.5		
ECONOMIC DEVELOPMENT ADMIN								
Salaries and expenses	32,795	27,297	205	205	160.0	133.2		
BUREAU OF THE CENSUS								
Salaries and expenses	191,585	204,849	2,024	2,106	94.7	97.3		
Periodic censuses and programs	4,615,822	530,979	106,501	6,856	43.3	77.4		
Total, Census	4,807,407	735,828	108,525	8,962	44.3	82.1		
ECONOMIC AND STATISTICAL ANALYSIS								
Salaries and expenses	63,458	69,869	619	577	122.3	121.1		
INTERNATIONAL TRADE ADMIN								
Operations and administration	258,429	267,881	1,881	2,032	137.4	131.8		
BUREAU OF INDUSTRY AND SECURITY								
Operations and administration	47,483	52,522	362	393	131.2	133.6		
MINORITY BUSINESS DEV. ADMIN								
Minority business development	11,732	12,406	100	103	117.3	120.4		
NAT'L OCEANIC AND ATMOS. ADMIN								
Operations, research & facilities	1,328,287	1,373,614	12,130	12,264	109.5	112.0		
Procurement, Acquisition, & Construc.	23,677	21,460	190	190	124.6	112.9		
Fisheries Finance Program Account	0	0	0	0	0.0	0.0		
Pacific Coastal Salmon Recovery Account	0	0	0	0	0.0	0.0		
Promote & Develop Products	0	0	0	0	0.0	0.0		
Fishermen's Contingency Fund	0	0	0	0	0.0	0.0		
Coastal Zone Management Fund	0	0	0	0	0.0	0.0		
Limited Access System Admin Fund	0	0	0	0	0.0	0.0		
Damage Assessment & Restoration Fund	1,933	1,933	16	16	120.8	120.8		
Total, NOAA	1,353,897	1,397,007	12,336	12,470	109.8	112.0		
PATENT AND TRADEMARK OFFICE								
Salaries and expenses	1,335,535	1,482,085	9,814	10,098	138.9	146.8		
NAT'L TECHNICAL INFORMATION SVC								
Revolving Fund	14,700	15,425	150	150	98.0	102.8		
TECHNOLOGY ADMINISTRATION								
Salaries and expenses	0	0	0	0	0.0	0.0		
NAT'L INST. OF STANDARDS AND TECH								
Scientific & tech. research & services	281,158	302,634	2,182	2,324	128.9	130.2		
Industrial technology services	19,352	19,686	153	154	126.5	127.8		
Construction of research facilities	9,529	9,736	89	89	107.1	109.4		
Total, NIST	310,039	332,056	2,424	2,567	127.9	129.4		
NAT'L TELECOMM. & INFO ADMIN								
Salaries and expenses	14,450	15,240	107	103	135.0	148.0		
Public Tele. Fac. Planning & Construction	1,596	0	0	0	0.0	0.0		
Information Infrastructure Grants	135	0	0	0	0.0	0.0		
Digital TV Transition & Public Safety Fund	2,427	2,427	13	7	186.7	346.7		
Broadband Technology Opportunities Program	0	6,314	0	50	0.0	126.3		
Digital-To-Analog Converter Box Program	0	0	0	0	0.0	0.0		
Total, NTIA	18,608	23,981	120	160	155.1	149.9		
Total, DOC	8,314,314	4,470,468	136,610	38,087	60.9	117.4		

Representative Mike Honda
Questions for the Record

Office of the Senior Advisor for Native American Affairs

1. **I was pleased by your announcement at the Tribal Leaders meeting in November that you have appointed a Senior Advisor for Native American Affairs to report directly to you. What are your current and future plans, including a timetable, for funding the Office of the Senior Advisor from Departmental Management funds, expanding its staff, and ensuring its longevity?**

Answer: The Department of Commerce is committed to economic development across all Native American communities. Through our Minority Business Enterprise Centers, Native American Business Enterprise Centers, Economic Development Administration, and other Commerce agencies, we have been supporting Native American business and communities by providing business consultation, access to capital, as well as economic development and procurement assistance. Through our National Telecommunications Information Agency (NTIA), we have worked closely with Indian Country on our efforts to deploy broadband to unserved and underserved communities.

As of May 10, 2010, NTIA has awarded at least 9 projects totaling approximately \$250 million in Federal grants that are expected to benefit Tribal areas of the United States. For example, the \$32 million grant to the Navajo Tribal Utility Authority plans to bring high-speed affordable broadband services to the Navajo Nation by deploying 550 miles of new aerial fiber-optic cable and 59 new or modified microwave towers covering 15,000 square miles in Arizona, Utah, and New Mexico.

With regards to future funding, the Department's FY 2011 Budget request includes \$1 million to support the Office of Native American Business Development in the Minority Business Development Agency. This is an increase of \$800,000 and four positions for this office, which is also headed by the Senior Advisor. The timetable for implementing the increase is as soon as the funds are appropriated, and we would appreciate your support for this request. We do not have plans to fund the Senior Advisor from the Departmental Management Salaries and Expenses account. It is particularly difficult to obtain Congressional support for increases to that account, which frequently has taken major reductions during House floor action.

Our end goal is to develop a fully staffed office dedicated to this important work. In the interim, I have indeed designated Don Chapman as Senior Advisor for Native American Affairs. In that role, Mr. Chapman serves as the Indian Country Liaison to the Office of the Secretary, the White House and other federal agencies; develops and implements the Department's tribal Consultation Policy;

and works with all Commerce agencies to leverage resources to support business, infrastructure and natural resource development in Indian Country.

Administration's Views on Spectrum

This past November, NTIA responded to an inquiry from my colleague Ms. Eshoo and stated that the Administration believes in having public interest obligations on spectrum, which is in direct contrast to the views of the Bush Administration position (and which I am happy to hear). In the letter to Ms. Eshoo, your Department had promised to provide the FCC with the Administration's views on having a free broadband service and open access/open platform public interest obligations as the AWS-3 spectrum band is built-out after being auctioned off by the FCC in the very near future. My questions are about those views:

- 2. Does the Administration oppose the FCC imposing a free broadband service build-out obligation?**

Answer: The Administration has not taken a formal position on what obligations the FCC should impose on AWS-3 licensees. As Assistant Secretary Strickling stated in the letter to Representative Eshoo, it is the FCC's responsibility to determine precisely the appropriate conditions and requirements that should be applied in any given instance. In this context, NTIA believes it appropriate for the FCC to consider market factors to provide proper incentives for network build-out and efficient use of spectrum resources along with public interest concerns.

- 3. Does the Administration oppose open access and open platform requirements from being applied to this band?**

Answer: The Administration has not taken a position with respect to specific licensee obligations in this band. NTIA continues to review the record in the proceeding and will now do so in light of its review of the FCC's newly released National Broadband Plan.

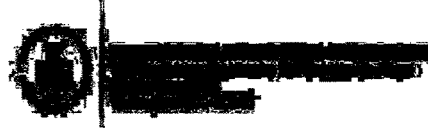
- 4. Does the Administration oppose this spectrum being made available for new entrants into the broadband sector?**

Answer: No, the Administration does not oppose making spectrum available to new entrants. In a January 4, 2010 filing with the FCC, NTIA noted that, in general, auctions are the most efficient way to assign radio spectrum. However, NTIA agreed with the Department of Justice (DOJ) that, in markets with insufficient competition, incumbent providers might attempt to acquire spectrum to forestall entry by potential competitors. NTIA therefore concurred with DOJ that "there are substantial advantages to deploying newly available spectrum in order to enable additional providers to mount stronger challenges" to incumbent providers. See Letter from Assistant Secretary Lawrence E. Strickling, NTIA, to FCC Chairman Julius Genachowski, at 5,

5. **It is my understanding that the FCC, your partner agency in managing spectrum, is prohibited by Section 309(j)(7) of the Communications Act from considering federal revenues in determining how to allocate, auction, and assign commercial spectrum in the public interest. Can you assure me that no such considerations are playing a part in your department's interactions with the FCC as it develops its National Broadband Plan?**

Answer: I can assure you that to the limited extent the FCC consulted with the Department in its development of the spectrum-related section of the National Broadband Plan, Federal revenue considerations played no part in any information or suggestions the Department shared with the FCC.

[The letter follows.]



January 4, 2010

The Honorable Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: National Broadband Plan, GN Doc. No. 09-51

Dear Chairman Genachowski:

The National Telecommunications and Information Administration (NTIA) welcomes the opportunity to express the Administration's views on the development of the National Broadband Plan. The Commission's fundamental challenge is to promote the unregulated, market-driven innovation that has been the hallmark of the Internet economy, while also encouraging continued investment in and deployment of the open communications networks on which that economy rests. Achieving this balance is vital in order to realize the Administration's over-riding goal of connecting all Americans to the Internet at broadband speeds and assuring continued innovation in Internet content and services for consumers, businesses, and all levels of government. This letter presents the Administration's views on the proper balance between regulation and market forces in the Internet environment. Our views are informed by the *ex parte* filing in this proceeding of the Antitrust Division of the United States Department of Justice analyzing the competitive dynamics in the broadband Internet access marketplace.¹

In less than two decades, the Internet has transformed the way in which Americans gather and disseminate information, engage with their government and the political process, manage their social relationships, work, and shop. In 2008, about 190 million Americans spent, on average, more than 60 hours a month on the Internet at home or at work.² Similarly, the Internet has helped businesses expand and streamline their supply chains; find, market, and serve customers; and reduce costs and increase productivity. The benefits to the U.S. economy are substantial: one study estimated that the advertising-supported portions of the Internet alone directly and indirectly employ some three million people and create approximately \$444 billion in value annually.³

The Internet also has sharply reduced barriers to entry and spurred innovation in markets ranging from retail to new media. It provides a communications platform that has enabled virtually anyone with a good idea or an interesting point of view to find and build a customer

¹ *Ex Parte* Submission of the United States Department of Justice in GN Docket No. 09-51 (filed Jan. 4, 2010) (*DOJ Ex Parte*).

² J. Deighton, J. Quelch, Hamilton Consultants, Inc., "Economic Value of the Advertising-Supported Internet Ecosystem, at 24-25 (June 2009) ("Economic Value"), <http://www.iab.net/media/file/Economic-Value-Report.pdf> (citing estimates from Nielsen Online, comScore Media Metrix, Harris Interactive, and eMarketer).

³ *Id.* at 4.

base or an audience. Jeff Bezos launched Amazon as a crude website in July 1995; in 2008, the company had total sales in excess of \$19 billion and nearly 21,000 employees.⁴ Google was founded a decade ago in a Silicon Valley garage; in 2007 the firm earned more than \$16 billion and had more than 15,000 employees.⁵

The experiences of those two companies are not unique. The Internet has enabled hundreds of other firms to create and to participate in an ever-changing, intensely competitive service and application marketplace that piques and satisfies the interests of American consumers. It is not surprising, then, that Congress more than a decade ago declared that the “vibrant and competitive” Internet marketplace should be “unfettered by Federal or State regulation.”⁶

The Internet’s innovation ecosystem is built on, and thus depends upon, a communications infrastructure operating at broadband speeds, with robust bi-directional service. Indeed, the social and economic fruits of the Internet economy are the result of a virtuous cycle of innovation and growth between that ecosystem and the underlying infrastructure – the infrastructure enabling the development and dissemination of Internet-based services and applications, with the demand and use of those services and applications by consumers and businesses driving improvements in the infrastructure which, in turn, support further innovation in services and applications. And, of course, rivalry among the various firms providing broadband services also has expanded the availability and capabilities of that underlying infrastructure.

The National Broadband Plan has a vital role to play in realizing the Administration’s vision to spur continued innovation in our information-driven society; a more accessible, transparent, and democratic government; and a new wave of technology-driven innovation that will enrich our economic life and make the United States more competitive in global markets.⁷ The Plan properly focuses on the development of that broadband infrastructure. The Commission’s task is to seek maximum reliance on market forces where possible and deploy government oversight where needed. We must identify policies that both promote “faster and more widely available broadband” infrastructure and, in the words of President Obama, “preserve the fairness and openness that led to the flourishing of the Internet in the first place.”⁸

Many Residential Subscribers Currently Lack Choices in Broadband Providers

The United States has benefited from rapid growth of broadband Internet access services over the past decade. The Commission’s most recent figures record some 88.4 million

⁴ See *Amazon.com 2008 Annual Report* at 4, 19 (Apr. 2009), http://phx.corporate-ir.net/External_File?item=UGFyZW50SUQ9MjAyN3x0aGlsZlEjEPS0xfFR5cGU9Mw==&t=1; Christine Frey and John Cook, “How Amazon.com survived, thrived and turned profit,” *Seattle Post-Intelligencer*, Jan. 28, 2004, available at http://www.seattlepi.com/business/158315_amazon28.html.

⁵ “Economic Value,” *supra* note 2, at 38.

⁶ 47 U.S.C. § 230(b)(2) (1996).

⁷ See generally Office of Science and Technology Policy, “Technology,” <http://www.ostp.gov/cs/issues/technology>.

⁸ Remarks by the President on Innovation and Sustainable Growth, Hudson Valley Community College, Troy, NY, Sept. 21, 2009, http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Innovation-and-Sustainable-Growth-at-Hudson-Valley-Community-College (President’s Remarks).

broadband lines in service as of July 2008, as compared to less than 2 million in December 1999.⁹ More than one-half of those lines provide transmission speeds of 2.5 megabits per second (Mbps) downstream.¹⁰

Yet, these impressive national figures obscure the fact that locally, where residential consumers make their purchasing decisions, they frequently have limited, and often no, choice among broadband Internet access service providers. The Commission's recent Broadband Status Report indicates that "[a]t most 2 providers of fixed broadband services will pass most homes."¹¹ Furthermore, "50-80% of homes may get speeds they need only from one provider."¹² Thus, even in areas where two wireline networks are deployed, consumers seeking to use the most bandwidth-intensive applications (e.g., high-quality, streaming video) may only have a single viable choice of provider.¹³

The economics of providing wireline broadband Internet access service suggest that market forces alone may not produce additional entry. Fixed broadband infrastructure, unlike the Internet-based services and applications that ride upon it, involves very substantial sunk costs and rather low marginal costs associated with adoption and usage by incremental households.¹⁴ Because of the large fixed and sunk costs of wireline networks, it is likely that additional wired competitors will enter only those markets with the greatest density of users.¹⁵

A key question looking forward is whether emerging "fourth generation" (4G) wireless services will have price and performance characteristics that might make them a viable alternative to wireline services for a significant number of customers.¹⁶ Although early

⁹ See "High-Speed Services for Internet Access: Status as of June 30, 2008," Table 4 (July 2009) (2009 Report), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-292191A1.pdf; "High-Speed Services for Internet Access: Status as of June 30, 2001," Table 2 (Feb. 2002), http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/hspd0202.pdf. The statistics are for "advanced" service lines, which support transmission speeds of at least 200 kilobits per second in both directions. Given the evolution of the market over the last decade, that seems a reasonable minimum benchmark for identifying "broadband" services. The Commission recently used the term "basic broadband" to refer to services with an information transfer rate greater than 768 kilobits per second (kbps) and less than 1.5 megabits per second in at least one direction. See *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans*, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691, 9701, n.66, *recon.*, 23 FCC Rcd 9800 (2008). For purposes of its Broadband Technology Opportunities Program, NTIA defines "broadband" to include services offering two-way data transmission at speeds of at least 768 kbps downstream and at least 200 kbps upstream. See *Notice of Funds Availability (NOFA) and Solicitation of Applications, Broadband Technology Opportunities Program and Broadband Initiatives Program*, 74 Fed. Reg. 33104, 33108 (2009), available at http://www.ntia.doc.gov/fnotices/2009/FR_BBNOFA_090709.pdf.

¹⁰ 2009 Report, *supra* note 9, Table 5.

¹¹ "Commission Open Meeting Presentation on the Status of the Commission's Processes for Development of a National Broadband Plan," at 135 (Sept. 29, 2009), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293742A1.pdf.

¹² *Id.* In other words, although there may be multiple providers of above-dialup speeds in a community, many of them will not offer speeds sufficient to support the services and applications that most users demand.

¹³ See *DOJ Ex Parte*, at 13.

¹⁴ Additionally, the costs of that infrastructure can be shared to a considerable degree with other services, notably multichannel video and traditional voice services.

¹⁵ See *DOJ Ex Parte* at 9, 13. It is conceivable that some less densely populated areas may possess certain characteristics (e.g., high income levels) that could attract and sustain multiple wireline providers.

¹⁶ Satellite service does not appear likely to provide significant competition to other broadband technologies for the

projections from industry are encouraging, it is premature to predict when, or even whether, these wireless broadband services will provide the competitive alternatives that can benefit consumers of all services, including wireline. The fact that some wireline customers seem willing to switch to wireless service suggests that the two offerings could become part of a broader marketplace.¹⁷

The next several years will test the limits of wireless broadband, including the adequacy of in-building coverage and the ability of wireless networks to accommodate large numbers of data-intensive users. It remains to be seen, for example, whether WiMax and Long Term Evolution (LTE) technology services will be offered at prices and on terms (e.g., speed and quality) that make them attractive to wireline users. The Commission also must keep in mind that the two largest US wireless providers, Verizon and AT&T, also offer wireline services in major portions of the country, raising the question of whether these providers will market these services as replacements for wireline services, either within the region where they provide wireline services or at all.¹⁸ Finally, we need to be mindful of how future developments in the applications and Internet services markets can affect demand for broadband. Are there “killer” applications on the horizon that will be supported by wireline providers but not wireless?

Possible Policy Responses

Two aspects of local broadband service markets require careful public policy attention. First, in many areas, the broadband market is highly concentrated. And second, the major broadband providers also offer services that are subject to competition from services and applications that rely on broadband facilities to reach prospective customers. Broadband service providers have an incentive to use their control over those underlying facilities to advantage their value-added services or to disadvantage competitive alternatives.¹⁹ In the absence of robust broadband competition, those providers may be able profitably to act on those incentives to the detriment of consumers and competition. The Commission should explore ways to understand and address these concerns.

Promoting Competition

The surest way to deter undesirable conduct by incumbent broadband service providers is to increase local broadband Internet access service competition, because of the competitive

vast majority of Americans. *See id.* at 12 n.27.

¹⁷ *See id.* at 10-11.

¹⁸ *See id.* at 8, 10-11.

¹⁹ *See, e.g., Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications*, Memorandum Opinion and Order, 23 FCC 13028, 13030, ¶ 5 (2008), *appeal pending*, No. 08-1291 (D.C. Cir. filed Sept. 4, 2008) (“Peer-to-peer applications [such as those with which Comcast had interfered] have become a competitive threat to cable operators such as Comcast because Internet users have the opportunity to view high-quality video . . . that they might otherwise watch (and pay for) on cable television. Such video distribution poses a particular competitive threat to Comcast’s video-on-demand (“VOD”) service.”); *id.* at 13055, ¶ 47 (“Moreover, Comcast’s practice selectively blocks and impedes the use of particular applications, and we believe that such disparate treatment poses significant risks of anticompetitive abuse.”); *Madison River Communications, LLC*, Order, 20 FCC Rcd 4295 (2005) (telephone company blocked transmission of VoIP alternative to its voice offerings).

market's demonstrated power to lower prices, improve service, and spur innovation.²⁰ The Commission, of course, has a long-held preference for advancing regulatory goals through structural regulation designed to expand competition in communications markets.²¹ Given the projections of explosive growth in wireless bandwidth requirements, a primary tool for promoting broadband competition should be to make more spectrum available for broadband wireless services.²² The Administration supports exploring both commercial and government spectrum available for reallocation, and favors a spectrum inventory to determine how radio frequencies are currently being used and by whom. The Commission and NTIA also should explore ways to create incentives for more efficient use of limited spectrum resources, such as dynamic or opportunistic frequency sharing arrangements in both licensed and unlicensed uses. NTIA also supports research and development that leads to innovative new spectrum access technologies, because these can spur a new round of innovation that will increase domestic spectrum efficiency through sharing and opportunistic use. New and more efficiently used spectrum can make a significant contribution to a more competitive broadband Internet marketplace. Wireless services for Internet access are tending toward smaller and smaller cell sites, each of which requires connection to national backbone networks. Therefore, along with providing new spectrum for broadband uses, it will remain important for the Commission to assure competitive access to high capacity wireline backhaul facilities.

When new spectrum becomes available for licensed uses the question will become how to assign it to broadband providers in a way that will generate the greatest benefits to the consumers of those services.²³ Under most circumstances, the best approach is to auction the new frequencies, on the theory that the highest bidder – the one with the highest private value – will also provide the greatest benefits to consumers.²⁴ In the presence of market power, however, the bidders with the highest private value may be incumbents intent on forestalling new entry that will compete for the incumbents' existing customer base.²⁵ Based on the Department of Justice's experience with other highly concentrated telecommunications markets, NTIA agrees with the Department that "there are substantial advantages to deploying newly available spectrum in order to enable additional providers to mount stronger challenges to broadband incumbents."²⁶

²⁰ See, e.g., *DOJ Ex Parte* at 14-19.

²¹ See, e.g., *Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, Second Report and Order, 22 FCC Rcd 15289 (2007); *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101 (2006), *aff'd sub nom. Alliance for Community Media v. FCC*, 529 F.3d 763 (6th Cir. 2008); *MTS/WATS Market Structure*, Third Report and Order, 93 FCC 2d 241, *recon.*, 97 FCC 2d 682 (1983), *further recon.*, 97 FCC 2d 834, *aff'd in relevant part sub nom. National Ass'n of Reg. Util. Comm'rs*, 737 F.2d 1095 (D.C. Cir. 1984); *Cartefone*, Decision, 13 FCC 2d 420, *recon. denied*, 14 FCC 2d 571 (1968).

²² See generally, "Comment Sought on Spectrum for Broadband," NBP Public Notice # 6, GN Docket Nos. 09-47, *et al.* (Sept. 23, 2009), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-09-2100A1.pdf.

²³ With advances in dynamic or opportunistic sharing technologies (e.g., "smart" radios), the Commission should explore the potential for expanded unlicensed spectrum use.

²⁴ See *DOJ Ex Parte* at 22.

²⁵ See *id.* at 22-23.

²⁶ See *id.* at 23.

Addressing Provider Behavior

Given the slow progress in the development of vigorous competition in local broadband markets to date, the Commission should be alert to potential anticompetitive behavior by incumbent providers. We urge the Commission to examine what in many areas of the country is at best a duopoly market and to consider what, if any, level of regulation may be appropriate to govern the behavior of duopolists. In so doing, however, the Commission should eschew price regulation, whether as a means of controlling retail rates or as a means of giving entrants access to the incumbents' broadband facilities. In view of the difficulty that government has in determining efficient prices, price regulation is likely to stifle investment in broadband infrastructure or to discourage broadband service innovation.²⁷

On the other hand, the Commission should examine the terms under which firms offer broadband Internet access, including policies concerning and affecting the flow of traffic over their networks. For that reason, the Administration fully supports the Commission's initiating a rulemaking to reexamine the 2005 Broadband Policy Statement.²⁸ NTIA expects to offer views on the issues presented in that rulemaking at the appropriate time. Those positions will be informed, in part, by NTIA's experience to date with our Broadband Technology Opportunities Program (BTOP) and the Rural Utilities Service's (RUS) Broadband Initiatives Program, which award grants for infrastructure deployment and other purposes. At Congress' direction, NTIA and RUS require all infrastructure applicants to adhere to nondiscrimination requirements akin to those outlined in the Commission's Policy Statement. For the first round of grants, NTIA and RUS have received nearly 1,500 infrastructure applications requesting more than \$23 billion in funds. These applications suggest that there are a significant number of commercial and non-commercial network operators that are prepared to provide Internet access service under non-discrimination rules.

Improving Information Disclosure

As the Commission attempts to increase the amount of competition in local broadband service markets, it should seek to improve the *quality* of competition by ensuring that consumers get complete and accurate information about the broadband services available to them. In particular, the Commission should identify the types of price and service data that users need to make intelligent choices among those options.²⁹ In so doing, the Commission should recognize that there is a difference between merely technical disclosure, in which information is available in a technical format, and disclosure that actually informs choice. Timeliness of disclosure is also important because consumer choices must be based on current information to be meaningful. Moreover, consumers must be able to compare the choices actually available to them in their own geographic areas; data aggregated at the national or state level is of little use.

²⁷ See *id.* at 28.

²⁸ See *Preserving the Open Internet*, Notice of Proposed Rulemaking, GN Docket No. 09-191, FCC 09-93 (rel. Oct. 22, 2009), http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-93A1.pdf. See also *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, Policy Statement, 20 FCC Rcd 14986 (2005).

²⁹ See *DOJ Ex Parte*, at 24-25 (discussing, among other things, the difference between advertised ("up to") transmission speeds and actual average speeds).. The Commission should take care to ensure that information disclosure does not facilitate price collusion or limit the ability of providers to compete on price. *Id.* at 27.

The Commission should also recognize that consumers are not the only ones that need timely and accurate information about the capabilities and characteristics of broadband services. Developers of devices, services and applications need basic information about the way that broadband networks operate so that developers can ensure that their products will work effectively and efficiently on those networks. As importantly, developers need information about how broadband networks change to ensure compatibility over time. NTIA therefore recommends that, in addition to prescribing service disclosure requirements for the benefit of consumers, the Commission should adopt network disclosure rules to promote innovation in devices, services, and applications.

Improved Collection and Mapping of Broadband Service Data

As noted, markets for broadband services are local in nature. Market conditions, however, vary substantially from one region to another, with differences in deployment patterns across geographic areas, as well as divergences in the speeds, prices, and quality of available services. Sound policymaking requires reliable, consistent, and systematic data that depict these variations among local broadband markets.

NTIA currently is working to collect broadband data and to make it publicly available. Pursuant to the Broadband Data Improvement Act (BDIA), and with funding provided by the American Recovery and Reinvestment Act (Recovery Act), NTIA is awarding grants to state-designated entities to collect comprehensive data on broadband availability and adoption in each State.³⁰ NTIA will use the data collected to develop a national broadband map that will be publicly available by February 2011.³¹ And, consistent with the BDIA, the Commission is also gathering detailed information on broadband deployment and subscribership, including technologies used and maximum speeds available to consumers.³² NTIA agrees with the Department of Justice that the Commission should expand its data collection effort to include an assessment of the nature and extent of competition in each local broadband market.³³

Conclusion

It is vital to the U.S. economy and society “to preserve an open Internet in which all Americans can participate and benefit.”³⁴ The National Broadband Plan is critical to that effort because broadband services provide the indispensable pathways for Internet communications. As noted above, the Commission’s task is to identify policies that will continue the beneficial

³⁰ See BDIA, Pub. L. No. 110-385, Tit. I, § 106, 122 Stat. 4099-4102; American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, Div. A, Tit. II, 123 Stat. 115, 128; NTIA, *State Broadband Data and Development Grant Program*, 74 Fed. Reg. 32545 (2009) (*NTIA Broadband Data NOFA*), http://www.ntia.doc.gov/fmnotices/2009/FR_BroadbandMappingNOFA_090708.pdf.

³¹ See *NTIA Broadband Data NOFA*, *supra*, 74 Fed. Reg. at 32546.

³² See BDIA, *supra* note 30, Tit. I, § 103, 122 Stat. 4096, 4096-4098 (2008); *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691, *recon.*, 23 FCC Rcd 9800 (2008).

³³ See *DOJ Ex Parte*, at 19-20.

³⁴ President’s Remarks, *supra* note 8.

interaction between the communications infrastructure and the Internet superstructure – policies that promote efficient investment in broadband networks and services, while ensuring that those facilities are operated in ways that will fuel the next stage of innovation at the Internet “edge.” The Commission should work to expand competition in local broadband Internet access services, in order to reduce prices, improve quality, and spur innovation. It should promote information disclosure by broadband service providers that can both spur competition and assist consumers. Finally, NTIA encourages the Commission to continue in its balanced, deliberative approach to addressing the potential for discriminatory and anticompetitive behavior by broadband service providers while the broadband services market continues to develop.

Respectfully submitted,

/s/ Lawrence E. Strickling

Lawrence E. Strickling

cc: The Honorable Michael J. Copps
The Honorable Robert M. McDowell
The Honorable Mignon L. Clyburn
The Honorable Meredith Attwell Baker
Marlene H. Dortch, Secretary

Ranking Member Frank R. Wolf

Questions for the Record

Stimulus - Broadband Grants

In addition to your regular appropriations for fiscal year 2009 and fiscal year 2010 the Department of Commerce received almost \$8 billion in the Stimulus bill. At the end of fiscal year 2009 you had obligated only about 18% of that funding, and only 7.2% had been outlayed.

- 1. Can you bring us up to date on the obligation and expenditure rates by program?**

Answer: Following the Representative Wolf QFRs, the following table (American Recovery and Reinvestment Act Update) provides the Total Obligation and Unobligated Balance data for the Department of Commerce's American Recovery and Reinvestment Act (ARRA) funds. As a Department, Commerce has obligated \$2.4 billion with an unobligated balance of \$5.4 billion, as of March 23, 2010.

[The table follows:]

ARRA Update
Total Obligations, Unobligated Balances and Outlays
thru March 23, 2010
Dollars in \$000s

Approp	Project	Total Allocation	2009-2010 Obligations to Date	Remaining Unobligated Balance
EDA S&E	Admin	3,000	643	2,357
EDAP	Philadelphia	32,904	32,904	0
	Atlanta	30,393	30,393	0
	Denver	9,238	9,238	0
	Chicago	27,749	27,749	0
	Seattle	33,473	33,473	0
	Austin	13,243	13,243	0
Total, EDA Approp		150,000	147,643	2,357
	2010 Coverage Follow-up	30,000	25,659	4,341
	2010 Census Advertising	105,000	112,934	(7,934)
	2010 Census Partnership	115,000	62,777	52,223
	2010 Census Early Operations	750,000	138,220	611,780
Total, Census Approp		1,000,000	339,590	660,410
ORF	Hydrographic Survey Backlog	40,000	39,784	216
	Habitat Restoration	167,000	155,589	11,411
	Environmental Reviews	3,000	1,482	1,518
	Vessel Maintenance and Repair	20,000	15,972	4,028
PAC	NOAA Climate Computing	170,000	83,567	86,433
	NEXRAD Acceleration	7,400	0	7,400
	Wx Forecast Offices	9,000	5,168	3,832
	Satellite Development (IAA Air Force/NASA)	74,000	73,452	548
	Pacific Regional Center (IAA NAVFAC)	142,000	141,658	342
	SW Fisheries Sci Center	102,000	6,442	95,558
	Fairbanks Satellite Facility (IAA Army Corps of Engineers)	9,000	9,000	0
	General Facilities Repair	8,600	7,426	1,174
	FSV Construction	78,000	496	77,504
Total, NOAA Approp		830,000	540,036	289,964
STRS	Equipment	108,000	22,531	85,469
	Research Grants	34,125	30,482	3,643
	PostDoc Fellowships	21,775	12,596	9,179
	Fellowships Program	19,500	0	19,500
	Research Contracts	16,600	9,985	6,615
	IT Infrastructure	9,000	6,453	2,547
CRF	Internal Construction	172,000	11,631	160,369
	Construction Grants	177,900	170,952	6,948
STRS/CRF	Administrative Support	21,100	8,372	12,728
Total, Direct NIST Approp		580,000	273,002	306,998

ARRA Update
 Total Obligations, Unobligated Balances and Outlays
 thru March 23, 2010
 Dollars in \$000s

Approp	Project	Total Allocation	2009-2010 Obligations to Date	Remaining Unobligated Balance
DOE	Smart Grid	10,000	2,290	7,710
NTIA	BTOP	2,230	979	1,251
HHS	Health IT	20,000	628	19,372
Total, All NIST Spending		612,230	276,899	335,331
BTOP	Admin	140,398	83,854	56,544
	BTOP	3,749,000	571,836	3,177,164
	Public Computer Center	200,000	33,632	166,368
	Sustainable Broadband	250,000	7,683	242,317
	Broadband Inventory Mapping	330,547	108,202	222,345
Coupons	Coupons	579,395	337,800	241,595
Total, NTIA Approp		5,249,340	1,143,007	4,106,333
Agriculture	RUS	235	235	0
Total, All NTIA Spending		5,249,575	1,143,242	4,106,333
Total, DOC ARRA Spending		7,841,805	2,447,410	5,394,395

2. How you are doing in terms of getting these funds obligated and spent for their intended purposes?

Answer: Since the passage of the Recovery Act, the Department has successfully balanced the urgency of addressing one of the worst economic crises in history with the need to demonstrate prudent stewardship of taxpayer dollars. As provided in the table, the Department is working to meet program milestones to obligate the remaining Stimulus funds by the September 30, 2010 deadline in a fiscally responsible manner.

3. How are you measuring the impact of these programs on economic recovery?

Answer: The following provides the respective measuring approaches and direct impacts of Department of Commerce Bureaus for ARRA programs:

EDA

EDA tracks the performance of its Recovery Act stimulus funds through stringent reviews of quarterly reports to FederalReporting.gov. These reports provide information on the amount of full-time positions created/retained, the amount of funds received, the number and amount of sub-contracts, etc. Additionally, EDA monitors the start date of its stimulus projects to ensure that they start within the established timeframe.

Census

The Census Bureau is now employing over 76,000 individuals in temporary positions with Recovery Act funds. Some of the positions have lasted for many months. We expect to have hired about 150,000 total Recovery Act funded positions by the end of FY 2010.

NOAA

With this funding, NOAA has infused new resources into the economy and also invested in critical infrastructure to meet NOAA's mission needs. NOAA is particularly proud of efforts to create jobs as habitats are restored. Many of NOAA's grants for marine and coastal habitat restoration are located in areas of high unemployment and have provided jobs to Americans during a critical phase of our economic recovery. NOAA's grant recipients reported creating 514 jobs through September 30, 2009 and 794 jobs for the 1st quarter of fiscal year 2010.

NIST

NIST research is intended to help overcome barriers to long-term scientific and technical innovation by addressing discrete measurement problems in critical technology areas or areas of national need. As such, the larger impact will be realized over the long term and support the goal of the ARRA to provide for economic recovery based on scientific innovation. The numbers for immediate

job creation are not yet available, as the first cycle of ARRA-reporting for these grants has not yet occurred. The first round of reporting will occur in April 2010.

The ARRA spend plan included several distinct sub-programs to support the NIST Postdoctoral Research Associateships program. In FY 2009, there were 12 post-doctoral (postdocs) "Early Starts" supported with the funds -- these are "traditional" National Research Council (NRC) Postdocs who were allowed to begin tenure early with ARRA funds, as well as 42 NIST NRC postdocs hired through the use of the ARRA funds. NIST has also allocated \$9 million of the funds to the NRC for the purpose of administering a program to select up to 45 additional fellows over a 5-year contract period. This new program is in addition to the regular NRC Postdoctoral program. The first 34 of these fellows have been selected, and eight have recently started at NIST. This is a current total of 88 new positions, with up to another 11 expected. Finally, in addition to these new fellowships, some existing fellowships were converted to "term appointments" using the ARRA funds, enabling those associates to remain at NIST and continue research and contributions to NIST research, and enabling them to have additional time to find more permanent positions.

The ARRA funding enabled 39 postdocs who were already working at NIST, but nearing the end of their fellowships, to have their positions converted to "term appointments" lasting for up to an additional 17 months. Up to 30 additional postdocs whose fellowships are scheduled to end later in FY 2010 are expected to benefit from these extra-term appointments, for a potential total of 69.

NTIA

Projects funded by the Broadband Technology Opportunities Program (BTOP) are designed to increase broadband access and adoption in communities across America as well as to create jobs, promote broadband training and adoption, and lay the groundwork for sustainable economic growth for years to come. These funds not only meet the near-term economic objectives of the Recovery Act, but they also will continue to pay dividends far into the future in the form of long-term global economic and competitive benefits, heightened innovation, and improved education and health care.

As a condition of their awards, grantees must file quarterly reports regarding the progress of their projects, including data concerning job creation. The first grant recipients are in the early stages of turning their funded proposals into reality, and will begin filing their initial reports in the coming months. In the short-term, BTOP investments will help create thousands of jobs for building infrastructure, installing computer workstations, and developing and implementing outreach to broadband consumers. The types of jobs range from manufacturing fiber-optic cable and other high-tech components, to stringing fiber from pole to pole, to trenching, and to the installation of broadband networking hubs. Computer centers need to be built, and new computers and related hardware and software will be installed and networked into public computing centers in the short-term as

well. Outreach strategies need to be planned and executed, and staff will need to be trained how to best provide communities with needed broadband information and workforce skills. The data we collect in the near-term will show how the broadband initiatives contributed to the overall Recovery Act economic stimulus activity. It will also start establishing the measurable impact these projects will have. Based upon recipient reporting, NTIA will begin to be able to measure BTOP's impact on economic recovery by estimating jobs created, miles of broadband networks deployed, dollars spent on equipment and labor, numbers of Americans trained and educated, and the numbers of Americans that benefit from expanded access to and adoption of broadband technologies.

Over the long-term, BTOP investments will have benefits that will be critical to our nation's overall economic future. BTOP-funded projects will boost economic development for communities held back by limited or no access to broadband , heighten public safety and security , enhance employability, enable innovation, improve the nation's education, provide improved access to better health care, and foster energy efficiency and independence. These investments will ultimately help preserve America's economic competitiveness and leadership in the world.

4. Please identify every instance and amount where funds are requested in FY11 to continue or oversee an activity funded in the Stimulus bill.

Answer: The Department is requesting funding within NTIA to oversee activities related to the BTOP program. The Department also has a \$3.4 million increase to support the NIST Postdoctoral Fellowship program in FY2011.

In its Fiscal Year 2011 Budget Request to Congress, the Department of Commerce requested approximately \$24 million for administration and oversight of BTOP. BTOP projects must be substantially complete within two years of award and fully complete within three years of award. Monitoring our investments and providing technical assistance to grantees to maximize their opportunity to succeed will provide the safeguards necessary to protect the public's investment in these broadband projects. Much of this critical activity will take place after the September 30, 2010, date beyond which NTIA has no authority to obligate Recovery Act BTOP funds. The Department looks forward to working with Congress to ensure enactment of this proposed authority and funding to effectively administer and monitor BTOP grants to ensure that taxpayer dollars are spent consistent with the Recovery Act's purposes.

The Stimulus bill provided Commerce with \$4.7 billion to expand broadband access to unserved and underserved communities. I understand that through February 18th only about \$700 million of these funds have been awarded and the Inspector General has raised concerns with the Department's ability to award the remaining funding before the end September when the funds expires. Your fiscal year 2011 budget request proposes a \$23.7 million increase to improve oversight of these grants. Of course, this is after funds have been awarded.

5. What are you doing to ensure that the remaining broadband grant funds are awarded to worthy grant applicants and not awarded haphazardly to simply get the funds out before the appropriation expires?

Answer: As of March 15, 2010, NTIA has awarded \$1.1 billion for 72 BTOP Infrastructure, Public Computer Center, and Sustainable Broadband Adoption grants, and awarded \$102 million for 54 Broadband Mapping grants. As stewards of taxpayer funds, the Department is determined to invest every dollar wisely. Our thorough review process helps guard against investments that are not cost-effective or where it appears that the applicant cannot financially sustain the project beyond the life of the grant. And our post-award orientation, training, and technical assistance provide our grantees with every opportunity to be successful.

Before making an award, NTIA undertakes an extensive and thorough review of applications to ensure the prudent use of taxpayer funds. The multi-step process includes an eligibility pre-screening, an evaluation by expert reviewers to identify

the best projects, and a thorough top-to-bottom scrubbing during our due diligence review phase to ensure that only the highest quality and most sustainable investments are funded. Our due diligence includes:

- performing detailed assessments of the application's proposed project benefits and service areas;
- analyzing the project's technical viability;
- analyzing the project's budget and financial sustainability;
- reviewing audit findings and credit checks;
- evaluating potential environmental and historic preservation impacts of the project;
- validating the proposal's feasibility, consistency, and accuracy; and
- reviewing information supplied by existing service providers regarding the proposed funded service areas.

During due diligence review, NTIA staff engages directly with applicants to resolve concerns or questions, requests supplemental information in order to support the in-depth application review, and analyzes any requests for waivers from programmatic or statutory requirements. All of these efforts have helped ensure that projects funded by NTIA fulfill the purposes established by Congress in the Recovery Act and achieve the aggressive goals developed by the Program. The Department will continue to perform this extensive review of all projects and is on track to award all BTOP grants by the statutory deadline of September 30, 2010.

National Export Initiative

The International Trade Administration budget includes an increase of \$78.5 million as part of the National Export Initiative.

6. What will this program entail, how does it fit in with what other agencies are doing, and what are the expected impacts on U.S. exports and job creation?

Answer: The National Export Initiative (NEI) provides an unprecedented, high-level attention to our nation's export effort - and is a visible demonstration of the President's commitment to increasing exports. The NEI will create, for the first time, an "export promotion cabinet" that will invest several cabinet secretaries with direct responsibilities to creating strategies to achieve progress in key areas important to exporters.

I, as Secretary of Commerce, serve as Chair of the Trade Promotion Coordinating Committee (TPCC). I have made improving interagency cooperation on export promotion and revitalizing the TPCC a top priority.

The coordinating committee brings together 20 federal agencies and departments to work on trade expansion efforts, and it will help operationalize the goals laid out in the NEI.

The Administration is seeking increases to a number of other TPCC agency budgets in order to support more U.S. jobs through exports, including:

- \$54 million funding increase for USDA programs that promote U.S. agricultural exports by developing and maintaining overseas markets and reducing foreign trade barriers and other practices that hinder U.S. agricultural exports.
- \$21 million increase for Ex-Im Bank to be able to process export loans quicker and increase its ability to help small businesses by expanding its staff and utilizing technology more efficiently. The Administration also approved a program budget of \$92.7 million compared to a level of \$58 million for FY 2010, a 60 percent increase. Since Ex-Im Bank collections exceed its expenses there is no appropriations request.
- \$165 million in subsidy budget authority for SBA to support \$17.5 billion in loan guarantees in the Section 7(a) program, which offers a number of loan products to help small businesses develop or expand their export activities. The budget also includes \$5M for SBA's Office of International Trade to continue its small business export promotion efforts.
- \$1 million increase for USTDA to promote investment in clean energy projects.

By leveraging TPCC agencies and corporate partners, ITA would launch a new nationwide export education and awareness campaign, a national series of export conferences, and a program of assistance, outreach, and education tailored to these small and medium sized enterprises (SMEs) to get them to enter more challenging high-growth markets (i.e., China).

Much of the increase would go toward domestic and overseas staffing increases.

7. What are the highest priority activities the ITA will pursue that will lead to increased US exports, especially by small and medium-sized businesses?

Answer: Engagement, outreach and education of SME's will be critical to our effort. In 2007 (latest available information), small businesses were 97 percent of all firms in the U.S. yet accounted for only 30 percent of value of U.S. exports.

The President's NEI calls for a strong focus on the support and empowerment of SME's, and it is critical that these companies have full access to the opportunities provided by foreign markets. Experience has shown us that education and financing are two key areas of particular concern to SME's, and we anticipate that the export promotion cabinet's SME strategy will have a strong focus on these two areas, among others.

The President's Budget will allow ITA to bring on as many as 328 trade experts to serve as advocates for U.S. companies, which will give them the ability to assist more than 23,000 clients to begin or grow their export sales in 2011.

They are going to put a special focus on increasing, by 50 percent, the number of small and medium-sized businesses exporting to more than one market.

Also, the TPCC recently created an SME working group. This group is meeting regularly, and we anticipate that some of its recommendations likely will be included in any strategies developed by the export promotion cabinet.

Finally, as part of the NEI, the president has called upon the Export-Import Bank, which provides critical financing to U.S. companies when private banks are unwilling or unable, to increase its financing available for SME's from \$4 billion to \$6 billion over the next year.

During the last three months alone, the bank has authorized \$1 billion in small business financings and added 112 new small businesses clients, who are selling everything from nanotechnology-based cosmetics to date palm trees to sophisticated polymers.

Decennial Census

The preparations for the 2010 Census have not inspired a lot of confidence. The plan to use hand-held computers for non-response follow up was abandoned after millions of dollars were wasted. This failure increased the estimate life-cycle cost of the 2010 Census by \$3 billion.

- 8. Are you confident that your new cost estimates for non-response follow up will hold and that the overall costs of the 2010 Census will remain within the funding already allocated? When should we be able to say with certainty that the costs are within budget, and that further emergency supplemental funds will not be required?**

Answer: The FY 2010 enacted budget for Non-Response Follow-up (NRFU) is based on cost estimates using a number of components that were developed early in the decade or were revisited when the decision was made to go back to paper operations. However, as the census approached, our knowledge of these components improved based on additional experience and data. These included experiences such as Address Canvassing and Group Quarters Validation as well as revisiting Census 2000 observations and experiences. We also worked with a panel of experts in both headquarters and field operations to determine the impact of this information on cost drivers. Working with subject matter experts, we developed several likely alternative cost scenarios for these components. This analysis indicates that NRFU operations can very likely be completed within the original budget.

However, factors such as the recent increases in vacant housing units and associated moves of occupants to alternative housing that will increase the workload by a currently unknown amount. That amount will not be known until late April. Once we know that workload, it will be a major indicator of whether we have sufficient funds. Other uncertainties that still could affect the final cost of the census include such things as enumerator productivity or natural disasters that could affect the schedule. Nonetheless, our recent analysis indicates that the NRFU operation can likely be completed within the original budget and will not require supplemental funding.

2020 Census

Historically, the cost of decennial census more than doubles from one decade to the next. This is unsustainable. The life-cycle cost of 2010 Census is nearly \$15 billion.

- 9. What are you and the Census Bureau doing now to ensure that the 2020 decennial census will avoid the enormous cost increases that have accompanied the last two decennial censuses?**

Answer: The Census Bureau will be conducting the 2020 Census in an increasingly demographically and culturally diverse nation, with a growing population characterized in part by informal, complex living arrangements and by swiftly evolving technology. We are committed to reducing the census-to-census cost increase, but lowering the cost increase will require fundamental changes in our planning, methods, and processes. Robust, early planning and investment in research and strong program management, risk management, and comprehensive systems engineering are crucial to achieving success in the 2020 Census. We are currently developing an early planning program for the 2020 Census that encompasses these changes with those goals and strategies in mind.

NPOESS

The fiscal year 2011 budget proposes a split in the NPOESS program, and funds new separate programs in NOAA and DOD. The NOAA program costs over \$1 billion in fiscal year 2011, an increase of almost \$700 million.

- 10. What will be the estimated life-cycle costs of the new programs in comparison to the costs of NPOESS?**

Answer: The life cycle cost (LCC) of the NOAA portion of the restructured NPOESS program, now called the Joint Polar Satellite System (JPSS) is \$11.9 billion which include the \$2.9 billion of NOAA funds from FY 2010 and prior years. The total life cycle cost of the restructured NPOESS program will not be

available until the Department of Defense has determined the cost of fulfilling its portion of the restructured NPOESS program.

A comparison of LCCs of the NPOESS program pre- and post-restructuring is difficult because at the time the program restructure was announced, the NPOESS Integrated Program Office (IPO) estimated that LCC was likely to exceed, by nearly \$2 billion, the June 2006 \$14 billion LCC estimate which was determined when the program was subjected to a Nunn-McCurdy recertification process. Because of the likelihood that LCCs would continue to grow under that management structure, the Administration determined that it was in the best interest of the government to restructure the NPOESS program.

11. And describe the changes in what will be delivered to NOAA, and the changes in capabilities of the final products?

Answer: The key elements of the Joint Polar Satellite System (JPSS) will retain the observational requirements of the original NPOESS program; however, NOAA, NASA, and DoD will be responsible for meeting these requirements through their own acquisition processes for their assigned orbits.

NOAA's JPSS-assigned afternoon orbit will maintain the observations that were planned for NPOESS in the afternoon orbit. JPSS will fly the Visible/Infrared Imager/Radiometer Suite (VIIRS), the Cross-track Infrared Sounder (CrIS), the Advanced Technology Microwave Sounder (ATMS), and the Ozone Mapping and Profiler Suite (OMPS).

JPSS will also fly instruments that are being procured with funds from the NOAA Climate Sensor Program - the Cloud and Earth Radiant Energy System (CERES)/Earth's Radiation Budget Sensor (ERBS) and the Total Solar and Spectral Irradiance Sensor (TSIS) instruments. NOAA has initiated discussions with the Japan Aerospace Exploration Agency (JAXA) to collaborate in its Global Change Observation Mission (GCOM) mission to meet the requirements that the Microwave Imager Sounder (MIS) would have provided through the use of the Advanced Microwave Scanning Radiometer (AMSR) instrument planned for the GCOM mission. Development of the Space Environment Monitor (SEM) instrument remains subject to completion of DoD's analysis of opportunities. The JPSS program architecture maintains capability for SEM observations in the afternoon orbit.

12. What is the risk and the range of additional costs to NOAA related to the termination of the NPOESS program beyond those shown in the fiscal year 2011 budget request?

Answer: Since it is an Air Force contract, negotiations regarding the NPOESS contract will be led by the Department of Defense (DoD) on behalf of the government. Termination and settlement costs are highly dependent on the path forward, as well as the government's ability to maintain strict control on its

negotiating position. These activities are extremely acquisition sensitive, and it is premature to discuss the cost of changing the contract until the NPOESS Transition Team has completed its assessment of next steps and DoD has completed its analysis of alternatives at meeting their early morning orbit requirements.

The Limitation of Funds clause on the Northrop Grumman contract requires NPOESS to obligate termination liability on contract each fiscal year. It is possible some termination and settlement costs can carry into FY 2012. The cost is under current review by DoD, and one-half of these costs would be NOAA's responsibility.

13. As a post-mortem on NPOESS, what would you identify as the characteristics that led to failure, and how does the new plan for NOAA's program specifically address those flaws?

Answer: The major challenge of NPOESS was jointly executing the program between three agencies of different size with divergent objectives and different acquisition procedures. The new system will resolve this challenge by splitting the procurements. NOAA and NASA will take primary responsibility for the afternoon orbit, and DOD will take primary responsibility for the morning orbit. The agencies will continue to partner in those areas that have been successful in the past, such as a shared ground system.

The restructured program will also eliminate the NPOESS tri-agency structure that has made management and oversight difficult, contributing to the poor performance of the program. As reported by an Independent Review Team in 2009, the NPOESS tri-agency Executive Committee process of providing management and oversight was ineffective. NOAA through NASA as its acquisition agent will procure the afternoon orbit assets that support its civil weather and climate requirements through program and project management practices that have been refined over decades of experience developing and acquiring space systems. NASA's role in the restructured program will be modeled after the procurement structure of the successful Polar Operational Environmental Satellite (POES) and the Geostationary Operational Environmental Satellite (GOES) programs, where NASA and NOAA have a long and effective partnership. NASA program and project management processes will include thorough and ongoing review and oversight of project progress.

These changes to the NPOESS program will better ensure continuity of crucial civil climate and weather data in the future. A main focus remains continuity of polar-orbiting satellite data. While the Air Force continues to have remaining Defense Meteorological Satellite Program (DMSP) polar-orbiting satellites available for launch for the next few years, NOAA launched its final polar-orbiting satellite in February 2009. Given that weather forecasters and climate scientists rely on the data from NOAA's current on-orbit assets, efforts will focus

development on the first of the Joint Polar Satellite System platforms on ensuring both short- and long-term continuity in crucial climate and weather data.

Telework

The Patent and Trademark Office has been a leader in the Federal government in making telework available to their employees. I understand that more than 5,000 PTO employees telework which is more than 80 percent of their eligible workforce.

14. How many employees telework in other Department of Commerce agencies?

Answer: Throughout the Department, in addition to PTO employees, 4,497 Department of Commerce employees teleworked on a regular, recurring basis; an additional 4,707 teleworked on an episodic/ad hoc/intermittent and/or situational basis during the 2009 calendar year (January 1–December 31, 2009).

15. What are you doing to increase telework opportunities throughout the Department?

Answer: The Department continues to promote the increase in telework opportunities by means of further policy development, improvement in information technology, and through training and awareness.

Policy:

The Department's Telework Plan has been revised to provide more flexibility in the use of telework for unique situations such as emergencies [e.g., pandemic, and continuity of operations (COOP)].

The Department is taking advantage of the Washington, DC metropolitan region's numerous GSA telework centers by allowing their employees to work on either a regular or intermittent basis out of these centers.

The smaller bureaus (e.g., ESA with an employee population of 44) are taking advantage of episodic telework as a means of reducing office coverage challenges. Where practical and feasible in the host country, Bureaus with an overseas presence (i.e. ITA) are promoting telework arrangements for their overseas assignments. Some challenges encountered are host country IT limitations (e.g., size of bandwidth).

Information Technology:

The Department uses its time and attendance system to record all telework hours worked. The Department has developed and continues to research new

solutions for secure remote access to support our teleworkers. The Department has issued a Remote Access policy to ensure that access to Information Technology (IT) systems from remote locations is provided to users in a secure and effective manner. The set of requirements defined in the implementation standard is intended to protect DOC IT networks and servers from the risks inherent in remote access. The Department has implemented several secure remote access solutions that facilitate teleworking.

Training and Orientation

The Department requires both the employee and supervisor take telework training before entering into a telework agreement. All bureaus are providing more frequent training and employee(s)/manager orientations to support utilizing telework as a workplace flexibility. Many bureaus hold annual town hall meetings to discuss the subject and cover telework policies and practices at new employee orientation. The Department's learning management system (Commerce Learning Center) offers on-line telework training for both employees and managers.

The National Oceanic and Atmospheric Administration during 3rd quarter 2010 (April – June) timeframe will issue additional telework notifications to employees which will include human interest stories and communicate the benefits of telework from both an employee and management perspective.

International Trade Administration – China

The Committee included language in the fiscal year 2010 bill directing the ITA to ensure that American commercial officers and locally-engaged staff receive human rights training, and requiring a plan from ITA. The purpose of this training is to ensure that when counseling U.S. businesses ITA staff should include information about human rights, the rule of law and corporate responsibility. We now have the plan from ITA and I understand that the goal is to train 100% of their international field-based staff this year, whether it is classroom training or web-based training. The plan however does not include a cost estimate.

16. How much do you intend to allocate from FY10 appropriations for this purpose, and can you assure the Committee that ITA will be able to meet their human rights training goals this year with the funding available?

Answer: ITA will meet their goal of training all of their international field based staff this fiscal year by spending \$500,000 from Executive Direction and Administration funds..." for human rights training. On February 19, 2010, ITA submitted to the House and Senate Committees on Appropriations its training plan to ensure that Commercial Service Officers and Locally Engaged Staff (LES) receive human rights training so they may effectively counsel U.S. businesses on human rights, rule of law and corporate responsibility.

As stated in the training plan, “[t]he goal for FY 2010 is to reach 100 percent of Commercial Service international field-based staff with at least one training format.

- The number of ITA client-facing staff targeted for classroom-based training in FY 2010 is approximately 300 Commercial Service Officers and LES.
- Webinars and computer-based training will be available to the population worldwide, so that all ITA employees – especially field-based trade professionals – will have the opportunity to participate in human rights, rule of law and corporate responsibility training this year.”

At this date, classroom based training is planned for numerous posts worldwide, a schedule of training webinars is being scheduled, and ITA is utilizing the Department’s learning management system to host and track web-based training which employees worldwide can access 24 hours a day.

National Climate Service

NOAA has announced its intent to create a NOAA climate service. This was done absent any proposal in the FY11 budget, and absent any notifications to this Committee. We included funding in the FY10 bill for NAPA to conduct an analysis of options for establishing a Climate Service.

- 17. What is the scope and timetable for this NAPA effort, and when can the Committee expect to see more information about possible options? Your testimony indicated that any organizational change on a NOAA climate service would occur next fiscal year.**

Answer: NOAA awarded a contract to NAPA on March 19, 2010 for the climate service study required in the FY2010 Bill. Based on discussions between NAPA and Appropriations Committee staff, the original date due for the report was extended from 120 days out to 180 days. As a result, the contract specifies that the final report is due to NOAA on September 14, 2010. That said, over the past two years, NOAA has been actively engaged in evaluating climate service activities within the agency. NOAA’s proposal is well thought out and based on strong foundation of input and analysis from groups including NOAA own scientists, the National Research council, the NOAA science advisory Board and others.

- 18. Once the NAPA study is completed, can we expect to see a legislative proposal or budget amendment to establish a climate service in NOAA?**

Answer: NOAA will be working with Congress on a reprogramming package that would best allow NOAA to accomplish its mission, both in climate and in science to support its mission. NOAA is committed to developing a structure that will best

allow NOAA to serve the American people by providing timely, accurate, and relevant climate information to allow them to make the best possible decisions for their families, communities, and businesses. . The NAPA report will provide valuable information to NOAA as it develops its reprogramming package, as well as Members of Congress and staff as they look at NOAA's eventual reprogramming package submission.

WEDNESDAY, MARCH 17, 2010.

**NOAA (NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION) FY2011 BUDGET OVERVIEW**

WITNESS

**DR. JANE LUBCHENCO, UNDER SECRETARY OF COMMERCE FOR
OCEANS AND ATMOSPHERE AND NOAA ADMINISTRATOR**

OPENING REMARKS

Mr. MOLLOHAN. The hearing will come to order. Good morning, welcome.

Today we will hear testimony from Dr. Lubchenco, NOAA Administrator and Under Secretary of Commerce for Oceans and Atmosphere. This is Dr. Lubchenco's first opportunity to testify before this Subcommittee.

Welcome.

Ms. LUBCHENCO. Thank you, Mr. Chairman.

Mr. MOLLOHAN. NOAA's fiscal year 2011 budget request includes \$5.5 billion for NOAA, an increase of \$808.6 million over the fiscal year 2010 enacted level, or a 17 percent increase.

The majority of this increase or \$678.6 million is attributable to the proposed restructure of the National Polar Orbiting Environmental Satellite System. NPOESS, a NOAA/DoD partnership with NASA playing a supporting role, has experienced technical and management challenges, cost overruns, and schedule slips, and the fiscal year 2010 Omnibus statement urged the Administrator to resolve these problems.

In response, the Administration has proposed a new approach under which DoD and NOAA would each acquire satellites for their respective orbits that would continue to share data.

The new approach will be referred to as the Joint Polar Satellite System. This a significant change designed to ensure continuity of critical climate data and we want to explore the reasons for the new approach as well as the proposed plan in some depth.

There is also \$155 million in increases for NOAA's other satellite programs, including \$63.5 million for the Geostationary Orbiting Environmental Satellite, GOES-R, which had been delayed by a contract protest.

We want to get a status update on these critical programs and explore the need for increases.

NOAA is an agency with multiple missions and the proposed budget provides a variety of topics. Unfortunately, we simply do not have time to discuss them all.

However, one of the more significant requests in the fiscal year 2011 budget is \$54 million, an increase of \$36.6 million to accelerate and enhance the implementation of a National Catch Share

Program. Will this program ensure jobs for commercial and recreational fisherman and the profitability of coastal communities?

We want to understand the elements of this program and why such a significant increase is needed now and we need to know why taxpayers should fund the cost of ensuring a sustainable resource for the benefit of private industry.

And last but far from least, on February the 8th, 2010, the Department of Commerce and NOAA announced the intent to reorganize and create the National Climate Service. The programming request will not reach the Committee for some time, but we understand that the Agency hopes that the reorganization can begin in fiscal year 2011.

We will ask you to share the details which you can convey and the reason for the timing of the announcement.

The mission of the NOAA Climate Service is critically important. It is unfortunate that the process of announcing it has overshadowed the efforts to create it.

Dr. Lubchenco, thank you for coming. I am going to ask Congressman Wolf, invite him to make opening statement, following which your written testimony will be made part of the record and we will invite you to present your oral testimony.

Mr. Wolf.

Mr. WOLF. Thank you, Mr. Chairman.

Welcome to the Committee. I look forward to your testimony.

Mr. MOLLOHAN. Dr. Lubchenco.

OPENING STATEMENT BY DR. LUBCHENCO

Ms. LUBCHENCO. Thank you.

Members of the Committee, thank you very much for the leadership and the generous support that you have shown NOAA. It is greatly appreciated as we work to improve our products and services for the American people.

As you know, on February 27th, the Pacific Ocean was impacted by a tsunami originating from an 8.8 magnitude earthquake off the coast of Chile. Fortunately, this tsunami was not as destructive as it could have been, but it provided a graphic illustration of how very far we have come in the past decade in making timely and accurate tsunami warnings and providing the public with information needed to make decisions.

This event demonstrates that that continued investment in observations, modeling, research, and outreach is vital to saving lives and property.

And our spring outlook announced just yesterday is intended to alert city and state emergency managers and citizens that over one-third of the contiguous United States has an above average flood risk in the coming weeks and months.

The President's fiscal year 2011 budget request provides a solid foundation to continue to advance NOAA's mission and for meeting our most pressing needs.

The request of \$5.6 billion represents an \$806 million increase over fiscal year 2011, as you noted, and addresses a set of priorities that will guide our actions in the coming year.

I would like to highlight a couple of significant areas of progress over the last fiscal year.

In the area of climate, we have continued to provide climate observations and analysis while engaging with our partners on how to strengthen our climate services.

We have made important progress in rebuilding our fisheries, recovering protected species, and sustaining the livelihoods and communities they make.

We introduced a draft Catch Share policy and are committed to improving fisheries enforcement and our relationship with the fishing communities and industries. And we made good progress in meeting the mandates of the Magnuson-Stevens Act and commissioning the NOAA ship Pisces which will support fishery research in the Gulf of Mexico and the southeast United States.

NOAA was also fully engaged in the President's Interagency Ocean Policy Task Force. The release of a draft national ocean policy and a framework for coastal and marine special planning reflects the growing recognition that healthy oceans matter and that protecting and restoring critical habitat is essential.

The fiscal year 2011 budget includes new investments to strengthen our science, foster innovation, rebuild and improve fisheries, and sustain and enhance satellite observations.

NOAA has become a global leader in reporting on the state of the central climate variables and proposes to establish a new line office called the NOAA Climate Service.

I want to thank the Committee for all the support that you have given us for improving NOAA climate services. The office will enable NOAA to better address the growing needs for climate services.

NOAA's fiscal year 2011 request includes \$435 million in support of the U.S. Global Change Research Program with \$77 million in increases for core climate services and observations.

NOAA's satellites provide the data and information that are vital to every citizen in our nation.

A funding increase of \$678.6 million for a total of \$1.1 billion is requested to support the Administration decision to restructure the NPOESS Program and create within NOAA the Joint Polar Satellite System.

NOAA is requesting an increase of \$62.5 million for a total of \$730 million to continue the development of the GOES-R Program to be prepared for launch near the end of 2015.

The fiscal year 2011 budget also supports NOAA's responsibilities in transforming fisheries and protecting species. The budget includes an increase of \$36.6 million to establish a National Catch Share Program. The program will provide a national framework to develop, manage, and improve Catch Share Programs in fisheries across the nation.

This increase will also continue the transition of the Northeast Groundfish Multi-Species Fishery to sector management as well as support new voluntary Catch Share Programs in the Mid-Atlantic, Gulf of Mexico, and Pacific Coast regions.

The fiscal year 2011 budget request also includes an increase of \$10.4 million in the Community-Based Restoration Program. NOAA plans to increase fish passage and spawning and rearing habitats by implementing larger scale ecological restoration in target areas.

We will continue supporting the Species Recovery Grant Program with a requested increase of \$9.6 million. This will allow NOAA to provide grants to conduct priority recovery actions for threatened and endangered species, including restoring habitat, monitoring population trends, developing conservation plans, and educating the public.

With a total request of \$65 million, the Pacific Coast Salmon Recovery Grants Program will continue to leverage federal, state, and tribal resources in the Pacific Coast region to implement projects that restore and protect salmonid populations and their habitats.

In fiscal year 2011, NOAA will continue to support its education programs and work to implement our new education strategic plan. A total of \$20.8 million is requested for the NOAA Education Program.

A recently released report from the National Academy of Sciences commends NOAA's commitment to education and provides recommendations for optimizing NOAA's investment in education.

We plan to carefully review those recommendations and incorporate them as needed to maximize the effectiveness of our education programs.

Overall, NOAA's fiscal year 2011 budget request reflects the commitment of the President and the Secretary to public safety, a healthy environment, sound science, underpinning decision making, and job creation.

These resources are critical to the future success of meeting our needs in climate, fisheries, coasts, and oceans.

And I look forward to working with you and I am happy to respond to any questions that the Committee may have.

Thank you, Mr. Chairman.

[The written statement of Dr. Jane Lubchenco, NOAA Administrator and Under Secretary of Commerce for Oceans and Atmosphere, follows:]

**WRITTEN STATEMENT OF
JANE LUBCHENCO, Ph.D.
UNDER SECRETARY FOR OCEANS AND ATMOSPHERE
AND NOAA ADMINISTRATOR
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE**

**ON THE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S
FY 2011 BUDGET REQUEST**

**BEFORE THE
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE OF COMMERCE, JUSTICE, SCIENCE,
AND RELATED AGENCIES
U.S. HOUSE OF REPRESENTATIVES**

March 17, 2010

Mr. Chairman and members of the Committee, before I begin my testimony I would like to thank you for your leadership and the generous support you have shown the National Oceanic and Atmospheric Administration. Your continued support for our programs is appreciated as we work to improve our products and services for the American people.

NOAA's mission and priorities support Secretary of Commerce Gary Locke's priorities through innovation in science and technology, services benefitting the economy and ecosystems, and green and blue businesses underscored by a solid foundation of environmental information and stewardship. A healthy environment and a strong economy go hand in hand. Recreational and commercial activities, representing billions of dollars in economic impact, depend on healthy coastal, ocean and fresh water environments and the services they provide. NOAA is assisting communities with the data, tools, technology, training, and essential services and knowledge needed to make decisions in diverse disciplines and sectors – from the innovative management of our natural resources to the investments we make in public infrastructure.

I am honored to be here as the Under Secretary for Oceans and Atmosphere at the National Oceanic and Atmospheric Administration (NOAA), one of the Nation's premiere environmental science and stewardship agencies. I am pleased to speak with you today regarding the President's Fiscal Year (FY) 2011 Budget Request for NOAA.

The FY 2011 President's Budget provides a solid foundation to continue to advance NOAA's mission. This is a critical budget for the Administration and NOAA, and provides support for meeting our most pressing needs. The FY 2011 request is \$5.6 billion, representing an \$806 million increase over the FY 2010 enacted level. After careful consideration of the key issues facing the Nation in which NOAA is mandated to and able to respond, we developed a set of priorities that helped to shape this budget and will guide our actions in the coming years. These

priorities include ensuring the continuity of climate, weather, and ocean observations; eliminating overfishing and ensuring the sustainability of marine fisheries; strengthening climate science and services; promoting healthy and resilient coastal communities and ecosystems; improving weather forecasts and disaster warnings; and strengthening Arctic science and stewardship. Before discussing the details of this budget request, it is important to document some significant areas of progress over the last fiscal year.

FY 2009 ACCOMPLISHMENTS

Climate

In the area of climate, we have continued to provide climate observations and analysis while engaging other federal agencies, the private sector, the science community, and many others on how to strengthen our climate services. In FY 2009, NOAA calculated sea-level trends for an additional 70 global stations. We also deployed ten additional Historical Climate Monitoring sites to provide high resolution regional climate data. Climate studies by NOAA scientists showed that changes in surface temperature, rainfall, and sea level are largely irreversible for more than 1,000 years after carbon dioxide emissions are completely stopped, and Arctic summers may be ice-free in as few as 30 years.

Satellites

We are working to resolve many of the management challenges that will allow us to get our future polar satellite program "back on track." These management challenges go back many years and resulted in significant delays and cost overruns. We still have a great deal of work to do, but this attention is critical to the continuity of the nation's weather and climate information. In FY 2009, our other satellite programs saw major milestones accomplished with the launch of NOAA-19, a polar-orbiting satellite, and GOES-14, a geostationary satellite. These satellites are critical for NOAA's weather-forecasting, storm-tracking, and space- and climate-monitoring missions. NOAA satellites also provided key support in the rescue of 184 people throughout and near the United States during FY 2009, providing their location to emergency responders.

Weather

Concern for public safety drives NOAA to continue to improve the timeliness and accuracy of warnings for all weather-related hazards. NOAA is committed to enhancing timely and accurate weather and climate forecasts through better observations, improved data assimilation, and collaboration with the research community. To this end, NOAA alerted the communities in Upper Mid-West in early February of record flooding they would experience in late March and April in the Red River Valley. NOAA also provided a Winter Outlook in early October which has been spot-on in advising the American public of the conditions expected through February, including the El Nino-driven storms which have swept through the southern tier of the Nation, bringing heavy rains, snow and flooding from California to the Mid-Atlantic since December.

Fisheries

We have made important progress in rebuilding our fisheries, recovering protected species and sustaining the livelihoods and communities dependent upon them. We introduced a draft catch share policy and are committed to improving relationships with the recreational and commercial fishing communities. We are exploring ways to improve fisheries enforcement efforts, as well as the science used to inform fisheries management decisions. We are also considering ways to expedite *Endangered Species Act* consultations to allow projects to move forward more quickly while ensuring needed species protections. In FY 2009, NOAA continued to make progress in meeting the mandates of the *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act*. NOAA also commissioned the NOAA Ship *Pisces*, which will support fisheries research in the Gulf of Mexico and the Southeast United States.

Oceans and Coasts

NOAA was fully engaged in the President's Interagency Ocean Policy Task Force, participating in and supporting every public hearing and attending every working group and Task Force meeting. The result of the Task Force's effort was the release of a draft national ocean policy and interim framework for coastal and marine spatial planning, the first time any Administration has so clearly committed to the ideal that "healthy oceans matter." Protecting and restoring critical habitat is essential for healthy oceans. In FY 2009, NOAA's Coastal Estuarine and Land Conservation Program acquired or put under easement over 4,000 coastal acres.

ARRA Stimulus Funding

The distribution and management of funding made available through the *American Recovery and Reinvestment Act of 2009* (ARRA) is a success story for NOAA, as are the results of our projects. NOAA has obligated approximately 70 percent of the \$830 million received. We have met all of our planned milestones and expect to obligate the remaining funds in the coming months. With this funding, we have infused new resources into the economy and also invested in critical infrastructure to meet NOAA's mission needs. I am particularly proud of our efforts to restore habitat, creating jobs as we restore ecosystems. We awarded 50 grants for marine and coastal habitat restoration in 22 states and territories, obligating \$155.4 million. Many of these projects were located in areas of high unemployment and have provided jobs to Americans during a critical phase of our economic recovery. For example, NOAA grant recipients reported creating or saving 372 jobs for the period of October 1 through December 31, 2009.

The progress we have made toward our strategic priorities and the improvements made to NOAA's core functions and infrastructure set the stage for even more success in the years to come.

FY 2011 BUDGET REQUEST HIGHLIGHTS

The FY 2011 Budget reflects NOAA's efforts to focus on program needs leading to measureable outcomes, identify efficiencies, and ensure accountability. The budget includes new research

and development investments to strengthen our science (including climate) mission and foster innovation; provides investments to rebuild and improve fisheries and the economies and communities they support; and proposes targeted investments to sustain and enhance satellite observations, including a major realignment of our NPOESS program.

Meeting the Rising Demand for Climate Services

President Obama has made it clear that addressing climate change is a high priority, and that good government depends on and should be informed by strong scientific knowledge. NOAA has become a global leader in reporting on the state of essential climate variables. NOAA proposes to establish a new line office called NOAA Climate Service. This office would bring together NOAA's longstanding and outstanding capabilities — Nobel Peace Prize award-winning researchers and assessments, observations, predictions, training and vital on-the-ground climate services delivery to users in climate-sensitive sectors and economies. A single climate office, rather than the current dispersed structure, will enable NOAA to better address the growing need for climate services. NOAA's FY 2011 request includes \$435 million in support of the U.S. Global Change Research Program, with \$77 million in new increases for core climate services and observations (excluding increases for geostationary and polar-orbiting satellites) needed to enable the Nation to more effectively address the impacts of climate change. Climate science encompasses an immense breadth of topics ranging from those that are well understood and documented, such as greenhouse gases, to those on the cutting edge of knowledge, such as ocean acidification and melting sea ice.

For example, the increasing acidity of the world's oceans has the potential for devastating effects on marine life and ocean ecosystems, but the degree to which various organisms may be capable of adapting to a more acidic environment is uncertain. More investments in ocean acidification are required to reduce this uncertainty and consider means to respond and/or adapt. In FY 2011, NOAA requests an increase of \$6.1 million, for a total of \$11.6 million, to support new technologies and ecosystem monitoring systems to better assess the physiological and ecosystem level effects of ocean acidification on productivity and the distribution of commercial and recreational marine fish stocks.

The impacts of climate change are evident on both a global and local scale. The Arctic, in particular, is an emerging area of international concern, as it continues to experience profound atmospheric, terrestrial, and oceanic changes related to climate variability and change. With an increase of \$3 million, for a total of \$6.3 million requested in FY 2011, NOAA will improve and amplify representation of Arctic climate processes in global climate models, strengthen our network of observations, and provide user-focused research assessments for the region.

Scientific assessments are integral for enhancing our understanding of climate — both to determine how and why climate is changing, but also what the changing conditions mean to our lives and livelihoods. NOAA will provide climate assessments on both the regional and national levels to meet society's increasing demand for climate data and information. A requested increase of \$10 million will establish regional and national assessments that will synthesize,

evaluate, and report on climate change research findings, evaluate the effects of climate variability and change for different regions, and identify climate risks and vulnerabilities.

Strong scientific assessments incorporate information provided by NOAA's climate models and carbon observing systems. Climate models are the only means of estimating the effects of increasing greenhouse gases on future global climate. In FY 2011, NOAA requests an increase of \$7.0 million, for a total of \$9.6 million, to continue development of Earth system models to address urgent climate issues such as sea level rise, feedbacks in the global carbon cycle, and decadal predictability of extreme events. An increase of \$8.0 million, for a total of \$20.9 million, will allow NOAA to continue implementation of the Carbon Tracker Observing and Analysis System, which is an observational and analysis network that measures carbon dioxide and other greenhouse gases. This system will serve as the backbone for verifying greenhouse gas emission reduction and mitigation efforts in North America.

Improve Satellite Observations and Management

NOAA's satellites provide the data and information that are vital to every citizen in our Nation – from weather forecasts, to safe air, land, and marine transportation and emergency rescue missions, we all use satellite products in our everyday life. One of the greatest challenges that NOAA faces today is ensuring continuity of satellite data and operations to provide state-of-the-art, unbroken coverage that supports weather and marine forecasting; climate assessments and change predictions; and space weather forecasts. With the FY 2011 budget request, we will invest in multiple satellite acquisition programs for the continuity of critical weather, climate, and oceanographic data.

A funding increase of \$678.6 million, for a total of \$1.1 billion, is requested to support the Administration decision to restructure the NPOESS program and create within NOAA the Joint Polar Satellite System. This large increase reflects the Administration's determination that beginning in FY 2011, NOAA will fully support within its own budget the procurement and development of the assets for the afternoon orbit. Restructuring the NPOESS program will allow NOAA to continue the development of critical earth observing instruments for the afternoon orbit, which are required for improving weather forecasts, climate monitoring, and warning lead times of severe storms. The restructured program separates civilian and military satellite procurements, but retains sharing of common assets such as the ground system and data. The National Aeronautics and Space Administration (NASA) will serve as the lead acquisition agent for NOAA, continuing the long and effective partnership on all of our polar-orbiting and geostationary satellite programs to date. There is still much work that remains, but NOAA is committed to working with our partners to ensure a smooth transition to assure the continuity of Earth observations from space.

NOAA is requesting an increase of \$62.5 million, for a total of \$730 million, to continue the development of the Geostationary Operational Environmental Satellite – Series R (GOES-R) program. This increase will provide for the continued development of six GOES-R satellite instruments, the spacecraft, and ground systems to be prepared for launch near the end of 2015. The acquisition of NOAA's GOES-R series, in partnership with NASA, is progressing on track. The new satellites will carry improved environmental sensors to enable NOAA's forecasters to

enhance the timeliness and accuracy of their severe weather warnings. Also, this next generation of GOES satellites will provide advances in NOAA's observation capabilities, including improvements to coastal ecosystems, space weather, and lightning observations through continued funding of instruments such as the Advanced Baseline Imager, Solar Ultra Violet Imager, Extreme Ultra Violet Sensor/X-Ray Sensor Irradiance Sensor, Space Environmental In-Situ, and Geostationary Lightning Mapper.

Global sea level rise directly threatens coastal communities and ecosystems through increased exposure and erosion, more frequent storm-surge and tidal flooding, and loss of natural habitat due to drowned wetlands. NOAA's budget requests an additional \$30.0 million for a total of \$50 million to continue development of the Jason-3 satellite that will provide continuity of sea surface height measurements, thus ensuring an uninterrupted climate record of over 20 years. The Jason-3 mission is a joint U.S. – European partnership with U.S. and European funding.

NOAA requests a \$3.7 million increase to partner with the Taiwan National Space Organization for the launch of 12 satellites to replenish and upgrade the Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC) satellite constellation. This program is a cost effective means of obtaining information about the temperature and moisture in the atmosphere around the globe that will improve forecasting accuracy.

Finally, a requested increase of \$9.5 million will support, in cooperation with NASA, the refurbishment of the existing NASA Deep Space Climate Observatory (DSCOVR) satellite, its solar wind sensors, and the development of a Coronal Mass Ejection (CME) Imager. The data and information provided by DSCOVR will support the operations of the National Weather Service Space Weather Prediction Center, which generates accurate and timely 1-4 day forecasts and warnings of geomagnetic storms that could adversely affect power grids, telecommunications, the health and safety of astronauts, and the viability of satellite systems.

Transform Fisheries and Recover Protected Species

Ending overfishing, improving fisheries management and putting fisheries on a path to sustainability and profitability are still challenges for NOAA. I would like to highlight areas in the FY 2011 budget that support targeted investments to continue fulfilling NOAA's responsibilities under the *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act*, and that will help to sustain local communities while restoring a number of vital fisheries stocks and habitats.

NOAA recently released a draft catch share policy to encourage the consideration and adoption of catch shares wherever appropriate in fishery management and ecosystem plans and amendments, and will support the design, implementation, and monitoring of catch share programs. Catch share programs give fishermen a stake in the benefits of well-managed fisheries, and therefore greater incentive to ensure effective management. To support NOAA's policy, this budget includes an increase of \$36.6 million, for a total request of \$54 million, to establish a National Catch Share Program. This program will provide a national framework to develop, manage, and improve catch share programs in fisheries across the Nation. This increase will also continue the transition of the Northeast ground fish (multispecies) fishery to sector

management as well as support new voluntary catch share programs in the Mid-Atlantic, Gulf of Mexico, and Pacific Coast regions.

Managing fisheries to their full potential requires additional efforts focused on habitat condition and ecosystem functioning, which provide the foundation for species recruitment and survival. The FY 2011 budget request includes investments in this area through three vital NOAA programs that are focused on threatened and endangered species, but will have a resonating impact across broad goals for enhancing ecosystem integrity and health. First, through the Community Based Restoration Program, NOAA plans to increase fish passage and spawning and rearing habitat by implementing larger-scale ecological restoration in targeted areas such as wetlands. NOAA is requesting an increase of \$10.4 million for a total of \$23.8 million for this effort in FY 2011. Second, we will continue supporting the Species Recovery Grants Program in FY 2011 with a requested increase of \$9.6 million, for a total of \$20.8 million. This will allow NOAA to provide grants to conduct priority recovery actions for threatened and endangered species, including restoring habitat, monitoring population trends, developing conservation plans, and educating the public. Third, with a total request of \$65 million, the Pacific Coastal Salmon Recovery Grants Program will continue to leverage federal, state, and tribal resources in the Pacific Coast region to implement projects that restore and protect salmonid populations and their habitats.

Another highlight of the FY 2011 request includes support for the restoration and protection of the Nation's largest estuary, the Chesapeake Bay. NOAA supports the President's Executive Order to restore the Chesapeake Bay by providing enhanced understanding of the relationships between the Bay's living resources and habitat, coordinating protection and restoration of key species and habitats across jurisdictional lines, and supporting a coordinated system of monitoring platforms distributed across the Bay. We are requesting an increase of \$5 million, for a total of \$7.1 million, for regional studies in the Bay. This investment will ensure NOAA has state-of-the-art field and laboratory equipment in place in FY 2011, which will be used to address the mandates of the President's Executive Order in FY 2011 and beyond.

In addition to expanding scientific understanding in the Chesapeake Bay, NOAA scientists are developing integrated ecosystem assessments (IEA), a critical tool for understanding the interactions between multiple species and for helping to manage and sustain critical stocks and habitats. IEAs allow managers to weigh trade-offs between sectoral uses and evaluate the socioeconomic implications of management actions. Most importantly, IEAs provide guidance to ensure the most cost-effective and informed resource management decisions. In FY 2011, NOAA is requesting an increase of \$5.4 million, for a total \$7.5 million investment, to focus primarily on the California Current Ecosystem, but to also engage work on the Gulf of Mexico and Northeast Shelf IEAs.

Vibrant Coastal Communities and Economies

It was estimated that in 2003, approximately 153 million people — or 53 percent of the Nation's population — lived in the 673 U.S. coastal counties, an increase of 33 million people since 1980. It is estimated that this number will increase by 12 million people by 2015. In addition, over half of the U.S. Gross Domestic Product is generated in coastal counties, highlighting their critical

importance to the Nation's economy. This population increase is straining the limited land area of coastal counties. Coupled with the important economies of coastal areas and the demands for ecosystem services, it is becoming increasingly difficult to manage coastal resources in the context of competing uses. NOAA's FY 2011 budget provides key investments to promote sustainable, safe use of coastal areas and to support the economies of these coastal areas.

As stated in the interim report of the Interagency Ocean Policy Task Force, current and future uses of ocean, coastal, and Great Lakes ecosystems and resources should be managed and effectively balanced. I would like to highlight areas in our request that support this goal and other Administration priorities.

Human uses of ocean resources are accelerating faster than our ability to manage them. Increasing conflicts are unavoidable as demands increase for ocean-based energy, marine aquaculture, commercial and recreational fishery products, shipping and navigation services, and other activities. The Administration's Interagency Ocean Policy Task Force released the Interim Framework for Effective Coastal and Marine Spatial Planning in December 2009, which is aimed at enhancing and streamlining ocean management decisions to ensure the health of vital ocean ecosystems as human uses increase. Current management approaches are ad hoc and fragmented at the federal, state, and local levels. NOAA is a leader in providing tools and services that support coastal and marine spatial planning efforts. Our existing programs have established a foundation for coastal and marine spatial planning that could be used government-wide across jurisdictions and sectors. In FY 2011, NOAA requests an increase of \$6.8 million to support coastal and marine spatial planning, which will enhance existing efforts for sustainable fisheries, safe navigation, improved water quality, living marine resources and critical habitat protection.

NOAA's request further supports coastal and marine spatial planning efforts with a \$2 million increase to support the Gulf of Mexico Coastal and Marine Elevation Pilot to a develop robust geospatial framework, including high-resolution topographic and bathymetric datasets. These datasets will provide a better understanding of baseline variables needed to enhance coastal community resilience, wetland loss and erosion, and the potential for degradation of key ecosystem services. This pilot will begin in the Gulf of Mexico and be extended to other regions and applications over time.

The Nation's coastal communities and economies depend on healthy coastal resources, which are threatened by fragmented planning and management of societal use of coastal lands and waters. Regional ocean governance mechanisms facilitate the effective management of ocean and coastal resources across jurisdictional boundaries by improving communications, aligning priorities, and enhancing resource sharing between local, state, and federal agencies. Our request of a \$20 million increase will establish a competitive grants program to advance effective ocean management (including coastal and marine spatial planning) through regional ocean governance. The program will help support priority actions, in association with states, identified in plans of the existing regional ocean partnerships. Support for these partnerships will also encourage development of comprehensive, coastal and marine spatial plans, which are consistent with the President's Ocean Policy Task Force Interim Framework for Effective Coastal and Marine Spatial Planning.

To better protect the public health of our coastal citizens and tourists, NOAA requests an increase of \$9.5 million, for a total of \$12.5 million, to support research into technologies that better detect, identify, characterize, and quantify disease-causing microbes, toxins, and contaminants in marine waters. These funds will be used to target sensor development, which will support ocean and coastal related Health Early Warning Systems, identify risks, and promote public health.

In addition to public health hazards, coastal communities are vulnerable to hardship and costs associated with episodic and chronic natural hazards, such as hurricanes, sea-level rise, and coastal erosion. Our request of a \$4 million increase will support the development of tools, such as web portals, Geographic Information System (GIS) products, and forecast models, to help coastal communities mitigate the impacts of climate and weather hazards.

Ensure Timely Weather Forecasts

Weather impacts our lives and the economy. The United States experiences a broader variety of severe weather than any other Nation on Earth, from hurricanes in the south, east, and west, to arctic storms in the north. Each year, NOAA provides 76 billion observations, 1.5 million forecasts, and 50,000 warnings to mitigate the impact of weather events and protect life and property. The FY 2011 Budget Request proposes important increases in both weather operations and weather research.

Weather is a factor in over 70 percent of air-traffic delays, costing approximately \$29 billion annually¹. Two thirds of all weather delays are preventable with more accurate and timely weather information. To meet the rising demands of air transportation, NOAA is involved in a collaborative partnership with the Federal Aviation Administration to create the Next Generation Air Transportation System. NOAA requests an increase of \$15.1 million, for a total of \$26.7 million, to modernize our aviation weather forecasts and warnings. This funding will provide much needed improvements to processing systems and models, as well as new products for pilots.

NOAA is dedicated to continually upgrading existing weather tools to keep up with growing needs and improved technologies, as well as investing in research to develop new products. NOAA requests an increase of \$3.2 million, for a total of \$11.1 million, to install additional components to the Nation's fleet of NEXRAD Doppler weather radars to improve their accuracy in determining the quantity and type of precipitation. Doppler weather radar is the primary tool used to issue local storm warnings for flash floods, tornadoes, and severe thunderstorms. Looking to the future, NOAA also requests an additional \$6 million, for a total of \$10 million, to continue developing Multi-Function Phased Array Radar technology, which shows great promise as the next major improvement in weather detection. These funds will examine the benefits and efficiencies associated with this next-generation radar technology. Multi-Function Phased Array Radar's ability to rapidly scan large areas could provide an enormous advantage to radar

¹ See the Federal Aviation Administration's Research, Engineering and Development Advisory Committee's *Report of the Weather-ATM Integration Working Group*, 3 Oct. 2007; available at http://www.jpdo.gov/library/FAA_REDAC_Report.pdf.

meteorologists over current capabilities, and in turn enhance weather and climate warnings for the public.

Water resource and precipitation monitoring and forecasting have become a particular challenge with increases in population, drought, and frequent changes in commercial shipping needs. On an annual basis, the majority of federally declared disasters are due to flooding. In FY 2011, NOAA requests an increase of \$7.7 million for a total of \$12.9 million, to research, develop, and deliver water forecasting services for river, estuary, and coastal areas that do not currently have these capabilities.

In addition, the FY 2011 Budget includes \$2 million, for a total of \$13 million, for the national Space Weather Prediction Center (SWPC). Millions of precision Global Positioning System users, satellite operators, commercial and military space and aviation activities, and power grid operations will be vulnerable to a new round of solar storms during the predicted upcoming solar maximum. This investment will improve information technology systems at the SWPC and enhance space weather alerts and warnings to avoid potential disruptions to the Nation's shared infrastructure on which the public relies.

Finally, NOAA requests an additional \$2.2 million, for a total of \$14.5 million, to provide a necessary technology refresh and frequency conversion for our network of wind profilers. This 20-year-old system provides high-frequency wind data for severe weather warnings and watches of tornadoes, flash floods, and winter storms, short-term forecasts, and detection of volcanic ash plumes.

Program Support

In order to deliver sound science and services, NOAA must continue to invest in its information technology (IT) infrastructure, the quality and construction of NOAA facilities, and recapitalization. NOAA experiences thousands of cyber attacks every month. A requested increase of \$8.7 million will enhance security monitoring and response capabilities, and consolidate our IT infrastructure into a single enterprise network. In addition, NOAA needs to continue to replace key facilities to ensure employee safety and maintain mission continuity. This budget includes an increase of \$14 million for the Pacific Regional Center which brings together NOAA programs on Oahu, Hawaii. While the *ARRA* funds we received in FY 2009 helped fund basic construction of the facility, additional funding is needed in FY 2011 to procure and install the information technology infrastructure for the new facility. The budget also includes an increase of \$5 million to support the replacement of the bulkhead at NOAA's Atlantic Marine Operations Center.

NOAA's fleet plays an essential role in accomplishing NOAA's environmental and scientific missions. The FY 2011 budget continues the recapitalization of NOAA's fleet, critical for data collection to meet fisheries management mandates. A \$6.2 million increase is requested to address vessel maintenance backlog, and to increase preventative maintenance rates for the fleet. An additional \$7.4 million is requested to accelerate a planned FY 2013 Major Repair Period to address structural, mechanical, and electrical breakdowns of the *Miller Freeman*. Lack of repair to this valuable ship would result in lost days at sea and impact NOAA research. Finally, we

request \$3 million towards the design of a fishery survey vessel to replace the OREGON II, an aging fishery survey vessel operating in the Gulf of Mexico. Another \$1.4 million is requested for project management of a new fishery survey vessel that is being built using ARRA funding.

CONCLUSION

Overall, NOAA's FY 2011 Budget Request reflects the commitment of the President and the Secretary to public safety, a healthy environment, sound science underpinning decision making, and job creation. These resources are critical to the future success of meeting our needs in climate, fisheries, coasts, and oceans. I look forward to working with you, the Members of this Committee, and our constituents to achieve the goals I've laid out here through the implementation of the FY 2011 budget.

Thank you for the opportunity to present NOAA's FY 2011 Budget Request. I am happy to respond to any questions the Committee may have.

NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM

Mr. MOLLOHAN. Thank you, Doctor.

Doctor, there have been some significant changes in the plans for Polar-orbiting Operational Environmental Satellites recently. I would like to begin with you by walking us through the problems with the management and implementation of the Polar-Orbiting Operational Environmental Satellite System and then we will discuss the proposed approach, budget request, and future plans.

So, first of all, please describe the purpose for NPOESS.

Ms. LUBCHENCO. The NPOESS or National Polar-orbiting Operational Environmental Satellite System was created in 1994. It was intended to provide information that is related to both weather and climate information, both critically important to the nation. It was set up as a collaboration between NOAA and the Department of Defense with NASA providing additional support.

The original formulation had the program with a joint decision-making management structure, the EXCOM, the Executive Committee, that had representatives from each of the three agencies, NOAA, NASA, and DoD, and specifically Air Force, and that management structure was intended to—the program was set up with the intent of combining and putting together both civilian and military needs into a single program and taking advantage of the synergies to be derived from that.

As you know, the program experienced very considerable cost overruns, 87 percent increase in costs through 2009, and 30 percent of that growth in cost was after the restructuring incurred after the Nunn-McCurdy process.

Mr. MOLLOHAN. Before you get to that, just explain to the Committee how initially the program was funded, appropriations, and you mentioned the agencies, but what were the relative contributions of the agencies.

Ms. LUBCHENCO. The budget was split 50/50, half to NOAA and half to Department of Defense.

Mr. MOLLOHAN. What was the original budget for the program?

Ms. LUBCHENCO. The original budget, let me look at my notes here so that I am sure that I get it correct. What I have are NOAA's numbers. May I ask my staff behind me?

Mr. MOLLOHAN. You can submit that for the record. That is okay.

[The information follows:]

In 2005, Pre-Nunn-McCurdy, the NPOESS program Life Cycle Cost (LCC) was \$8.4 billion. Of that amount, DoD would provide \$4.354 billion, and NOAA would provide \$4.048 billion.

In June 2006, Post-Nunn-McCurdy, the NPOESS program LCC was increased to \$12.516 billion. Of that amount, DoD would provide \$6.265 billion, and NOAA would provide \$6.251 billion.

In 2009, the NPOESS program LCC was updated to reflect the July 2008 Office of the Secretary of Defense Cost Analysis Improvement Group (CAIG) cost estimate (including updated the operations and sustainment costs that had been omitted at 2006 Nunn-McCurdy certification. The NPOESS program LCC increased to \$13.951 billion. Of that amount, DoD would provide \$6.983 billion, and NOAA would provide \$6.967 billion.

On February 1, 2010, the NPOESS Program was restructured. DoD is still assessing its costs for implementing the early morning orbit and those costs are unknown at this time. The cost to implement JPSS, the NOAA portion for the afternoon orbit is \$111.9 billion, of which \$2.9 billion has already been spent.

Mr. MOLLOHAN. Describe the management structure in a little more detail, the process by which decisions were supposed to be made and just conceptually when you bring the Department of Defense in with a civilian activity, what was the interface? What were the rules of engagement, if you were, and who were to make final decisions in that process?

Ms. LUBCHENCO. Mr. Chairman, the concept was that the EXCOM would make final decisions and the individuals who sat on the EXCOM from NOAA and from NASA had that authority. The individual who sat on the Committee from the Department of Defense did not have that authority.

And so the Executive Committee would make decisions and the individual from Department of Defense would go back to DoD and in many cases, a decision that had been made jointly would be overruled.

Mr. MOLLOHAN. Was there one person? I guess your testimony is that there is one person who made a final decision with the Defense Department; is that correct?

Ms. LUBCHENCO. In effect, there was often a dysfunctional relationship because there were different priorities and different requirements of the different agencies.

And the contract was structured in a way that there was no direct immediate oversight which was an additional problem that has been identified by multiple GAO reports as well as the Independent Review Team report.

Mr. MOLLOHAN. Was there one decider, to use that word, who could make a decision for the overall program and, if so, who was that person?

Ms. LUBCHENCO. There was no one tasked with that responsibility. In principle, the Executive Committee as supposed to be doing that. But in reality, it was unable to do so.

Mr. MOLLOHAN. Why?

Ms. LUBCHENCO. Because the individual who sat on the EXCOM for the Department of Defense did not have decision-making authority.

Mr. MOLLOHAN. Okay. But it sounds like there is a big dog on the porch some place that maybe, I do not know, because of the amount of money they brought to the table or could in effect direct the path forward for the program and make decisions with regard to funding and process and contracting.

Is that true and was that with the Department of Defense, the person you are alluding to?

Ms. LUBCHENCO. Because this was well before my time, I have not seen this play out firsthand.

Mr. MOLLOHAN. No, I know you have not, but you are bound to have reviewed this.

Ms. LUBCHENCO. We have.

Mr. MOLLOHAN. And the Committee is asking you to tell us who was the decision maker and because they had such a dominant role in the program and you are suggesting it is in the Defense Department, I am asking who it is. Who was it? What position was it?

Ms. LUBCHENCO. Mr. Chairman, I do not know that.

Mr. MOLLOHAN. Was the program independently evaluated?

Ms. LUBCHENCO. Yes, Mr. Chairman. There were nine GAO reports in—eight reports in nine years.

And the NPOESS Program also constituted an Independent Review Team Chaired by Mr. Tom Young who was the former President and COO of Martin Marietta and a former Director of NASA Goddard Space Flight Center.

That Independent Review Team echoed many of the findings of the GAO reports and it highlighted or, I think, concluded that there was an extraordinarily low probability of success of the program and that this should be of great concern to the nation because the continuity of both climate and weather information was at risk.

Mr. MOLLOHAN. Well, you have made some evaluations about moving forward with the current NPOESS Program. What would be the risk that the nation faces if we were to move forward with the current program?

Ms. LUBCHENCO. It was explicitly because of that risk that we have paid special attention to how to put this program back on track because it is vital to the nation's interests.

And I believe that the proposed restructuring announced by the Administration would, in fact, put that program on a path to success with a much higher probability of success than the former NPOESS Program.

Mr. MOLLOHAN. When did the Administration start reviewing the program and trying to resolve the problems in the civil and military weather climate systems and what was the result of that effort? When did it start and what was the result?

Ms. LUBCHENCO. When I first assumed the position of Administrator, which was March 20th of last year, I almost immediately began conferring with the Secretary of Commerce, with the Office of Science and Technology Policy, with the Office of Management and Budget, with NASA, and with DoD to figure out what the problems were and what solutions might be.

Shortly thereafter, I believe early in the summer, the Administration announced that it was going to take a comprehensive look at this program following on the review of the Independent Review Team and later in the summer set up a formal process for doing that review involving various offices of the White House, OMB, OSTP, and National Security Council. And so there were two parallel processes underway, the White House process and the joint interagency process of the three agencies, all wrestling with how can we fix this problem.

It is not that others had not tried before, but we were determined to actually figure out—you know, the status quo was simply unacceptable.

Mr. MOLLOHAN. And what did you come up with?

Ms. LUBCHENCO. In the President's budget that was announced in early February, part of that announcement was the Administration's decision to restructure the NPOESS Program by separating out the responsibility for acquisition for the satellites, giving DoD responsibility for acquisition for satellites and instruments that are relevant to the early morning orbit which is most critical for military needs.

Mr. MOLLOHAN. So Defense needs and—

Ms. LUBCHENCO. Defense needs.

Mr. MOLLOHAN. Uh-huh.

Ms. LUBCHENCO. And giving to NOAA responsibility for acquisition for the instruments and the satellites for the afternoon orbit which is most important for weather and climate information.

NOAA would work closely with NASA to oversee and execute the acquisitions and all three agencies would continue to operate the ground system which that part of the former NPOESS Program was working well.

So this proposal retains the elements that were working well—

Mr. MOLLOHAN. The ground system?

Ms. LUBCHENCO. The ground system, and separates out the acquisition and the oversight for the satellites and the instruments for the two different orbits.

Mr. MOLLOHAN. So you are the Administrator. How do you feel about this new arrangement?

Ms. LUBCHENCO. Mr. Chairman, I am really pleased that we have a solution that I believe is viable. This program is too important to not be on a path to success. And I think the situation was becoming intolerable and really inexcusable.

That said, there was a pretty high hurdle to figuring out a solution. I am really pleased with the solution that we came up with and hope that you and the Committee and others in Congress agree that it is a good viable solution. I believe that it is.

Mr. MOLLOHAN. So Defense Department decisions are out of your critical path judgments and you are out of the Defense Department's critical path judgments?

Ms. LUBCHENCO. That is correct.

Mr. MOLLOHAN. So you are going to be developing satellites and making decisions that serve you. Are there going to be any operational problems as a result of this new arrangement?

Ms. LUBCHENCO. Let me first point out that much of the data that we acquire, that NOAA and NASA will acquire will be shared with DoD and conversely. So there is still sharing of information. It is the acquisition that is separated.

And I believe there is always risk associated with any complex satellite programs. That comes with the territory. But I think the risk is much less substantial and much more manageable than with the current management structure, specifically because the program acquisition will be overseen by NASA. We have a good working relationship and track record with them for joint oversight of programs. There is much more immediate access to technical capability. We have a lot of assets to bring to the table.

And the risk that exists, I believe, can be mitigated both by staying on top of the programs immediately and anticipating and dealing with problems, but also having adequate budget reserves to be able to deal in real time with any problems as they arise. And that is the way that we have typically dealt with our other satellite programs that we run jointly with NASA. So that is a good model for this newly-structured program.

Mr. MOLLOHAN. So there are no decisions that Defense can make that would impede your progress or time line? You know, they have got a couple of satellites on the ground, we understand, but that will not impede you? It will not affect you; is that correct?

Ms. LUBCHENCO. The period of transition, fiscal year 2010, is a critical year. And the path to success assumes that the funds that the Department of Defense has in its budget for fiscal year 2010 will be spent for the needs for which they were intended.

Mr. MOLLOHAN. Is there a threat to that possibility?

Ms. LUBCHENCO. I assume that there is a possible threat.

Mr. MOLLOHAN. I said that wrong, but is there a possibility that there is a threat to that?

Ms. LUBCHENCO. Yes, sir, I think there is.

Mr. MOLLOHAN. Are you picking up any concerns or do you have concerns based on any information you are picking up?

Ms. LUBCHENCO. We know that the program, that the success of the program depends on an effective transition. And if that transition does not go as anticipated, there may be very serious consequences with delay in the program or derailing of the program. And what is at risk is the continuity of the weather and climate information. And any further delays or insufficient budgeting could easily be quite problematic.

Mr. MOLLOHAN. What are you doing to head that off?

Ms. LUBCHENCO. We are emphasizing how important this solution is, how likely it is to, or how it is a very significant improvement over the status quo. We have been working closely with the leadership at DoD, with the point person for acquisitions who has been working on this solution with us and who has indicated his commitment to seeing this through. So I believe that within DoD, there is interest in having this program succeed.

Mr. MOLLOHAN. Mr. Wolf.

Mr. WOLF. How much money was wasted over the years, the fact that it was not successful?

Ms. LUBCHENCO. The cost overruns, as I mentioned, were on the order of 85 percent.

Mr. WOLF. Can you put that in dollars?

Ms. LUBCHENCO. Yes, sir. The NPOESS Program was originally budgeted at \$8.4 billion in 2004.

Mr. WOLF. So how much of that do you think was wasted?

Ms. LUBCHENCO. So I do not have that number, but I would be happy to get it to you. It is a very large number.

Mr. WOLF. In the billions?

Ms. LUBCHENCO. Yes, sir.

Mr. WOLF. Do you think the failure was because of personality or do you think the failure was because of technology?

Ms. LUBCHENCO. The Independent Review Team that was chaired by Tom Young said that there were a number of causes for the failure, that the Executive Committee, as I indicated, was inefficient and ineffective, that the different agencies have very different requirements and their priorities are not aligned, that there is no backup capability in this system, that the budget was insufficient to deal with a very complex program that this one is, and that there was insufficient government oversight of the contract.

So the IRT and the GAO reviews highlighted multiple problems with the way the program was originally structured.

Mr. WOLF. So it was less technology and more human factors that resulted in it?

Ms. LUBCHENCO. Congressman, there is a lot of new technology that was being developed for the program and that is part of what creates the risk. And because it is new technology, because we are sort of pushing the envelope for new instruments, it is important to have adequate budgeting to account for the inevitable problems that might develop in those new instrument systems.

Mr. WOLF. Are any of the people who were involved with the failure still there in the operation of it now? And you are not justifying this because you are new in town, so it is not that you have to be defensive. Are the people who were there involved in either agency or all three continuing to be, but just now there has been a divorce and a separation? But have you thought there should be some other people come in?

Ms. LUBCHENCO. Congressman, I believe that the personnel that are still on board at NOAA are immensely capable and very, very good. I believe that our track record of other successful programs with NASA in partnership with NASA attest to our skills and our abilities to manage complex programs. I cannot evaluate the expertise of the individuals that were involved on the Department of Defense side because that is not something that I know.

Mr. WOLF. Well, I will move on. I used to be on the Subcommittee years ago and this was a big issue. And then I left and now it is continuing to be.

And it would seem to me that if the divorce, unless it was a no-fault divorce, but if the divorce was partially because of both sides, it would seem that you ought to have a clean approach and new people to come in to have the opportunity to sort of begin and not having started out with the failure.

So if you have the same people that were there before, even though they may be wonderful people, maybe their expertise ought to be put in some other important program at NOAA. But maybe you ought to have just a new person or a new team to begin afresh so you are not kind of tied down with that.

Maybe you can just let the staff know. I mean, give us a list of the personnel who are going to work on the program now and let us look and overlap and see how many were there for the last three years before this. And then the Committee can take a look at that judgment and see if the same people ought to stay.

But when you look at the food banks are empty and there are a lot of problems in the country, the loss of billions of dollars, you know, that is a lot of money.

Ms. LUBCHENCO. I agree, Congressman, which is why I made it one of my highest priorities to fix this program, because I think it was inexcusable and an embarrassment. And this is not the way we should be operating.

CLIMATE SERVICE

Mr. WOLF. You have announced your intent to create a NOAA Climate Service. This was done absent any proposal in the fiscal year 2011 budget and absent any of the required notification to the Committee.

We included funding in the fiscal year 2010 bill for the National Academy of Public Administration, NAPA, which generally does a

pretty good job, to conduct an analysis of options for establishing a Climate Service.

Is the review underway? What is the status of that?

Ms. LUBCHENCO. Congressman, the announcement that we made on February 8th was an intention to create a new line office within NOAA called the NOAA Climate Service. That proposal is reorganizing existing assets.

NOAA currently has a wealth of climate science and climate services that we provide already. They are distributed currently across many line offices within NOAA. They are in lots of different places. And this proposal is simply to pull all of those together and put them into a single line office.

So it is reorganizing existing assets to be better positioned to be effective partners with other agencies, to provide services that we are being increasingly asked for more effectively, more efficiently, essentially to do our jobs more responsibly.

Mr. WOLF. Just as a result of the NAPA review?

Ms. LUBCHENCO. No. We announced the intent to reorganize. We intend to use the NAPA review to help us inform how that organization should be best accomplished.

Mr. WOLF. So you will not do anything until the NAPA review is finished?

Ms. LUBCHENCO. We anticipate that the NAPA review is going to be providing information to us on an ongoing basis. And as that information comes forward and interim reports or other things, we will fold that into our planning. So the NAPA review will be very, very helpful in guiding our understanding of the tradeoffs with a specific organizational design.

Mr. WOLF. Now, you need the authorization of the authorizers to do this? Do you plan on asking for legislation?

Ms. LUBCHENCO. My understanding is that what we have proposed, taking existing people from existing places and putting them in a different place is a reprogramming and—

Mr. WOLF. Wouldn't that need the legislative—

Ms. LUBCHENCO. The programming would require approval by the Department, by OMB, and by our Appropriations Committees.

Mr. WOLF. How do the Authorizing Committees feel about that?

Ms. LUBCHENCO. Obviously many of our Authorizing Committees are keenly interested in this and we intend to work closely with them as the NAPA report is being prepared to inform the way that we are thinking about designing this. So we fully anticipate working closely with all of the relevant Committees, both Appropriations and Authorization Committees.

Mr. WOLF. So, therefore, you will continue to go ahead waiting on the reprogramming of approval by this Committee or by the authorizers or by both?

Ms. LUBCHENCO. The formal approval that is required is by your Committee, but we would hope to work closely with the Authorizing Committees and have their blessing. Different Authorizing Committees have had different views of how this might be best structured and so this is a great opportunity for us to be in dialogue with all of them and to think about what type of organization would best meet the needs of the nation.

OFFICE OF ATMOSPHERIC RESEARCH

Mr. WOLF. Your initial announcement, it appears that you have already developed a plan to establish the Climate Service mainly by breaking off pieces of the Office of Oceanic and Atmospheric Research.

That office was established in its current form in 2005 with the purpose to unify and to strengthen the role of science and research in NOAA's programs. And that organization resulted from the recommendations of a Research Review Team of prominent scientists.

So why would the undoing of the last science reorganization at NOAA be a good idea at this time?

Ms. LUBCHENCO. When that reorganization was done, the need for climate services was not as obvious as it is today. And what we have proposed is to take some offices, some labs, some offices from the Office of Oceanic and Atmospheric Research, some from other parts of NOAA. We have not made any decisions about how to organize those pieces together and that is what the NAPA report will inform, number one.

Your question was asking more specifically about our existing Oceanic and Atmospheric Research line which the two goals that we had in mind with this restructuring were, one, to make climate services and science more effective and efficient, but, two, to strengthen science across NOAA. And OAR, the line Office for Oceanic and Atmospheric Research plays a vital role in strengthening the science.

And it is my hope and plan to use this opportunity to reposition OAR to advance transformational science that is right at the forefront of innovation on key issues for NOAA. There is a lot more science that is done at NOAA, not just climate science, and there are a lot of places in NOAA where science exists.

Mr. WOLF. Are there pieces of other federal agencies that ought to be in this if you were to do this?

Ms. LUBCHENCO. There are other federal agencies that have responsibilities for delivering some kind of climate services and we are in dialogue with them. Many of them rely on what NOAA provides in terms of basic data, basic models, basic predictions. And so this organization is designed to better position us as partners to the other agencies so that they can do their climate job better and we can be more useful to them.

EDUCATION PROGRAM

Mr. WOLF. Okay, Well, maybe we will talk to NAPA, too, at the time and see where they are.

One other area is on the educational programs. According to the staff, they said you are only requesting \$20.8 million for NOAA's education programs which is a reduction of over 60 percent from the amount appropriated in fiscal year 2010.

Every time you have a hearing, you always hear about the importance of the critical nature of the challenge that our country has with regard to science, the competition with regard to China, the competition with regard to India.

Education is probably a key, so why would you have such a significant cut? When I think of the first question of the \$4 billion

that has been lost going down the drain and then you think of we are falling behind as a nation in math and science and physics and chemistry and biology, why would you be looking for such a significant cut or is it not significant? Is it just different accounts or how is that?

Ms. LUBCHENCO. Education is one of my highest priorities at NOAA. It is very critical to the national interests for all the reasons that you have just articulated. The request this year reflects readjustments from congressionally directed funding in earlier years. And—

Mr. WOLF. Earmark, is that what you are calling that, congressionally what? How do you put that in congressional—

Ms. LUBCHENCO. This is one of the Washington euphemisms, congressionally directed funds.

Mr. WOLF. Is that diplomatic? You are really congressionally directed.

Ms. LUBCHENCO. I had to learn a whole new language coming here.

Mr. WOLF. So this is to correct the mistakes the Committee has made?

Ms. LUBCHENCO. Not mistakes at all.

Mr. WOLF. How about the Jason Project? I am just curious.

Ms. LUBCHENCO. Could I just add one note to that? NOAA had requested that the National Academy of Sciences review our Education Program with the idea of providing us information with how to make it most strategic, most effective, most complementary to a lot of the other educational programs and science education programs that are out there.

Just earlier this month, we received the report from the Academy study. It is highly complimentary of our efforts and it provides a large number of recommendations for improvement.

It is my intention to utilize that report to rethink our Education Program and figure out what it should look like, how it should best serve the nation's needs.

Mr. WOLF. Before you get into Jason, what are some of the things? What did the Science Foundation recommend? What did they say you should be doing you are not doing now?

Ms. LUBCHENCO. They highlighted many of our current programs as being highly successful but not at scale, so to scale up some of the specific programs.

I have not had a chance to read the report in depth because it just came out. And I am very much looking forward to doing that. I know that it highlighted the GLOBE Program, the Jason Program many of our competitive grants programs, our B-WET Program. There are our educational partnership programs. There are a whole slew of programs that we have.

Mr. WOLF. Could I get a copy of their—

Ms. LUBCHENCO. Absolutely.

Mr. WOLF. What did they say about the Jason Program?

Ms. LUBCHENCO. I do not recall specifically.

Mr. WOLF. I had a discussion with Dr. Ballard.

Ms. LUBCHENCO. I have, too.

Mr. WOLF. And I was asked to introduce Dr. Ballard at a program in my district about four or five years ago. It was the night

of the seventh game of the World Series. And they asked me to come and I said I would come. I had an anti-gambling group I was speaking to that night and I said I did not think anyone was going to show. But because of my respect, I will come.

I went in. It was at Rachel Carson Intermediate School——

Ms. LUBCHENCO. Uh-huh.

Mr. WOLF [continuing]. In Fairfax County. And I will tell you, the auditorium, it was a gymnasium, was packed. And these kids really got into the program.

And Ballard has a way of getting people interested who are not that interested and people who are interested, getting them very interested. So I would be anxious to see what the National Science Foundation feels.

Do you know Dr. Ballard?

Ms. LUBCHENCO. I know him quite well, Congressman, and I think he is a very gifted educator, explorer, scientist. And you are right. He really does generate a huge amount of interest and enthusiasm.

Mr. WOLF. And we are neglecting the oceans, I think.

Ms. LUBCHENCO. We are absolutely neglecting the oceans and the knowledge that school children and others have about oceans. Why they are important to us, what the opportunities are for keeping them healthy are not known to the extent that they need to be. So that is why our education programs are so important.

I just recognize that the scale of the problem is so much larger than our ability to do everything, that we need to be strategic in what we are doing, which——

Mr. WOLF. I agree. The last question I would ask you is one in that area. Is there a coordinating group in the government, because we are falling behind?

The reality of it is America, if you look at the scores and you look at we used to be number one, now the competition is not only with China and India, but it is in Poland and Hungary and Romania and Bulgaria.

I mean, during the 1980s, you would go to Romania and there was one little string and a lightbulb and now you go there and they are pulsating there. They are hungry, the competition.

And I am not criticizing what you are doing. I think you want to readjust, but is there a coordinating group in—different than an NPOESS coordinating group—but is there one in town that looks at every single program and is working with the Department of Education and working with you and working with NASA to make sure that everything—we have almost a man to the moon type approach to kind of change the dynamics of this?

Ms. LUBCHENCO. Congressman, the Office of Science and Technology Policy in the White House has identified STEM, S-T-E-M, science, technology, engineering, and math, so that is one of the other Washington-isms, has identified STEM education as one of their priorities and they are coordinating a dialogue across the different agencies, each of which has some responsibility for STEM education.

So there is acknowledgement of the need for better coordination and more strategic movement in addressing the challenge.

Mr. WOLF. Well, okay. Well, why don't you let us know about that and then if we could see a copy of the report.

We put language in last year directing the National Science Foundation to do either a 90- or 120-day study of what works—

Ms. LUBCHENCO. Uh-huh.

Mr. WOLF [continuing]. Because I think once you have lost somebody by fifth or sixth grade, it is over. You almost never find somebody getting excited about science in twelfth grade or when they go to college majoring in English Literature transferring into physics. It does not happen.

And so you might take a look at where the National Science Foundation is. They ought to be close to being finished. And so you ought to see. We just asked them what actually works, best practices, first through fifth, and I think there may be some helpful information there.

Ms. LUBCHENCO. Congressman, NSF has really been the lead on STEM education and I am delighted to know of this study. I served on the National Science Board for ten years and so I am very familiar with the range of their programs and the quality. And I will definitely find this report. And each of the mission agencies has some responsibility. NASA has some. Department of Energy has some education. We have some. Other agencies do as well. And you have highlighted the importance of coordinating across those but drawing on the best practices, for example, from this NSF report. So I think that is exactly what is needed.

Mr. WOLF. Well, thank you.

Thank you, Mr. Chairman.

Mr. MOLLOHAN. Mr. Bonner

FISHERIES STOCK ASSESSMENTS

Mr. BONNER. Thank you, Mr. Chairman.

It is good to see you again.

Ms. LUBCHENCO. Congressman.

Mr. BONNER. I want to first of all thank you publicly for coming to Mobile back in January—

Ms. LUBCHENCO. It was my pleasure.

Mr. BONNER [continuing]. To help with the groundbreaking of the Disaster Response Center.

Ms. LUBCHENCO. Uh-huh.

Mr. BONNER. And we are looking forward to that continued partnership with NOAA.

In full disclosure, I have a statement that my wonderful staff has prepared that has the questions that I am going to pose to you.

Ms. LUBCHENCO. Okay.

Mr. BONNER. But before I get there, I want to follow up on a conversation we had at that dedication because I told you I wanted to bring you back down. I hope, to help a community that is not only in my district in Alabama but many communities like it all along the Gulf Coast that is struggling today.

And I want to take you, and I do not think you were there, but I would give anything if you could have been at our full Committee hearing yesterday where we had Secretary Geithner, we had Dr. Orszag with OMB, and we had Dr. Romer who were representing

the Administration on the budget, on healthcare, on the challenging times that we are facing.

One of our colleagues, Ms. Kaptur from Ohio, a member of the Majority, said probably as well as any colleagues I have heard say that there is a real disconnect between Washington, D.C. and America. There is disconnect between the Administration. Again, she is a Democrat and so she was speaking of the Obama Administration.

But as a Republican, I would say there has been a disconnect that precedes this Administration and goes probably for decades, not just years. Presidents, Administrations, Congress, the American people are very frustrated and believe that their government is not on their side.

Orange Beach, Alabama, which is a little beach community about 60 miles from where we were in Mobile in January, had at one time one of the largest charter fleets in the Gulf of Mexico. They have gone just in recent years from 140 boats down to 90 boats.

And when I mention boats, I am talking about a business, family business, three or four or five generations, a million to maybe sometimes two and a half million dollar business that employs five or six people. And so with those that have gone out of business, those families have now been forced to find work elsewhere.

Baldwin County, the unemployment rate in January of 2007 was two percent. It is now over ten and a half percent. And this is one of the most prosperous counties economically in the State of Alabama. National Marine Fisheries has been involved as part of this problem, unfortunately.

While I understand the final decision has not been made with regard to the length of the 2010 season, we have reason to believe that it will be shortened from the 65-day season for red snapper in 2009 to somewhere between 51 and 60 days.

Last year, we heard that there was a contemplation of taking the fishing for red snapper from two fish down to one. I understand that is not going to happen and I am grateful for that.

But now, Doctor, I want to speak to all of the people that work with you who are behind you and ask you this question. And you are not sworn in, so you cannot answer, but think about this.

Would you pay \$1,200 to take your family on a fishing trip to catch two fish? Most people would not.

So we are talking about family businesses that are struggling in the worst economy since the Great Depression. And, again, I use this only as an aside to Marcy Kaptur's comments yesterday.

The best I can tell in your written statement, and I do not hold you for that any more than you should hold me for the written statement I will give you in just a second from my staff, but there is some mention of commercial and recreational fishery products.

Red snapper are not products to the men and women and their families whose lives have been turned upside down any more than we are talking about the flounder in Massachusetts or the salmon off the coast of Washington State and Alaska. These are not products. These are real issues that affect people at the very heart of their survivability.

So here is my question. Red snapper has supported one of the most important fisheries in the entire country. Management re-

restrictions started around 1990, thus the population has been restricted for some 20 years. Despite these restrictions, fishery dependent derived population estimates still consider the population severely overfished. The same condition was suggested in 1990.

The overstock designation and the devastating reaction to it are based on an antiquated, at least in my view, antiquated data collection and analysis method dependent on actual fish takes that brings its validity into question.

Recently this overfished stock condition has led to even greater cutbacks in the total allowable catch that has led to even greater hardship to both commercial and sports fishers.

This year, the charter boat season, as I mentioned, upon which several communities in my district depend economically will again be shortened. We just do not know how long. And, again, as we believe, it will still be only two fish, thankfully not down to one.

This despite the fact that my home state has done, I think, as much as any state in being actively progressive, aggressively proactive in establishing some 20,000 artificial reefs and there are more than 4,500 oil rigs in Texas and Louisiana that provide additional safety for the habitat.

From a different base of knowledge and research using fishery independent surveys, the stock is clearly in better condition than predicted from most fishery dependent stock assessments and may be more in tune with what the fishers have adamantly been saying to me and to my colleagues. There is no shortage of red snapper. Many scientists locally are saying red snapper is at its highest stock ever.

There is also a unique opportunity to compare past fishing independent surveys from over ten years ago with a present stock conditions based on a new fishery independent study. These studies would take advantage of a variety of technology to measure a fishery without taking from fishermen only.

Such a new survey would not need any start-up time and would be directly comparable to a similar past survey. This approach of fishery independent research in my view would be more reliable, faster, and scientifically would bring some validity to evaluate the present stock condition and possible increases in population that have resulted from the restrictions over the past ten years.

So the question. Why is there such a delay in funding this type of work and why have repeated attempts to fund this type of work been rejected? And then I have got two quick follow-up questions, but I will give you a chance to answer those first.

Ms. LUBCHENCO. So, Congressman, let me simply start by saying that I am very concerned about the current status of many of our fisheries. And if you look nationwide, we are not in a good position. I think the number is over 60 stocks are currently overfished or undergoing overfishing. And I think the reality is that current fishery management has really not adequately controlled overfishing.

Thousands of jobs have been lost as fisheries decline under the current system and many valuable fisheries face huge closures, including the ones that you were describing in your state. And that has very serious impacts on jobs, on communities, on lives and livelihoods, on recreational opportunities as well as the availability of seafood.

So I agree that we are not in a good place right now. This is one of the reasons why I have been championing consideration of and transition to Catch Share programs for commercial fisheries, because I believe that they have a significantly better track record in improving fish and they work for fishermen as well as fish. And I think the changes in the commercial fishery in the Gulf of Mexico for red snapper are a strong testament to that.

I also agree with you that we do not have adequate information on the number of fish that are out there, if you will, or on the activities of recreational fishermen. The data are not as current as we would like. They are not as robust as we would like.

That said, we are required by law to use the best available information to make our decisions and it would be nice if we were in a better position and we had better data. I agree with the importance of acquiring those better data and funding those kinds of programs.

The decisions that we make about what to fund and what not to fund have to take into account all of the different fisheries all around the nation. And we simply have inadequate resources to do justice to all of them.

So it is not a good situation. I understand it has very serious consequences. Acquiring better fishery independent data is certainly appropriate. So, too, is having better information on what the activities are of recreational fishermen so that we can have more real-time information on what is being caught. And so there are sort of two data needs. One is the fish. One is the activities of the recreational fishing community.

One of the things that I committed to doing, which I shared with you when we were together in Mobile, was establishing a much better relationship with recreational fishermen. And I have been systematically beginning to do that.

We are convening a summit with recreational fishermen in April here in Washington, D.C. and we have been designing that summit in close collaboration with leadership from the recreational fishing community.

And we intend to work with them to identify the highest priority areas and to have a much better understanding of the data we do have, what is the basis of making our decisions, but also how can we improve that and how can we work collaboratively together with them to do that.

Mr. BONNER. Well, I appreciate the summit in April. And I appreciate your desire, stated desire to establish a better relationship with the recreational fishermen.

The only thing I will ask you in closing is, I am going to extend to you the same invitation that I extended to Mr. Schwabb who was nice enough to come meet with me, the Assistant Administrator for Fisheries. We had a very good conversation. But I would welcome the chance to bring you back to my district and we will go out on a boat and we will do independent data research. And I am very sincere. I am not trying to make light of this.

If the very people whose lives we are impacting the most, and it is not just the boat captains, it is the entire community, it is the restaurant and hotel people, it is the Chamber of Commerce, it is the thousands of people that come to these communities and fish-

ing is a big part of their vacation, but if they could have a chance to visit with you and with your team and let you see what we have been talking about when we say we believe red snapper has returned and is now more abundant than ever, not that that is alone going to convince you or anyone else at NOAA or National Marine Fisheries that more should not be done in terms of balance, science, but I will be perfectly honest, I think it would make them feel that people in their government that are going to—you know, we have no control over hurricanes. I wish we did. We cannot keep them from coming. We have no control over tornadoes.

We do not even have any control with the price of gas. So when fuel was \$4.00 a gallon a couple summers ago and that was another economic factor that put some of these folks out of business, there are some things we have no control over, but we do have control over writing regulations and passing laws that put hard-working, God-fearing Americans out of business and make them bitter toward their government. And so I would love to get you back down and anyone you would like to bring for an independent day of science and research.

And, again, I appreciate your coming down earlier.

Ms. LUBCHENCO. I appreciate that offer, Congressman. And I really do believe that we have much work to do to be out on the shore, on the water, and interacting more with people whose lives and livelihoods are affected.

Part of our challenge is keeping the eye on the long term as well as trying to figure out the solutions for the short term. And decisions that would preclude recovery of depleted fisheries are not going to be good for communities, for fishermen in the long term.

We are trying to think creatively about how we can address the very real short-term economic challenges while not precluding recovery down the road and it is that tension. And I think that these are extraordinary times and we are looking for creative solutions to try to do that balancing.

Mr. BONNER. Thank you.

Thank you, Chairman.

Mr. MOLLOHAN. Thank you, Mr. Bonner.

We have a vote. I plan to continue the hearing down to a point that we can all make our votes and then adjourn for—

Mr. RUPPERSBERGER. Mr. Chairman, I just made my vote.

Mr. MOLLOHAN. And adjourn for the remainder of three votes and then we will reassemble—

Ms. LUBCHENCO. Okay.

JOINT POLAR SATELLITE SYSTEM

Mr. MOLLOHAN [continuing]. After the three votes are cast. Please describe the new approach. What are NOAA's responsibilities and what are DoD's in the Joint Polar Satellite System?

Ms. LUBCHENCO. With the proposed restructuring of the Joint Polar Satellite System, NOAA would have responsibility essentially for the afternoon orbit. So NASA on behalf of NOAA would provide the acquisition management for the afternoon mission requirements. The Department of Defense would continue acquisition for the morning orbit assets and would need to transition the afternoon orbit instrument assets from DoD to NASA. So that is what

would be done in fiscal year 2010 with those funds that were allocated for that.

NOAA with assistance of NASA would continue procurement of an NPOESS Preparatory Project, or NPP-like spacecraft for the afternoon orbit. We do not yet have that spacecraft. We are examining options for acquiring that. It is a smaller bus than would have been the case under the old NPOESS Program.

Mr. MOLLOHAN. It could be a smaller bus or it is a smaller bus?

Ms. LUBCHENCO. We believe that we do not need the huge bus that was part of the NPOESS Program, that a smaller bus is more appropriate and certainly a lot cheaper.

And so we would continue procurement of those two spacecraft for the afternoon orbit and then support the launch readiness of the NPP, which is the NPOESS Preparatory Program, that is underway.

So that is what the funds for fiscal year 2011 would go to, would be to those particular responsibilities. And then, of course, the ground system, as I mentioned before, we would continue to operate jointly. That is working well and we anticipate no changes with that.

Mr. MOLLOHAN. So DoD's responsibilities would continue to be the morning or would be the morning round?

Ms. LUBCHENCO. That is correct. It would continue to have responsibility for the morning orbit and would share the data that would be appropriate from that that is not needed or that is appropriate to share for civilian purposes with us and then the converse.

Mr. MOLLOHAN. And what is DoD doing? Well, let me ask you this. What data from the different satellites will be shared or will data be shared from the different satellites, DoD, NOAA?

Ms. LUBCHENCO. We would share all of our data. DoD would share data that is not of a classified nature essentially. So each of those satellites has multiple different instruments on it and some of the instruments are more relevant for weather than climate, for example. And so that is one of the purposes of having a joint ground system is that you can share those data and it is set up to do that.

Mr. MOLLOHAN. And I think you said earlier in your testimony that the ground system will be jointly managed?

Ms. LUBCHENCO. NOAA manages it and NOAA is responsible for it, but it is a partnership that we all contribute to.

Mr. MOLLOHAN. Financially contribute to?

Ms. LUBCHENCO. No. I can check on this, but I believe that NOAA has the financial responsibility for that.

Mr. MOLLOHAN. But DoD is benefitting from that?

Ms. LUBCHENCO. I stand corrected. It is jointly funded.

Mr. MOLLOHAN. And would you submit for the record the share, how the joint funding is going to be shared?

Ms. LUBCHENCO. I would be happy to do that, Chairman.

[The information follows:]

In the February 1, 2010 decision to restructure the NPOESS program, in addition to assigning NOAA the responsibility of providing the observation for the afternoon orbit, it also assigned NOAA the responsibility of fielding the ground system network.

NOAA currently operates DoD's Defense Meteorological Satellite Program (DMSP) spacecraft on a reimbursable basis from the NOAA Satellite Operations Facility

(NSOF). NOAA will continue this arrangement for the rest of the DMSP satellites and NOAA anticipates that DoD would provide funds to NOAA to continue operation of satellites implemented under the DoD portion of the restructured NPOESS program. NOAA's Office of Satellite Operations has provided the command, control, and communication for DMSP spacecraft from Suitland, Maryland since 1998 with Schriever Air Force Base in Colorado providing back-up support. NOAA will continue to operate the DMSP platforms in the morning orbit under the restructured NPOESS program. The new ground system offers the agencies the opportunity to make operations more efficient by transitioning to a single enterprise solution for multiple satellites.

The JPSS budget will allow NOAA to continue development and fielding of the ground system in preparation for operations of the satellite on launch.

SATELLITE INTERNATIONAL PARTNERSHIPS

Mr. MOLLOHAN. International partners, how do they play in this?

Ms. LUBCHENCO. We currently have a partnership with EUMETSAT which is the European Meteorological Satellite System for support of the mid-morning orbit. There is an early-morning orbit, mid-morning orbit, and an afternoon orbit. They currently have satellites that operate in that mid-morning orbit. And NOAA provides instruments for that orbit that are flown on this European satellite and then we share the data.

So they provide the satellite, we provide the instruments, and everybody shares the data. That is currently what we do now. It is working very, very well. It is a great partnership. It saves us a lot of resources, a lot of money. And—

Mr. MOLLOHAN. Is that the extent of your international partnerships?

Ms. LUBCHENCO. No. We have considerable joint satellite systems, some with Europe's Meteorological Satellite Organization or EUMETSAT, some with the Japanese. Another one, for example, that we share with EUMETSAT is the Jason Program. Jason is a satellite system that measures sea surface height. It has altimeters that are critically important to have continuity of climate information but also for a lot of forecasting and information about sea level rise. That program is, I believe, a 50/50 split between NOAA and EUMETSAT.

And the funds that are requested in fiscal year 2011 are for Jason-3 and that satellite system builds on the earlier successes of Jason-1 and Jason-2 which again have been jointly operated with the Europeans.

Mr. MOLLOHAN. Are there international partnerships that you do not have that you are pursuing?

Ms. LUBCHENCO. There are a number of partnerships that we are having exploratory conversations about. I am not as familiar with those, but I would be happy to get that information to you.

Mr. MOLLOHAN. The information that comes down from these partnership satellites, does that information all come down the same ground system and it is managed in the same way as the data that would be managed between you and DoD?

Ms. LUBCHENCO. We have ground stations that have big satellite dishes. For example, in Fairbanks, Alaska, there is a ground system that captures data from the Polar-orbiting Satellites that are going around. It captures those data and then redistributes it to the relevant countries, the relevant agencies within the United

States. And there are a number of ground systems like that for the different types of satellite systems.

JOINT POLAR SATELLITE SYSTEM

Mr. MOLLOHAN. Okay. I am not sure I totally understand that. But all the data that is coming down from the Joint Polar Satellite System, all the data that will be coming down from the Defense satellite once they get that worked out, that is coming down in a ground system that you are managing?

Ms. LUBCHENCO. That is correct.

Mr. MOLLOHAN. And you are going to share that data in sort of arrangement with DoD. The information that is coming down from your partnerships like in the mid morning, is that coming down into the same system?

Ms. LUBCHENCO. Yes, it is.

Mr. MOLLOHAN. What role does NASA play in the Joint Polar Satellite System?

Ms. LUBCHENCO. The funds that are in NOAA's budget are contracted to NASA.

Mr. MOLLOHAN. NASA contributes no resources, no money?

Ms. LUBCHENCO. That is correct. NASA does not have any for the JPSS System, NASA does not have any budget. They are our partner. They—

Mr. MOLLOHAN. Is that a reimbursable agreement? Is it a memorandum of understanding?

Ms. LUBCHENCO. It is a reimbursable agreement. And it is the similar arrangement that we have for the GOES systems, for example. So they have the technical expertise, the experience in managing contracts, and they have primary responsibility for overseeing the acquisition, the testing of the instruments, the oversight of the contracts, et cetera. And they are very, very good at doing that and we have a great partnership with them.

Mr. MOLLOHAN. Well, because Defense is still reviewing this, correct? They are not at a point that they have made decisions of how they are going to go here. But will the Joint Polar Satellite System, will it include the same observations that were originally planned for the NPOESS afternoon orbit?

Ms. LUBCHENCO. For the afternoon orbit, yes, it will, because those are our responsibilities. DoD has committed to providing the same information that it does for the morning orbit, but they have not yet decided exactly how they will be doing that because those decisions for them are a little bit down the road.

Mr. MOLLOHAN. With regard to the afternoon orbit and the—

Ms. LUBCHENCO. Uh-huh.

JPSS SENSORS

Mr. MOLLOHAN. You are saying that you are going to have the same observations that were planned for NPOESS on the afternoon orbit under the JPSS System?

Ms. LUBCHENCO. That is correct.

Mr. MOLLOHAN. What are those sensors?

Ms. LUBCHENCO. There are a whole range of sensors. Let me look here. The JPSS would have the Visible/Infrared Imager/Radiometer Suite, which is called VIIRS; the Cross Track Infrared Sounder,

which is CrIS; the Advanced Technology Microwave Sounder, ATMS; the Ozone Mapping and Profiler Suite, OMPS; Clouds and Earth Radiant Energy System, CERES; the Earth Radiation Budget Satellite, ERBS; and the Total Solar and Spectral Irradiance Sensor, TSIS. So those are all instruments that were on NPOESS that now will be on JPSS.

Mr. MOLLOHAN. Okay. So whatever bus you are using, you decide to use, you will have the same instrumentation for the afternoon orbit as was planned for NPOESS?

Ms. LUBCHENCO. That is correct.

JPSS BUS

Mr. MOLLOHAN. What are your plans with regard to the bus to be used? Has a decision been made with regard to that?

Ms. LUBCHENCO. The decision has not yet been made. We are exploring options. We currently plan to acquire two buses that are roughly the size of NPP. That seems to be a good model. It has worked well for us. It is adequate. And so exactly from whom we would get them has not yet been decided. We are exploring what options are out there.

Mr. MOLLOHAN. So what are you calling these launches, the C-1, C-2, C-3 launches under NPOESS, and these launches are JPSS-1, 2, 3?

Ms. LUBCHENCO. That is correct. So C-1 would become JPSS-1.

JPSS LAUNCH DATES

Mr. MOLLOHAN. And when is the estimated launch date for JPSS-1?

Ms. LUBCHENCO. It would be fiscal year 2015.

Mr. MOLLOHAN. And how does that schedule compare and what about 2, launch of the second satellite?

Ms. LUBCHENCO. The second is end of calendar year 2017.

Mr. MOLLOHAN. How do those dates compare with the NPOESS scheduled launches, C-1, C-?

Ms. LUBCHENCO. The JPSS-1 is about six months later than the original NPOESS schedule, but that schedule was questionable. No one thought that was actually very realistic. And it is 18 months sooner than the NPOESS schedule we have adjusted. So we are better off.

Mr. MOLLOHAN. Okay. We are going to recess for these votes and we will be back after the third vote.

Ms. LUBCHENCO. Okay.

Mr. MOLLOHAN. The hearing will stand in recess. Thank you.

I think we ended on my trying to—the hearing will reconvene—on getting estimates of schedules. So will you review that again? When do you anticipate JPSS-1 ready for launch?

Ms. LUBCHENCO. We anticipate JPSS-1 ready in fiscal year 2015.

Mr. MOLLOHAN. And JPSS-2?

Ms. LUBCHENCO. A couple years later, 2017.

Mr. MOLLOHAN. Okay. Will there be any data gaps with that schedule?

Ms. LUBCHENCO. There should not be any loss in data. We should not have any data gaps if the transition goes as scheduled.

And I just received during the break a memorandum from Department of Defense, from the Under Secretary of Defense for Acquisitions, Logistics and Technology who is the point person at DoD. And he issued this morning his decision memorandum which is his formal direction to the folks at DoD to do what they had committed to for the transition.

So we had their word that they were going to be responsible for transitioning the afternoon assets to us and to be responsible for the morning orbit. Now his decision memorandum has been issued which is the order to actually do that. So that is very good news.

JPSS TRANSITION

Mr. MOLLOHAN. How will the transition from NPOESS to JPSS be handled? You alluded to a transition plan and team. If you would elaborate on that, please.

Ms. LUBCHENCO. Yes, I would be happy to. We have laid out a transition plan that would ensure efficient and smooth handover of assets. There is a Government Transition Team that has been established. Those individuals have been named and they will immediately develop and execute this transition plan that we all agreed to.

Part of that entails, for example, DoD transitioning its assets to NOAA, but it also means working with DoD and Northrop Grumman Aerospace Systems Procurement to transfer the work on the instruments and the ground systems to the NASA-led acquisition vehicles.

DOD APPROPRIATIONS FOR NPOESS

Mr. MOLLOHAN. The information you just got from DoD, did it speak to its intent with regard to its appropriations for NPOESS for fiscal year 2010?

Ms. LUBCHENCO. Mr. Chairman, I have not read the entire memo. It is one of the PDFs that is on a screen that is too hard to read. So I have not read the entire thing.

I believe it simply orders DoD to do the things that were in the transition plan. So DoD has committed to the funding that they have for fiscal year 2010.

Mr. MOLLOHAN. They committed to buying into the program?

Ms. LUBCHENCO. That is correct.

Mr. MOLLOHAN. So that is their intention previously expressed?

Ms. LUBCHENCO. That is correct.

Mr. MOLLOHAN. Whether it is in that memo or not, I think that is my information.

Please describe the effect of the JPSS Program if the Defense Appropriations Committee here were to rescind some of those funds. And there is some expression and concern around that that might be a possibility.

Ms. LUBCHENCO. There is expression of concern. Should that happen, I think there would be significant risk of a data gap. It is our hope that that will not happen because that would be quite serious. So we are hopeful.

Mr. MOLLOHAN. Would there be a delay? What would be the—

Ms. LUBCHENCO. Yes. If the funds are rescinded, then the launch of JPSS-1 would be delayed probably by about six months and

there would be very considerable risk of a data gap. In fact, that risk would be almost a certainty.

JPSS BUDGET IMPACTS

Mr. MOLLOHAN. Let me finish this line up. Please explain the effects of the JPSS decision on NOAA's budget for fiscal year 2011.

Ms. LUBCHENCO. The fiscal year budget includes contingency funding, termination costs for the Northrop Grumman contract, and a cost estimate that is at or close to the 80 percent level. So this would ensure that lack of funding will not drive day-to-day decisions which has been a chronic problem with this program throughout.

Mr. MOLLOHAN. How has it impacted your request here? Your request has been increased by X number of dollars in order to support the JPSS approach.

Ms. LUBCHENCO. Yes, Mr. Chairman. The request has been increased by almost \$680 million. So the total request is a little over \$6 billion. And that request essentially has the—that is the total request, correct, yes—and that request includes this contingency funding, the termination cost, and—

Mr. MOLLOHAN. And would you please submit for the record an explanation of the effects of the JPSS decision on NOAA's budget for 2011?

Ms. LUBCHENCO. I would be happy to.
[The information follows:]

NORTHROP GRUMMAN AEROSPACE SYSTEMS CONTRACT

On February 1, 2010, the Administration announced NOAA and the Department of Defense (DoD) would no longer jointly procure the polar-orbiting satellite system called NPOESS. NOAA and DoD are in a critical transition phase as each agency determines how the programs in each agency's respective orbit will be structured. NOAA is working closely with NASA to develop the Joint Polar Satellite System (JPSS) for the afternoon orbit, while DoD is analyzing its options for fulfilling its need for environmental data in the morning orbit.

At this time, however, no final decision has been reached on the disposition of the NPOESS prime contract as a result of the Administration decision and ongoing transition. While it is possible the NPOESS prime contract, held by Northrop Grumman Aerospace Systems, could be terminated by DOD, it is also possible the contract could be transferred or modified. The FY 2011 budget includes funds to cover our termination liability should termination occur.

Most importantly, NOAA is working closely with NASA and DoD to ensure there will be no gap in polar satellite coverage, particularly in the afternoon orbit, which is crucial for monitoring climate change and its many impacts.

Mr. MOLLOHAN. Given the mutual use of data by NOAA and DoD and their shared responsibilities for termination liabilities, don't DoD decisions still have the potential to increase your cost?

Ms. LUBCHENCO. Yes, Mr. Chairman, they do. You know, what DoD decides to do in the out years still has the potential for affecting our costs.

Mr. MOLLOHAN. How?

Ms. LUBCHENCO. It is in the process of conducting a requirements review and analysis of its alternatives. The termination liabilities are a particular concern for us. We are working with DoD to minimize those liabilities and we are still in the process of negotiations.

Mr. MOLLOHAN. When will the JPSS Program baseline be determined and what steps will be taken before then and how will that impact your 2012 budget request?

Ms. LUBCHENCO. The program is going to be subject to independent review of the mission concepts, the organizational structure, the acquisition strategies, and the budget prior to program baselining.

The goal is to include these findings and resultant strategies in the fiscal year 2012 budget. So the Transition Team will provide the date for this review, but the DoD architecture is needed before that can be finalized.

Mr. MOLLOHAN. Has the NOAA/NASA Transition Team membership been finalized and how is it going if it has?

Ms. LUBCHENCO. The team has been formed. It is working together. I think we are off to a good start. And I think there is a solid basis from which to move forward. The recent decision memorandum from Dr. Carter, I think, is very good news and puts us in a good position.

SCATTEROMETER

Mr. MOLLOHAN. Okay. Mr. Schiff.

Mr. SCHIFF. Thank you, Mr. Chairman.

Last year, the Committee asked for a plan to develop a satellite-based scatterometer to monitor surface specter winds. That proposal was supposed to be included in the budget, but unfortunately it was not. This data is vital for forecasting the progression of hurricanes and other large storms. And our current source of such data, the QuikSCAT Satellite, lost an antenna in November ending its operational capability.

Given the predictable demise of QuikSCAT and ongoing discussions with NASA and the Japanese Space Agency, I am collaborating on a new mission.

Why was this project not included in the fiscal year 2011 proposal and what are your plans for obtaining high-quality surface specter wind data?

Ms. LUBCHENCO. Congressman, the QuikSCAT Program was very, very useful and helpful. We currently have other satellite programs that can provide some comparable information for the coastlines of the U.S. So even though we have lost that satellite system, we can make up for those data in forecasting hurricanes along the coastline.

What we have lost completely is the ability to do forecasts for ocean weather way out in the middle of the ocean away from the coastlines. And so replacing that satellite is an important thing for us to do. It was deemed less urgent than other needs and so it was a decision of tradeoffs because we currently have some capability to forecast hurricanes. QuikSCAT was not essential to that capacity. We still have that. And so we are anticipating studying what our options are for the future to replace what was lost with that system.

Mr. SCHIFF. Is it your expectation at this point that this will be included in next year's budget? This is a yearly reprieve but not a cancellation of the effort?

Ms. LUBCHENCO. It is probably too early to say at this point. We are looking at what the options are. And I would be happy to let you know as soon as we have made any decisions on that.

CONSTELLATION OBSERVING SYSTEM FOR METEOROLOGY, IONOSPHERE
AND CLIMATE

Mr. SCHIFF. Thank you.

And very quickly, I wanted to ask you, the budget submission in the case that NOAA is following up on, the successful COSMIC Radio Occultation Satellite Program with a new program COSMIC-2 to launch 12 small satellites to gather key weather and climate data, the new program is again a collaboration with Taiwan, meaning half the funding comes from Taiwan and about half the work will be done there.

For several years now, American companies have expressed interest in providing this data on a commercial basis and claim they can do so at considerable savings.

What would be the relative expense of procuring this data commercially as compared to under the current plan? When would the COSMIC-2 System be operational in providing data and how does that compare to when a commercial provider would become operational? And more generally, is NOAA pursuing opportunities to procure data from domestic commercial sources and help support the American commercial space industry?

Ms. LUBCHENCO. Congressman, NOAA currently uses commercial satellite data to obtain crucial information on a number of different—for different types of information, ocean color, for example. Sea ice tracking and monitoring are examples.

And so we fully recognize the value of the public/private partnerships that those kinds of arrangements entail.

We have ongoing dialogue with companies that might be able to provide additional crucial environmental data sets beyond our existing Geostationary and Polar Orbiting Satellite Systems.

In the last couple of years, NOAA has awarded a series of study contracts to get additional information from the private sector to examine possible ways to obtain additional high-priority weather, climate, and space weather observations. And we are folding that into our planning for the future. So we are taking stock of what is out there.

And COSMIC is one of those programs. COSMIC will provide important information for weather forecasting in an area where private sector cooperation will likely be very beneficial in the future.

While it has been determined that a 50/50 funding partnership with Taiwan is currently the most economical on the short term to obtain those instruments, on the longer term, private sector cooperation will likely be a good option as we are interested in obtaining more of that type of information.

Mr. SCHIFF. Can you just get back to the Committee with a comparison of what the commercial providers can do now in terms of the data you are looking for and what the relative cost would be?

Ms. LUBCHENCO. Certainly. I would be happy to.

Mr. SCHIFF. And whether they lack the capacity to give or if they have the capacity, whether the costs are greater or less than the partnership with Taiwan.

Ms. LUBCHENCO. One of the issues, Congressman, is who has access to the data. And so I am just flagging that as a consideration that we have to fold into our thinking. Any contractual arrangements we would have, we would want to have the data be freely accessible and available. And that does not always fit in with the business plan of some companies.

So that is one of the issues that we have to work through with them when we are talking about these kind of contractual arrangements. It is not just the money. It is how the data can be used is also important.

Mr. SCHIFF. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Mr. Wolf.

Mr. WOLF. I will pass.

Mr. MOLLOHAN. Mr. Schiff, do you have any other questions?

Mr. SCHIFF. No thank you.

Mr. MOLLOHAN. Okay.

Mr. WOLF. Mr. Chairman, I have some questions I will just submit for the record.

RECREATIONAL FISHING

Mr. MOLLOHAN. Okay. You scared me there. I thought I gave you too much time.

Recreational fishing contributes over 125 billion to the economy on an annual basis and supports over a million jobs. The recreational fishing community has expressed concerns with respect to NOAA programs, including Catch Shares and research. We heard that spoken to by Mr. Bonner here earlier this morning.

This community also has concerns about the effect of the coastal and marine spatial planning framework. We will submit several questions for the record on these topics.

CLOSING REMARKS

We are at the twelve o'clock hour and members have other engagements. And you have kindly given up your time to be here this morning and I know you have a busy schedule likewise.

So we will submit a number of other questions for the record other than this.

Thank you for your excellent testimony here today and your excellent service. The kind of management you brought to NOAA is very impressive dealing with this NPOESS issue and getting this on the right track will earn you, I do not know, a legacy forever. And we look forward to working with you and your fine staff.

Thank you very much, Dr. Lubchenco, for appearing here today.

Ms. LUBCHENCO. Thank you, Mr. Chairman. I appreciate it.

Mr. MOLLOHAN. The hearing is adjourned.

Chairman Alan Mollohan
Questions for the Record

Geostationary Operational Environment Satellite-R Series
Space and Ground Awards

There was some delay in the Geostationary Operational Environment Satellite-R Series, or GOES-R.

- 1. Originally, the spacecraft contract was awarded to Lockheed Martin; that award was protested and has since been resolved. Please bring us up to date on the current status of the spacecraft contract, including the expected launch readiness date.**

Answer: On December 4, 2008, GOES-R program announced that NASA, on behalf of NOAA, had awarded the spacecraft contract to Lockheed Martin Space Systems Company to build two spacecraft for the GOES-R program. The basic contract is for two spacecraft with two unfunded options that each provide for one additional spacecraft. On December 15, 2008, Boeing Satellite Systems filed a protest with the Government Accountability Office (GAO) against the GOES-R spacecraft contract award to Lockheed Martin Space Systems Company. After the resolution of the protest, the spacecraft contract activities were resumed on July 22, 2009.

Since that time the spacecraft contract has completed its Integrated Baseline Review (IBR) in April 2010 which established the performance baseline for the contract, and it had completed a System Definition Review (SDR) in March 2010. Currently work is on-going in support of the Preliminary Design Review (PDR) in January 2011.

As a result of the procurement delay, the launch readiness date for GOES-R was adjusted from April 2015 to October 2015 to ensure the core spacecraft development schedule was maintained.

- 2. When was the ground system awarded; and to whom?**

Answer: On May 27, 2009, NOAA announced that Harris Corporation – Government Communications Systems Division of Melbourne, Fla. had been selected to develop the GOES-R ground system, which will capture, process and distribute information from NOAA's next generation geostationary satellite series to users around the world.

3. Has the cost and schedule baseline been established?

Answer: Yes. The ground segment contract is valued at \$736 million and requires Harris Corporation to design, develop, test and implement the GOES-R ground system.

The Integrated Baseline Review (IBR) for the ground segment contract was successfully completed in November 2009.

4. Are there any other major acquisition awards outstanding? If so, what is the status of each such award?

Answer: Yes there are two major acquisition awards pending. The first procurement is for the GOES-R ground segment Antenna System which provides the space-to-ground and ground-to-space interface with the GOES-R series satellites at all three GOES-R ground system sites: (a) the set of 3 new antenna stations at the Wallops Command and Data Acquisition Station in Wallops, Virginia; (b) upgraded antennas at the NOAA Satellite Operations Facility (NSOF) in Suitland, Maryland; and (c) 3 new antenna stations at the GOES-R Remote Backup site, in Fairmont, West Virginia. This procurement is currently in source selection with contract award planned for July 2010. The antennas will be delivered as Government Furnished Products (GFP) to the Ground Segment contractor (Harris Corporation) to be integrated with the rest of the Ground Segment.

The second procurement is for the GOES-R Access Subsystem (GAS) which will provide the computing systems to support product generation and product distribution from the GOES-R satellite for users such as NOAA's National Weather Service, the Department of Defense, Department of Homeland Security, the U.S. Department of Agriculture, private weather services, and others. The GAS is being acquired by NESDIS's Office of Systems Development as part of its Environmental Satellite Product Distribution System development efforts. This effort is in source selection and contract award is scheduled for June 2010.

5. What is the status of the Remote Backup Site?

Answer: After an exhaustive nation-wide search, in December 2009, NOAA, with the assistance of the General Services Administration, selected Fairmont West Virginia as the site of the GOES-R Remote Backup facility. GSA awarded a lease for 15 years, with a five-year renewal option for office space as well as an area for the three GOES-R antennas, which will be sited to allow for data acquisition and command and control of the GOES-R satellites in the event the primary locations are disabled. The specific operational design will be completed by July 2010, and the build out will be completed by early 2011. This site must be functional before the launch of the GOES-R satellite in 2015.

6. Given the expected life of the recently launched GOES-15 and other GOES satellites on orbit, when will NOAA need to have GOES-R available for launch?

Answer: GOES-15, the last of the GOES-N Series, was successfully launched on March 4, 2010. It is currently going through on-orbit testing. After testing is completed, it will go into on-orbit storage until May 2015 when it is scheduled to be placed into operation to replace GOES-13 (currently GOES-East).

NOAA is developing the GOES-R satellite as quickly as possible to ensure that the satellite is ready for launch by October 2015 to mitigate any gaps in geostationary satellite data continuity, and maintain NOAA's operational posture of two operational satellites (GOES-East and GOES-West) and an on-orbit spare.

GOES-R Instrument Updates

7. The Advanced Baseline Imager (ABI) instrument has experienced some technical challenges. What is the current status of the instrument?

Answer: NOAA acknowledges that there are technological risks associated with building the ABI. NOAA determined that building a prototype model (PTM) of the ABI instrument would allow the GOES-R program to mitigate and retire design and development risks prior to building the flight model. The GOES-R Program has worked through and resolved a number of technical challenges in developing PTM for the ABI. In early March 2010, the PTM completed its pre-environmental testing review; it is currently completing the vibration testing portion of the environmental testing and will shortly begin the electro-magnetic interference phase of the environmental testing. The final phase of the environmental testing of the PTM is the thermal vacuum testing that is scheduled for October-November 2010. The ABI PTM is progressing as expected at this point in its development. Development of the ABI flight model will begin after successful completion of the PTM environmental testing.

8. Are there issues with the Geostationary Lightning Mapper (GLM) as well?

Answer: No, there are no technical issues with GLM. The GLM recently completed its Mechanical, Optical, and Thermal subsystem Critical Design Reviews (CDRs). Based on concerns by the GOES-R Program regarding the engineering maturity of these reviews the Government is working with the contractor, Lockheed Martin, on a recovery plan which may involve a schedule slip of the GLM system CDR. The Government's preliminary assessment is that the recovery actions will cause insignificant impact to the Flight Model 1 (FM1) schedule.

9. Please bring us up to date on the rest of the GOES-R instruments.

Answer: The Extreme Ultraviolet (EUVS) and X-ray Irradiance Sensor (XRS) (EXIS) completed its Critical Design Review (CDR) in November 2009 and is in the manufacturing and build phase.

The Solar Ultraviolet Imager (SUVI) completed its Critical Design Review (CDR) in November 2009 and is in the manufacturing and build phase.

The Space Environment In-Situ Suite (SEISS) is progressing toward its CDR which is planned for June 2010.

10. What is the current critical path on GOES-R?

Answer: The program critical path to the 2015 Launch Readiness Date (LRD) involves the development and delivery of the ground mission management capability in time to support spacecraft-ground compatibility testing, final pre-ship processing of the satellite, and launch base processing. The GOES-R System Program Director (SPD) is working with the NASA-led space segment and the NOAA-led ground segment to ensure that these risks are closed in time to meet the 2015 LRD.

11. What impacts have these issues had on the GOES-R budget?

Answer: These instrument development issues have not had an impact on the GOES-R budget since NOAA has developed sufficient resources within the existing GOES-R budget to address the issues as they arise. Also, with NASA as NOAA's acquisition agent for the space segment, the GOES-R SPD has access to the necessary engineering at the Goddard Space Flight Center to address technical issues.

Geostationary Operational Environmental Satellite Program

12. With respect to the previous GOES Program, list the existing satellites and their current status.

Answer: The GOES Program provides satellite coverage of the Western Hemisphere. Currently, there are five existing satellites. Following is a chart providing the status of each:

Satellite	Launched	Status
GOES I-M Series		
GOES-11	May 3, 2000	<ul style="list-style-type: none"> • Activated in June 21, 2006 • Currently GOES-West
GOES-12	July 23, 2001	<ul style="list-style-type: none"> • Activated in April 1, 2003 • Providing satellite support to South America
GOES N-Series		
GOES-13	May 24, 2006	<ul style="list-style-type: none"> • Activated in April 14, 2010 • Currently GOES-East
GOES-14	June 27, 2009	<ul style="list-style-type: none"> • In on-orbit storage • Being routinely monitored and tested to maintain operability in the event GOES-East or GOES-West fails prematurely
GOES-15	March 4, 2010	<ul style="list-style-type: none"> • On-orbit testing and checkout ongoing through early September 2010.
GOES-R Series		
GOES-R	October 2015 Launch readiness date	<ul style="list-style-type: none"> • Under development
GOES-S	February 2017 Launch readiness date	<ul style="list-style-type: none"> • Under development

QuikSCAT

This NASA research mission measured ocean surface wind speed and direction in nearly all-weather conditions over 90 percent of the global oceans every day. QuikSCAT provided near-real-time data for use by operational agencies and international meteorological organizations for open-ocean marine weather forecasts and for identifying the location and size of hurricanes while at sea.

- 13. Recently, it was announced that the scatterometer antenna spin mechanism began to degrade and then stopped spinning. Was this expected? Why did it occur?**

Answer: The NASA QuikSCAT satellite was designed for a nominal operational lifetime of only two to three years when it was launched in June 1999 as a research and development mission. When the bearings failed in November 2009, they were over 10 years old and 5 years beyond their design life when the antenna spin mechanism failed. NOAA and NASA fully anticipated that the satellite was reaching the end of its usable life.

- 14. How will this affect NOAA forecasts for hurricanes and tropical storms making landfall in the U.S. and the Caribbean?**

Answer: NOAA landfall forecasts for hurricanes and tropical storms in the U.S. and the Caribbean will be minimally impacted without NASA QuikSCAT because of the availability of other data sources for analyzing storms in these coastal areas, such as hurricane hunter aircraft. However, with the failure of NASA QuikSCAT, the ability to maintain and improve the accuracy of hurricane-force wind warnings in the Atlantic and Pacific open oceans for non-tropical ocean storms could be degraded. NOAA is pursuing both short and long-term mitigation strategies.

- 15. What is the data used for?**

Answer: Remotely-sensed Ocean Surface Vector Winds (OSVW) from satellites is used by National Weather Service forecasters to issue marine forecasts and warnings. This information is used directly by mariners engaged in commerce and transportation to make safe and economically efficient ocean passages. OSVW data provide information over vast areas of the ocean not covered by conventional observations. These data can help determine the intensity of the winds and the radius of tropical storm force winds associated with tropical storms and hurricanes. Most importantly, the NASA QuikSCAT OSVW data was used to consistently determine the extent of strong winds – hurricane force winds – on dangerous winter storms. Based on this capability to detect winds increasing in strength to reach hurricane force winds, in 2000, NWS created a new Hurricane Force (HF) wind warning category and began issuing warnings for these severe

winds associated with winter-type storms in the open oceans. NASA QuikSCAT data are also very important to U.S. coastal areas, particularly the west coast and Alaska. Storms affecting these areas originate over the data-sparse Pacific Ocean and QuikSCAT provides the only source of surface wind observations over the open ocean. NASA QuikSCAT also provided valuable wind data over the tropical Pacific Ocean to help determine the intensity of tropical systems.

16. How will NOAA mitigate the loss of QuikSCAT data? What is the impact of this mitigation on NOAA's budget?

Answer: As a result of the NASA QuikSCAT loss, NOAA is continuing to pursue both short and long-term mitigation strategies for OSWW. Short-term mitigation options include improving the use of satellite data from partners, such as the Advanced Scatterometer (ASCAT) instrument on the European Met-Op satellite, operated by the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT). While ASCAT has different OSWW capabilities than NASA QuikSCAT, it does provide partial mitigation of the NASA QuikSCAT failure.

Additionally, India launched the research satellite Oceansat-2 in September 2009, which has a QuikSCAT-type instrument. NOAA is working on an agreement to gain timely access to data provided by the satellite. The quality of the data and instrument has not yet been demonstrated, and India does not currently have the capability to deliver data in a timely enough fashion to be useful for operational forecasting. China is planning to launch HY-2A, a QuikSCAT-type instrument, in late 2010. NOAA continues to attempt to engage China in discussions about acquiring access to their data.

Partnerships also provide substantial advantages to the U.S. by providing cost savings through launch and launch services that would be borne by a pre-existing mission over a U.S.-only OSWW satellite mission.

17. Why doesn't the fiscal year 2011 budget request include funding for a replacement scatterometer? Will the fiscal year 2012 budget include such a request? If not, why not?

Answer: NOAA, consistent with its role as an operational satellite data provider, has worked with NASA, the satellite community, and other partners to study and develop appropriate solutions to maintain operational continuity of ocean surface wind data both through satellite-based and non-satellite options. As soon as a technical solution has been finalized, the Administration will submit a budget initiative in the annual appropriations process.

Catch Shares

The FY11 budget request includes \$54 million for a National Catch Share program, including a \$36 million increase from FY10.

18. What is a “catch share”?

Answer: “Catch share” is a general term for several fishery management strategies that allocate a specific portion of the total allowable fishery catch to individuals, cooperatives, communities, or other entities. Each recipient of a catch share is directly accountable to stop fishing when its specific quota is reached. The term catch share includes more specific programs defined in the Magnuson-Stevens Fishery Conservation and Management Act (MSA) such as Limited Access Privilege (LAP) and Individual Fishing Quota (IFQ) programs.

19. Why should catch shares be adopted? How do they help the fishermen in a given fishery?

Answer: Catch shares come in many shapes and sizes and if designed well, they can effectively stop overfishing, reduce the negative biological and economic impacts of the race for fish, and result in safer and more profitable fisheries. The adoption of Catch Share programs is voluntary. Evidence has shown that Fishermen participating in catch share programs are able to plan their fishing effort around the weather, markets, or other business considerations. Because they are allotted a share in a fishery, fishermen gain an economic incentive to catch their allocation at the least cost and without going over their allotment. As a fish stock rebuilds, the holder’s share increases in value. In addition, fishermen need not take unnecessary risks because they can fish whenever they want, and can fish at times when there is not a surplus in the market.

20. Does NOAA require a fishery to adopt catch shares?

Answer: No. The draft NOAA policy and the record states that NOAA is not recommending catch shares be used in all fisheries and that there is no mandate to adopt catch shares in any fishery.

21. Who makes the decision to adopt catch shares, then?

Answer: The Regional Fishery Management Councils (Councils) consider the appropriateness of catch share programs and decide if a fishery may benefit from their use. Catch shares designed for federal fisheries under authority of the Magnuson-Stevens Act have a great deal of design flexibility to accomplish a variety of goals. Each fishery is different and an explicit evaluation of all

management alternatives, including catch shares, is necessary to determine which approach is best suited for each fishery.

22. How many Regional Councils are there? What are they and what is their purpose? Who sits on a regional council and who decides who should sit on a regional council?

Answer: Section 302 of the Magnuson-Stevens Act (MSA) created eight regional fishery management councils: New England, Mid-Atlantic, South Atlantic, Gulf of Mexico, Caribbean, Pacific, North Pacific, and Western Pacific. Each regional council's area of responsibility is the exclusive economic zone (EEZ) adjacent to its constituent states or territories. Regional councils develop fishery management plans and management measures for fisheries within their area of responsibility in a fully transparent and public process. NOAA's National Marine Fisheries Service approves and implements these plans and measures.

In accordance with Section 302 of the MSA, the Secretary of Commerce is required to appoint the voting obligatory and at-large members to the regional councils. On behalf of the Secretary, NOAA's Assistant Administrator for Fisheries is charged with soliciting the gubernatorial nominations and facilitating the annual appointments process. Each regional council's voting members include one NOAA National Marine Fisheries Service representative, a representative of each state fishery agency in the regional council area, several private citizens nominated by state governors because of their specific qualifications (this includes representatives of the commercial and recreational fishing sectors as well as other interested non-governmental organizations), and in some regions, a representative from local tribal or territorial governments. Non-voting membership includes regional representatives from the U.S. Coast Guard, the Department of State, the U.S. Fish and Wildlife Service, and Interstate Marine Fisheries Commission. The annual solicitations for gubernatorial nominations, initiated in mid-January, are required to be submitted to the Assistant Administrator for Fisheries by March 15th.

23. If catch shares are such a great tool, why are so many fishermen protesting against the program?

Answer: Any significant change to fisheries management approaches generates concern, and allocation of exclusive shares is a significant departure from the traditional open access practices of the past. However, many current fishermen protestations concern mandated reductions in catch quotas that are necessary independent of the adoption of catch shares. The Magnuson-Stevens Act requirement to end overfishing and rebuild overfished stocks of fish to biologically sustainable levels mandates the adoption of annual catch limit controls. For many fisheries this means a reduction in allowable catch, at least in the short term, that will make it harder for fishermen to make financial ends meet. Catch shares are not mandating the reduction; they are simply allocating the allowable catch among individual recipients.

Nonetheless, despite the numerous potential benefits that catch shares provide, they are not without criticisms. Catch shares can result in some consolidation of the harvesting sector because some fishermen holding shares make a willing business decision to lease or sell their privileges to someone else. While they are compensated for their exit, others are impacted by their decisions. For example, in the Bering Sea crab fishery, the rate and extent of vessel consolidation surprised many, and the traditional number of crew positions was reduced significantly in the first year as vessel owners sold their shares and their vessels left the fishery. Many part-time crew jobs were lost, although catch shares typically lead to an increase in the number of full-time jobs and total income in the fishery. Previous to the Bearing Sea Crab Rationalization Program, harvesting and processing capacity had expanded to accommodate highly abbreviated seasons, resulting in significant portions of the capacity to be idle between seasons. Under the rationalization program, season lengths increased from 3-5 days to 93-230 days and revenues from the fishery increased by 40 percent (in constant dollars) in just three years. There have also been other concerns expressed about how catch shares programs might affect recreational fisheries, contribute to job losses on shore, or threaten the sustainability of small boat communities as shares are transferred among vessels, ports and sectors.

However, carefully designed catch share programs can effectively avoid or mitigate these issues using the tools available in the Magnuson Stevens Act. With the development of any new catch share program, there is a great deal of design flexibility to allow fisheries to support diverse fleets of both small and large vessels, encourage owner-operated fleets, set aside shares for specific sectors such as recreational participants, specific fishing communities or regional fishing associations, and provide preference and support for small owner-operated vessels and/or new entrants to enter the fisheries.

24. In FY10, there is \$17.4 million in the National Marine Fisheries Service (NMFS) line office budget for catch shares. What does that funding provide?

Answer: In FY2010 \$17.4 million in base funds was moved in into the National Catch Share Program Line. This amount includes:

- \$6.0 million for continued support for existing Limited Access Privilege Programs (LAPP) and development of new catch share programs
- \$6.0 million for Cooperative Research
- \$5.4 million for implementation and management activities of the Northeast Multispecies Sector program

25. The FY11 budget includes an increase of \$36.6 million, which would fund one program expansion and four new catch share programs. These five programs would cost more than twice the first 15 catch share programs. What does the increased funding provide? Why is the increase so much more than the original budget for catch shares?

Answer: The \$17.4 million catch share line in FY 2010 does not represent the amount spent on catch share management for existing programs.

This amount includes:

- \$6.0 million for continued support for existing Limited Access Privilege Programs (LAPP) and development of new catch share programs
- \$6.0 million for Cooperative Research
- \$5.4 million for implementation and management activities of the Northeast Multispecies Sector program

NOAA has requested an increase of \$36.6 million, for a total of \$54 million. The key purpose for this increase, above the budget for existing programs, is to accelerate and enhance implementation of catch shares as appropriate nationwide. The requested increase supports analysis and evaluation of fisheries for catch share programs, development of fishery management plans and regulations, observing and monitoring at sea and on shore, and enforcement activities. Of the \$36.6 million increase:

- \$10.6 million is for activities and capabilities that support and design catch share programs. This category includes program management at the national and regional levels, 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.
- \$2.0 million is for analysis and development of new catch share programs through the Regional Fishery Management Council Process. Catch share programs typically take several years of analysis, stakeholder participation, and Regional Council deliberation before being adopted. Catch Share Plans can be more complicated than many 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 industry advisory meetings, are often established to advise the Regional Council on appropriate alternatives.
- \$24 million is for implementation and operation of four new catch share programs: Gulf of Mexico grouper (\$6.6M), Mid-Atlantic tilefish (\$0.5M), Northeast multispecies (\$4.4M), and Pacific groundfish (\$12.7M). Of this \$24

million, \$2 million is provided for the NOAA Office of Law Enforcement. Following Regional Council adoption and Secretarial approval of a catch share program, an implementation period of one to two years is common. Key implementation activities include hiring management and enforcement staff, establishment of program specific share accounting databases and reporting systems, identification of eligible participants, issuance of catch shares, computation of annual quota for each participant, and adjudicating administrative appeals of the eligibility and catch share decisions. These activities need to be completed before fishermen begin fishing under the catch share program. The operational costs include program administration, monitoring, enforcement, and science evaluation.

26. Catch shares have been around since 1990, and there are 15 programs currently in existence. Why do we need such a significant increase in funding right now? What will happen if we don't fully fund the program?

Answer: The current sustainability of many fish stocks and fishing communities is threatened or in decline as a consequence of many factors, including past management practices that have resulted in too many fishermen trying to catch too few fish (overcapacity). Catch shares are a management tool that if designed well, can effectively stop overfishing, reduce the negative biological and economic impacts of the race for fish, and result in safer and more profitable fisheries.

Two-thirds of the requested funding supports implementation of four new catch share fisheries; they each require monitoring and operational support. This includes two of the nation's most valuable and overfished fisheries, the New England groundfish and the Pacific Coast groundfish fisheries, which are in the process of implementing catch share programs after years of planning and development. Their successful operation would be precluded without this funding. The absence of full funding will also delay the development of new catch share programs by the regional councils, reduce the public participation and transparency of catch share program development, and eliminate the collection and analyses of social and economic data that would be used to evaluate program options and ensure fair and equitable allocations of catch share privileges.

Recreational fishing represents a significant use of the Nation's fishing resources. The Committee has heard concerns expressed by members of the recreational fishing community about the impact that data collection may have on the allocation of fishing quotas for recreational fishermen under a catch-share fishery. Language was included in the FY10 Omnibus directing NMFS to provide a report on recreational fishing under catch share program management; that report is overdue.

27. Describe the concerns of the recreational fishing community and the NMFS strategy for addressing them. Is that strategy reflected in the 2011 budget?

Answer: While some members of the recreational fishing community are very supportive of catch share programs, there are a number of recreational fishing interests who have expressed concern that catch shares will limit recreational access to fishing, and that present commercial-recreational allocations of the allowable catch will be locked in perpetuity with the issuance of catch shares.

Historically, catch shares have focused on the commercial sector of a fishery and currently no U.S. recreational fishery uses catch share management, though such an approach would be feasible. Within a mixed-use fishery, regional councils can recommend management of the commercial sector with catch shares and still manage the recreational sector by other means. NOAA's policy makes it clear that regional councils need to carefully evaluate the potential effects of catch shares on all sectors associated with a fishery, regardless of whether they are in the catch share program. Commercial catch shares can benefit all sectors of a fishery by limiting commercial harvests to published quotas and providing economic incentives for conservation. This will have a positive impact on fish stock health, which is essential for both the commercial and recreational sectors.

The recreational fishing community is also concerned that commercial catch shares affect the recreational-commercial allocation of the total allowable catch (TAC). The setting of the TAC and its allocation among sectors is a separate policy decision of the regional council, regardless of whether catch shares are used to subsequently distribute the resulting allocation among participants in a given sector. Commercial catch shares do not take fish away from existing recreational allocations of the total allowable catch or exclude recreational anglers from access to fisheries. Commercial catch shares simply distribute the fish that are already assigned for commercial use among the eligible participants within the commercial sector.

Regional councils are required by law to periodically review catch share plans and non-catch share programs to ensure that they are meeting the intended goals for the fishery, the fishermen, and the fishing communities. Review of the commercial-recreational sector allocation is part of the responsibility to monitor the achievement of the goals of the management plan in consideration of changing conservation, biological, economic and social values. Regional councils may recommend modification to the distribution of the allowable catch, subject to Magnuson Stevens Act requirements. The criteria and schedules to reallocate quota between sectors can be included in the fishery management plan, and an unscheduled reallocation can be considered at any time by plan amendment if circumstances warrant.

The NMFS strategy for addressing these recreational concerns is reflected in the FY 2011 budget request. The FY 2011 budget request provides funding for improvements in fishery dependent data collection systems to support future catch share programs decision making, including data collection and analyses to evaluate criteria for recreational-commercial allocations of total allowable catch and subsequent distribution via catch shares. Quality control on historic catch data will help ensure initial individual or group allocations are based on accurate data, while new social and economic data collection and analysis will provide additional information on which to base allocation decisions (e.g., economic value of recreational fishery, etc). The creation of an adjudication or administrative appeals process will provide a final means of redress for recreational and commercial catch share recipients to ensure the allocation process is fair and equitable.

The key to success is a thoughtful program design process in which these issues are considered and planned for up-front. NOAA is committed to working with recreational, commercial, and other stakeholder groups to help them assess the pros and cons of adopting a catch share program for their sector.

NOAA also recognizes that successful implementation and effective monitoring of annual catch limits and accountability measures will require significant improvements in the quality, timeliness, and accessibility of marine recreational fishery catch and effort statistics. The FY 2011 President's budget also includes \$9 million for the Marine Recreational Information Program (MRIP). The MRIP provides a national framework for developing, testing and implementing the components of an improved marine recreational fishery data collection program. In FY 2010 the MRIP Operations Team began a study to identify recreational fishery survey enhancements needed to support the new requirements in the *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA)*, as well as the estimated implementation costs for those enhancements. While there are practical limits to the degree to which we can improve the timeliness of the collection, processing, and reporting of recreational fishery survey data and statistics, we continue to look for ways in which we can improve these processes. NOAA will use the information derived from this study and continue to evaluate the budget requirements for MRIP as part of our overall 2012 budget process. Our recently named National Recreational Fishing Advisor, Russ Dunn, will be tracking our progress on MRIP to ensure we improve our recreational fishing statistics as part of our broader efforts to strengthen our relationship with the recreational fishing community.

28. What is NMFS doing to ensure that recreational fishermen are included in the catch share programs in their regions?

Answer: NOAA's policy states that regional council's need to carefully evaluate the potential effects of catch shares on all sectors associated with a fishery, regardless of whether they are in the catch share program. Currently, no U.S. commercial catch share program limits recreational access to fishery resources and this is also NOAA's desire for the future. Additionally, NOAA will ensure that regional councils follow the law and review the performance of all catch share programs after the first five years, and then at least every seven years thereafter to determine among other things, impacts on the fishing community and changes in participation in the fishery at large. The key to success is a thoughtful program design process in which these issues are considered and planned for initially. NOAA is committed to working with recreational, commercial, and other stakeholder groups to help them assess the pros and cons of adopting a catch share program for their sector.

One of the potential risks of the transition to catch shares, if not addressed adequately in the design of the management system, is that the right to fish can become restricted to a very limited number of participants. This is commonly known as excessive consolidation, which can impact coastal communities with limited economic and employment alternatives.

29. How is NOAA working on preventing the risks of excessive consolidation and how is it addressed in the budget request?

Answer: The regional councils are required by the Magnuson-Stevens Act to ensure excessive consolidation does not occur and the regional councils have many tools available under the Magnuson-Stevens Act to prevent consolidation of catch shares by a few large fishing companies. For each catch share program, regional councils control the eligibility, initial distribution and subsequent possession, use, sale or transfer of these fishing privileges, and the maximum share that a privilege holder can hold, acquire, or use.

The regional councils determine the eligibility requirements for the initial allocation of privileges, including use of criteria such as historical participation, economic investment and/or dependence, geographic location, among many others. The definition of who is eligible to receive an initial allocation and preventing certain transfers can preclude non-fishing entities from acquiring shares if this is consistent with the regional council's objectives. If a regional council is also concerned with allocations/privileges not being fished, there are several design options to implement including a use-or-lose feature in the program.

The Magnuson Stevens Act also requires regional councils to ensure fair and equitable allocations and prescribe transferability characteristics. Regional councils have a high degree of flexibility and can design programs with no, limited or conditional transferability; privileges of variable duration; establish set-asides or hold backs; require owners be on board; link privileges to certain localities, gear types, or vessel sizes, etc. The regional councils have many means to achieve distributional objectives that are consistent with the Magnuson Stevens Act's national standards and the fishery management plan's stated objectives, including an objective related to privilege leasing and active participation of share holders.

Moreover, regional councils are required under the Magnuson Stevens Act to ensure privilege holders do not acquire an excessive share of the privileges in the program by establishing a maximum share and any other limitations or measures necessary to prevent inequitable concentration. Regional councils must also consider procedures to prevent excessive geographic or other consolidation and promote the sustained participation of small owner-operated fishing vessels. Taken together, these means give authority to regional councils to prevent excessive control of the industry by a few large fishing companies.

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 calls for the creation of Regional Fishing Associations, or fishing communities that enable several fishermen to collaboratively hold and manage a quota allocation. This is a key mechanism to ensure that benefits from a catch-share fishery are realized by a large number of people. The Committee has heard that Councils must authorize such entities to be formed and to hold quota.

30. Given the important role that Regional Fishing Associations can have in ensuring participation in a catch share fishery, why do Councils have the option not to allow them?

Answer: Both a "Fishing Community (FC)" and a "Regional Fishing Association (RFA)" are types of group entities that can hold quota under Section 303A of the Magnuson Stevens Act. Each is a voluntary association consisting of participants in the fishery who hold quota share for use in that region and they must have established by-laws, operating procedures and a sustainability plan submitted to the regional council. Congress authorized but did not require Limited Access Privilege Programs to include FCs and/or RFAs.

Each regional council has the option to decide what are the appropriate goals, objectives and tools for their fishery. These decisions are based on the collective values and beliefs that are derived from the public participatory process engaging their fishermen and their fishing communities. An additional alternative is that there could be multiple community entities in a catch share program that would be based on requirements of either a FC or a RFA, depending on their interests of meeting community trust objectives or those of private cooperatives. Regardless of the approach, it is important that the regional council define the

entity in such a way that meets the primary objective of mitigating any projected negative effects of a catch share program on fishing communities.

The draft NOAA catch share policy states that “Both here and in other countries catch shares have shown they can effectively achieve annual catch limits, reduce the negative biological and economic impacts of the race for fish, and when properly designed can eliminate overfishing and result in safer and more profitable fisheries while also addressing other social objectives.”

31. Has NOAA analyzed the affect that increasing numbers of fisheries under catch share fisheries management will have on the ability of US fisheries to compete for national and global markets?

Answer: NOAA has not conducted extensive analyses of changes to market share of U.S. products for domestic consumption and foreign trade as a result of catch share programs. However, the effect should be positive, as catch shares will improve the cost structure and profitability of U.S. fisheries, and will better smooth catch over the course of the year. Nationwide, there are 15 catch share programs currently in operation in six of the eight different regions. The total ex-vessel value of these fisheries was greater than \$854 million in 2007, 21% of the total ex-vessel value for all U.S. commercial fisheries. Properly designed catch share programs can help us achieve sustainable fisheries in the United States, increase the domestic supply of fishery products, and improve our food security. NMFS has estimated that rebuilding U.S. fish stocks could increase the annual commercial dockside value by an estimated \$2.2 billion (54 percent). This increase would generate an estimated additional \$31 billion in sales nationwide. At this level, the U.S. seafood industry would generate a total of \$133 billion in sales. Because many overfished stocks are popular targets of recreational fishermen, rebuilding of these stocks will also significantly increase the estimated \$82 billion impact that saltwater anglers have on the U.S. economy. While the ecological and aesthetic value of marine fish stocks cannot easily be measured in dollars, they are just as critical to our Nation.

32. Will increasing the number of fisheries under catch share management improve the ability of coastal communities to sustain and create jobs in fish harvesting, processing, and retailing and related industries?

Answer: Increasing the number of rebuilt and sustainable fisheries will improve the ability of coastal communities to sustain and create jobs in the fishing and seafood industry. NOAA believes well-designed catch share programs are the appropriate tools to rebuild and sustain such fisheries in appropriate circumstances. Management programs that allocate catch shares to communities should help maintain the sustained participation of those fishing communities. Ending the race to fish and reducing overcapacity should produce continued improvements in the safety of fishermen at sea. The projected improvements in economic performance should result in an increase in

employment in the domestic seafood industry, increased income, and better cost structure for the fishery.

33. What effect will implementation of catch shares on domestic fisheries have on U.S. international fisheries negotiations, especially when dealing with cross-boundary fish stocks?

Answer: If the U.S. portion of a fish stock is in a catch share program, NOAA expects the catch share program will help the U.S. meet its international commitments and may provide grounds to argue for stronger international measures. The Alaskan halibut fishery individual fishery quota program is managed under the authority of the International Pacific Halibut Commission, and controls both U.S. and Canadian harvest of this species under international agreement in concert with the North Pacific Fishery Management Council.

Recreational Fishermen

Recreational fishing contributes over \$125 billion to the economy on an annual basis, and supports over a million jobs. The recreational fishing community has expressed concerns with respect to NOAA programs, including catch shares and cooperative research. This community also has concerns about the effect of the Coastal and Marine Spatial Planning framework.

34. Briefly describe the purpose of the Coastal and Marine Spatial planning framework, and what its impacts on recreational fishing might be.

Answer: In June 2009, President Obama created the Interagency Ocean Policy Task Force (Task Force) and charged it with developing recommendations to enhance national stewardship of the ocean, coasts, and Great Lakes and promote the long term conservation and use of these resources. As part of its charge to develop an effective framework for Coastal and Marine Spatial Planning (CMSP), the Task Force's *Interim Framework for Effective CMSP* defines CMSP and describes a process for developing and implementing coastal and marine spatial planning in the United States. The Interim Framework document defines CMSP as a comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analyzing current and anticipated uses of ocean, coastal, and Great Lakes areas. In practical terms, CMSP provides a public process for society to better determine how the ocean, coasts, and Great Lakes are sustainably used and protected now and for future generations. CMSP, as conceived by the Task Force is not a map drawing exercise and does not contain a zoning plan or establish any restrictions on activities, nor does it restrict access.

The Task Force heard and considered the views of the recreational fishing community throughout the process of developing the framework for CMSP. The Task Force recognizes the conservation activities of recreational users, who

have a long history of actively participating in the stewardship of the ocean, coastal, and Great Lakes resources. Furthermore, the Task Force understands the importance of recreation, including sustainable recreational fishing, and that Americans should continue to enjoy such outdoor experiences, which are also critical to the economic, social, and cultural fabric of our country.

The Task Force believes recreational fishing would benefit from the recommendations outlined in the Interim Framework. The national goals of CMSP identified in the Interim Framework include support for sustainable and productive uses and maintenance of public access to our oceans, coasts, and Great Lakes. The CMSP process would also enable improved coordination with the conservation activities of recreational users, who have a long history of actively participating in the stewardship of these resources. Ensuring healthier oceans, coasts, and Great Lakes will benefit recreational activities and the communities that rely on them.

NOAA expects there to be additional benefits from CMSP to recreational fishing including:

- Preserving critical ecosystem functions and services that are essential to our fisheries and the communities and economies that rely on them.
- Creating healthier oceans and coasts and thus helping ensure that Americans have opportunities to fish for generations to come.
- Ensuring that important commercial and recreational fishing areas are not inadvertently set aside for emerging industrial uses such as energy.
- Enhancing safe navigation by minimizing collision hazards.
- Facilitating co-location of recreational fishing with compatible uses to reduce user conflicts.

Until the regional planning process is implemented in each region, it is not possible to predict impacts of CMSP on particular sectors in particular areas. While no final decisions have been made regarding how CMSP will be implemented, some general principles have emerged in the drafting of the Ocean Policy Task Force vision for this new way of stewardship for our oceans. The Interim Framework describes an approach to CMSP that is regionally based, and developed cooperatively among Federal, State, tribal, and local authorities, and existing regional governance structures. The process of developing plans would be fully transparent, including extensive stakeholder and public participation. As an important use of our oceans, coasts, and Great Lakes, the value of recreational fishing would be considered in the regional planning processes. Mapping and measuring historical use and trends in recreational fishing would be a critical element in understanding the needs of anglers. This information along with information on other uses is expected to be analyzed by regional planning bodies. CMS plans developed by these regional bodies are expected to be implemented through existing legal authorities and will not supersede state or federal laws. Existing statutory authorities and governance responsibilities for state or regional bodies (such as the Regional Fishery Management Councils

under the Magnuson-Stevens Act) would remain unchanged. Under the Interim Framework, however, coordination of federal agency ocean actions would be enhanced under a National Ocean Council, and regional application of CMSP tools and principles would help to identify and reduce conflicts among uses, reduce environmental impacts, and facilitate compatible uses.

35. Is it feasible that recreational fishing would experience some closures? Why would closures be considered?

Answer: NOAA does not anticipate recreational fisheries being closed due to coastal and marine spatial planning (CMSP). However, area closures could be considered in CMSP due to conflicting uses such as security, defense activities, shipping and transportation, pollution, and ecosystem preservation. However, a recreational fishery may be closed to prevent overfishing. When NOAA closes a recreational fishery the decision is never made lightly. NOAA examines the best available data provided through a variety of sources. Fish stock assessments conducted by NOAA use the most recent data from fishery catch and fishery-independent surveys, as well as long time series of comparable data. The most recent data pin down the current status of the stock and the long time series provide indicators about trends and potential stock productivity. Both recent and long-term data are important to determine catch levels that will rebuild and maintain stocks and fisheries at sustainable levels. For the recreational fishery, catch statistics are provided by the current federal and state recreational fishery survey programs in each region. If statistical estimates of landings produced by the regional surveys have exceeded, or are projected to reach or exceed specified harvest levels for a particular fish stock, a closure – specified through public notification in the Federal Register – is necessary to mitigate the magnitude of any recreational overage and its impact on the established mortality objective for that stock for the year.

36. Who would make the decision to close recreational fisheries?

Answer: The regional councils establish criteria for closures in their fishery management plans. NOAA's National Marine Fisheries Service implements the fishery management plan and issues regulations, including closures that are necessary.

The cooperative research program provides funds to fisherman to conduct research that benefits both the agency and the fishermen while gathering data for Magnuson Stevens Act requirements. There is funding for cooperative research in FY10, but this funding would be reduced in FY11 under the budget proposal.

37. How much funding was provided in FY10?

Answer: Cooperative Research was enacted at \$17.6 million in FY 2010.

38. How much funding is proposed for FY11?

Answer: The FY 2011 Budget includes a total of \$13.1 million for cooperative research. This total includes \$6 million from a Catch Shares line item dedicated to cooperative research which will be focused on enhanced stock monitoring and conservation engineering (including technology transfer) to support the transition to sectors and annual catch limits in the Northeast. Funding priority for the \$6 million will be given to:

- Fisheries currently managed under a catch share program or for fisheries which are transitioning into catch share management
- Fisheries with interaction with fisheries under catch share management or in transition to catch share management
- Fisheries with significant data gaps for annual catch limits

The remainder of the total \$13.1 million request (\$7.1 million) will support NOAA's nationwide cooperative research enterprise to address critical research needs identified by the Regional Fisheries Management Councils and stakeholders. Information obtained from this research will improve stock assessments and the management of fishery resources. The information provided can cover a wide range of research areas, including but not limited to fishery-dependent data, life history studies, species abundance and distribution, habitat studies, and socioeconomic studies.

39. Why does the budget propose reduced funding for cooperative research in FY11?

Answer: The demand for cooperative research must be balanced with many other competing priorities both within NOAA and across government. In FY 2011 we are requesting funding closer to historical levels. Funding for Cooperative Research was \$10.1 million in 2008 and increased to \$11.5 million in 2009. In FY 2010 funding for cooperative research as a whole increased to a total of \$17.6 million. The total request for FY 2011 is \$13.1 million.

40. What does NOAA intend to do about the lack of data it has on important recreational fisheries, such as South Atlantic red snapper? Could this data be obtained through cooperative research?

Answer: In FY 2011, the requested funding focuses on fishery-independent and fishery-dependent data collection activities and data collection platforms (i.e., research vessels). FY 2011 funds will be used to support the following activities:

- Increasing fishery-independent sampling in the South Atlantic to improve precision and coverage by increasing sample size and spatial coverage of reef fish habitats, particularly for biological data and for gear testing and comparisons.

- Implementing video survey methodologies that address sampling concerns (e.g. selectivity of current Marine Resources Monitoring, Assessment, and Prediction program survey gear).
- Pursuing the goals of South Atlantic Fishery Management Council and NOAA Fisheries' Fishery Independent Monitoring Program Workshop--November 2009. These goals include, enabling evaluation of response(s) of fish populations to management actions; providing useful spatial and temporal indices of abundance, length frequencies, and age distributions for as many species as possible within the snapper-grouper complex; providing data that can be utilized in ecosystem approaches to fisheries management; and continuing to improve gear configurations.
- Securing the participation of the fishing industry in the design and implementation of fishery-independent data collection activities in the South Atlantic by relying on their vessels, knowledge of red snapper locations and habitats, and expertise in fishing gear methodologies. These activities will also include bycatch mortality studies. These efforts will fill data gaps generated by the closure of the directed red snapper fishery in the South Atlantic, because fishery-dependent data will no longer be available, and ensure the continued monitoring of the red snapper stock.
- In FY2011, in addition to employing NOAA's new high-tech vessel the *Pisces* to map reef fish habitats in South Atlantic and provide survey data on managed stocks, the budget request includes an increase of \$3 million to begin the design of a shallow-draft NOAA Fisheries Survey Vessel (FSV5). This high-tech vessel will expand NOAA Fisheries' ability to conduct fishery-independent surveys and collect data in near-shore coastal waters where critical nursery grounds for the majority of recreationally valuable species are found.

The FY 2011 request also includes a total of \$9 million for continued support of the Marine Recreational Information Program's (MRIP) ongoing development and implementation of improved recreational fishery surveys of catch and effort. This includes the development of a National Saltwater Angler Registry through implementation of an on-line federal registration system and support for ongoing registration efforts by states whose anglers are exempted from the federal registration. The MRIP has been conducting pilot studies to test the use of registry data in both mail and telephone surveys, and plans to implement registry-based surveys of fishing effort in all states of the South Atlantic in 2011. The MRIP is also conducting pilot studies in 2010 to test the utilization of electronic logbook reporting methods for charter boats and headboats, as well as improved sampling methods for shoreside surveys of angler catches. MRIP plans to start phased implementation of such survey improvements in 2011. This should help to enhance the quality and timeliness of marine recreational fisheries

catch statistics for red snapper. Cooperative research can supplement existing data collection activities from core programs such as MRIP.

41. Will the lack of stock assessments and accurate data on recreational catch close fisheries as a result of the Magnuson Stevens Act requirement to end overfishing by 2011? Which fisheries will be closed?

Answer: NOAA does not anticipate recreational fisheries being closed because of a lack of stock assessments and a lack of data on recreational catch. The decision to close a fishery is never made lightly. NOAA examines the best available data provided through a variety of sources. For the recreational fishery, catch statistics are provided by the current federal and state recreational fishery survey programs in each region. If statistical estimates of landings produced by the regional surveys have exceeded, or are projected to reach or exceed specified harvest levels for a particular fish stock, a closure – specified through public notification in the *Federal Register* – is necessary to mitigate the magnitude of any recreational overage and its impact on the established mortality objective for that stock for the year.

NOAA recognizes that significant improvements in the quality, timeliness, and accessibility of marine recreational fishery catch and effort statistics will be needed for successful implementation of the 2006 amendments to the Magnuson-Stevens Act requirements to manage fisheries with annual catch limits and accountability measures. NOAA will support recreational fishing data collection and management through the \$9 million request for the Marine Recreational Information Program (MRIP), included in the President's budget. The MRIP is developing and testing improved survey designs and plans to start phased implementation of those enhancements in FY 2011. In FY 2010, the MRIP has initiated a study that will specifically identify any additional survey enhancements that will be required by fishery managers. This project will develop a menu of possible enhancements and will also estimate their implementation costs. There are practical constraints that limit the range of possible improvements, but this project will provide NMFS with a better understanding of what improvements are possible and what resources will be needed to implement them.

42. What economic effect will the closing of these recreational fisheries have on the coastal communities and the Nation? How recent is the economic data that this answer is based on?

Answer: NOAA does not anticipate recreational fisheries being closed because of a lack of stock assessments and a lack of data on recreational catch.

43. What level of funding would NOAA require to meet its legal requirements to manage recreational fisheries without closing them due to a lack of current stock assessments and accurate data?

Answer: NOAA recognizes that successful implementation and effective monitoring of annual catch limits and accountability measures will require significant improvements in the quality, timeliness, and accessibility of marine recreational fishery catch and effort statistics. Several efforts are underway to determine the necessary requirements for effective management. The President's Budget Request for FY 2011 includes a total of \$9 million for continued support of the Marine Recreational Information Program's (MRIP) ongoing development and implementation of improved recreational fishery surveys of catch and effort. This past January, NOAA implemented the National Saltwater Angler Registry as a step toward generating better estimates of saltwater anglers' catch and effort. Better data allows for more informed decision-making, which in turn will help NOAA preserve and enhance our country's strong tradition of recreational saltwater fishing.

In FY 2010 the MRIP Operations Team began a study to identify recreational fishery survey enhancements needed to support the new requirements in the *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA)*, as well as the estimated implementation costs for those enhancements. While there are practical limits to the degree to which we can improve the timeliness of the collection, processing, and reporting of recreational fishery survey data and statistics, we continue to look for ways in which we can improve these processes. NOAA will use the information derived from this study and continue to evaluate the budget requirements for MRIP as part of our overall 2012 budget process.

Finally, NOAA recognizes the needs of recreational fisheries as a priority which was announced in September 2009 as part of the Recreational Fishing Engagement Initiative. On March 23, 2010 the Assistant Administrator for the National Marine Fisheries Service, Eric Schwaab, announced the appointment of Russell Dunn as the NOAA Fisheries National Policy Advisor for Recreational Fisheries. Also announced was the appointment of 22 members of the recreational fishing community from around the Nation to a Recreational Fisheries Working Group to provide expertise on saltwater recreational fishing to NOAA's Marine Fisheries Advisory Committee. In addition, on April 16 and 17, NOAA hosted a Recreational Saltwater Fishing Summit on April 16-17, 2010 in Alexandria, Virginia. The Summit sought to improve the level of trust between NOAA and the saltwater recreational fishing community necessary to effectively meet today's ocean management challenges. The Summit's facilitated discussions brought to light a range of issues, including the quality of recreational catch and effort data, catch share programs, and representation within NOAA and regional fishery management councils - as well as possible

recommendations to address these issues. For its part, NOAA pledged to work with its advisory bodies, regional offices, and constituents to build an action agenda that continues improvements initiated at the Summit. NOAA understands the Summit will be evaluated not by words, but by the strength of the resulting actions. As NOAA addresses the mutual concerns discussed at the Summit, regular updates, progress, and follow-through will be tracked at: <http://www.nmfs.noaa.gov/sfa/PartnershipsCommunications/recfish/RecFishSummit2010.htm>

44. How will NOAA implement Annual Catch Limits for recreational fisheries that do not have real-time catch data?

Answer: Some recreational fisheries have highly variable annual catches and lack reliable inseason or annual data on which to base accountability measures (AM) and annual catch limits (ACL). If there are insufficient data upon which to compare catch to ACL, either inseason or on an annual basis, NOAA will work with the regional fishery management council to implement the necessary data collection system to support AMs and ACLs. For example, AMs could be based on comparisons of average catch to average ACL over an appropriate multi-year moving average, such as three years. Evaluation of the moving average catch to the average ACL would be conducted annually and AMs would be implemented if the average catch exceeds the average ACL. As a performance standard, if the average catch exceeds the average ACL for a stock or stock complex more than once in the last four years, then the system of ACLs and AMs would be re-evaluated and modified if necessary to improve its performance and effectiveness. The initial ACL and management measures may incorporate information from previous years so that AMs based on average ACLs can be applied from the first year. Alternatively, a regional council could use a stepped approach where in year-1, catch is compared to the ACL for year-1; in year-2 the average catch for the past 2 years is compared to the average ACL; then in year 3 and beyond, the most recent 3 years of catch are compared to the corresponding ACLs for those years.

NOAA is supporting ongoing development and implementation of improved recreational fishing data and management through a \$9 million request for the Marine Recreational Information Program (MRIP), included in the FY 2011 President's budget. In FY 2010, the MRIP has initiated a study that will specifically identify any additional survey enhancements that will be required by fishery managers to manage effectively with annual catch limits and accountability measures. This project will develop a menu of possible further enhancements and will also estimate their implementation costs. There are practical constraints that limit the range of possible improvements, but this project will provide NOAA with a better understanding of what improvements are possible and what resources will be needed to implement them. NOAA will use this information and continue to evaluate the budget requirements for MRIP as part of our overall 2012 budget process.

NOAA Climate Service

The Department of Commerce and NOAA announced the “intent to reorganize” and create a NOAA Climate Service.

45. Why does NOAA need to create a NOAA Climate Service? Doesn't NOAA provide climate products now?

Answer: The Nation needs an objective, authoritative, and consistent source of timely and reliable climate information based on the best available science, to support decision-making at national, regional, state, and local levels. Numerous external studies, by NOAA's Science Advisory Board, the National Academy of Sciences and others have reiterated the need for easy-to-find, reliable and understandable information and products about climate variability and change.

NOAA is well positioned to help address this need, as we are already contributing strongly to the development and delivery of climate science, tools, products and information. A NOAA Climate Service would create a visible and easy to find, single point of entry for people to access NOAA's climate science and service assets, and enable improved information sharing and more productive partnerships with federal agencies, local governments, private industry and other users and stakeholders. Building from a solid foundation of partnerships with other federal agencies, academia, state and local governments and the private sector, NOAA can further contribute and more effectively deliver urgently-needed services by integrating and expanding its unique earth observation and monitoring assets, world-class research and modeling capabilities, and broad operational data and information services at the regional level.

46. Is the proposed plan to include the NOAA Climate Service in an existing line office, or to create a new line office?

- **Will components of other lines offices be transferred to the NOAA Climate Service? If so, which components, and why is this necessary?**
- **How will NOAA maintain an emphasis on basic research when so many components of the Office of Oceanic and Atmospheric Research (OAR) are transferred to the NOAA Climate Service?**

Answer: On February 8, 2010, the Secretary of Commerce announced the intention to create a NOAA Climate Service line office dedicated to bringing together the agency's strong climate science and service delivery capabilities. The concept is that the Climate Service would bring together many of the agency's existing climate assets including research labs, climate observing systems, modeling facilities, integrated monitoring systems and extensive on the ground service delivery infrastructure. A NOAA Climate Service would provide a

single, reliable and authoritative source for climate data, information, and decision-support services to help individuals, businesses, communities and governments make smart choices in anticipation of a climate-changed future.

As was presented, our intent is to consolidate climate activities currently dispersed across several line offices. A NOAA Climate Service would draw from three existing NOAA line offices:

- From NOAA's Office of Oceanic and Atmospheric Research (OAR): the Geophysical Fluid Dynamics Laboratory; the Climate Program Office; and from the Earth System Research Laboratory – Office of the Director, the Chemical Sciences Division, the Global Monitoring Division, and the Physical Sciences Division.
- From NOAA's National Environmental Satellite, Data and Information Service: the three data centers – the National Climatic Data Center, the National Oceanographic Data Center, and the National Geophysical Data Center, as well as the Comprehensive Large-Array Stewardship System Program Office.
- From NOAA's National Weather Service: the Climate Service will assume management of the relevant climate observing networks, including the Tropical Atmosphere Ocean array, the Historical Climate Network, and the modernization of the hourly precipitation gauges.

Numerous external studies, by the National Academy of Sciences, NOAA's Science Advisory Board, and others have reiterated the need for easy-to-find, reliable and understandable information and products about climate variability and change. Under NOAA's current distributed organizational structure for climate services, the rapidly increasing user demand for climate services is outpacing NOAA's ability to most effectively deliver the products and information being requested. A centralized NOAA Climate Service will increase the agency's ability to anticipate, understand and provide the information Americans need to meet the challenge of being competitive and resilient by incorporating relevant climate knowledge in decision-making today. Unifying the climate activities of the entities listed above in to one line office to focus on this challenge would enable NOAA to strategically and tactically guide its climate research, monitoring and assessment work in a coordinated fashion with the full complement of partners, government and non-government alike, which have been and will continue to be a cornerstone of success.

In addition, NOAA is taking a number of steps to strengthen science across the agency, including reinstating the position of NOAA Chief Scientist, and making it a vital part of the Headquarters leadership team. This position will be on a par with the two Assistant Secretary positions.

NOAA is also in the process of developing a formal plan to actively involve scientists and science leaders across the agency in the development of our

future research strategy, and using our NOAA Research Council to strengthen formal mechanisms for evaluating our research activities.

47. Is funding requested in the FY11 budget for the NOAA Climate Service, or for programs that will become part of the NOAA Climate Service? List the relevant programs.

Answer: There is no proposal in the FY 2011 budget to establish a NOAA Climate Service. Any NOAA Climate Service would be presented as a reorganization proposal for consideration by the Congress pursuant to the requirements of the FY 2010 Appropriations Act. We are still developing a reorganization proposal that will include details on the laboratories, centers, and divisions that would be transferred from other line offices to form the new NOAA Climate Service, as well as details on the annual operating budgets for these programs and the number of full-time NOAA employees to be transferred to the Climate Service.

In FY 2011, NOAA requested approximately \$-47million in increases over the FY2010 Enacted budget for the proposed NOAA Climate Services as supported by the U.S. Global Change Research Program (USGCRP). The increases include:

- \$10 million for Assessment Services to establish a new and sustained capability within NOAA to provide climate assessments to decision-makers at national and regional scales. It will provide the capacity to engage stakeholders and decision makers throughout the process in order to better determine priority issues, risks, and vulnerabilities that need to be addressed;
- \$1.5 million for NOAA's Climate Portal to establish one-stop public access to all of NOAA's climate data, information, and services online;
- \$15.8 million to support critical climate observing infrastructure;
- \$7 million for Earth System Modeling: Urgent Climate Issues to will improve model resolutions and address critical areas of model uncertainty, including: sea-level rise, Arctic, terrestrial carbon cycle and biogeochemical feedbacks, and decadal predictions/abrupt change;
- \$11 million to expand the development of climate quality data records from satellite observations;
- \$2 million to enhance data center operations to provide users with consistent and reliable access to the nation's environmental data and information via the Comprehensive Large Array-Data Stewardship System (CLASS).

We believe that a NOAA Climate Service would create a stronger position for climate leadership within NOAA to more deliberately guide all climate research, monitoring, and assessment work in an integrated fashion and to better coordinate efforts with its partners to ensure reliable delivery of climate services and information.

48. NOAA has created six new Regional Climate Service Director positions and posted the announcements on USAJOBS. How do these positions fit into the NOAA Climate Service plan?

- **Where will these positions be located?**

Answer: As described in the February 2010 USAJobs Vacancy Announcement, the new Regional Climate Service Directors will be "responsible for providing leadership in the development of an integrated NOAA program of regional climate services that responds to the needs of stakeholders and draws upon agency-wide assets and capabilities." The Regional Climate Service Directors will be employees of the National Climatic Data Center and co-located with the National Weather Service Regional headquarters. Should a NOAA Climate Service materialize, these individuals would leverage and coordinate the work of key NOAA regional climate service programs and partners (e.g., National Weather Service Regional and local forecast offices, Regional Climate Centers (RCCs), Regional Integrated Science and Assessment (RISA) programs, State Climatologists, NOAA Coastal Services Center, Sea Grant extension, and others) toward to better understand and respond to the information needs of governments, businesses, resource managers and communities and to forge and sustain close working relationships with those stakeholders.

As part of NOAA's focused investment in the development of an integrated climate services program in FY10, NOAA has begun a transition from a suite of individual climate applications and service programs (e.g., RISAs, RCCs, NWS, National Climatic Data Center, Sea Grant Extension Network, Coastal Services Center) to an integrated Regional Climate Services Enterprise. The aforementioned individual programs have made progress in meeting stakeholder needs in the areas they serve. However, these efforts were not integrated such that proven products and services and best practices were readily shared within and among regions, and many regions and sectors remained underserved. As part of an integrated network, the planned Regional Climate Services Enterprise will more effectively coordinate the deployment of programs and services in each region. Existing resources will be leveraged to ensure efficiency while enhancing their responsiveness regionally to emerging stakeholder needs and expediting their transition from research to operations and services. Such coordination reduces duplication and enhances user access to and trust in NOAA's products and services, while also strengthening the Enterprise's efforts to improve the nation's climate literacy and inform better decision-making for adaptation and mitigation in the face of future climate-related uncertainties.

49. How will the NOAA Climate Service interact with other federal agencies? Will any one agency take the lead role?

Answer: The White House Office of Science and Technology Policy (OSTP) has stated they will review the current climate activities across the federal government and establish an OSTP-led interagency process to coordinate climate services across the relevant agencies.

NOAA believes that all agencies must consider climate change adaptation and mitigation as it relates to their mission areas. Just as the nation's climate research efforts require and benefit from sustained interagency and other partnerships, so too will the delivery of climate information and services. NOAA already works closely with many federal, regional, academic and other partners on climate research, data collection and dissemination and climate service provision. We recognize the importance of this collaboration, and understand that no single agency can provide all climate services for all people.

However, NOAA has much to contribute to addressing the nation's need for improved climate science and services. The Secretary's announcement on February 8th outlining our plans to better align NOAA assets into a functional climate service, was a major step forward for this Administration in strengthening its capability to understand and adapt to climate change. NOAA is well-positioned, ready and willing to lead as the federal government strives to best equip the nation to face the challenges of a changing climate.

50. What are the next steps? When will Congress see the reprogramming package? Does the Department have the package currently, or does OMB?

Answer: The Consolidated Appropriations Act of 2010 (H.Rept. 111-366, P.L. 111-117), directed NOAA to enter into a contract with the National Academy of Public Administration (NAPA) to research options for structuring a National Climate Service within NOAA. That study is scheduled for completion in September. Following the completion and submission of the NAPA report to Congress and NOAA in September, NOAA will review and incorporate any recommendations into its reorganization plans. Our intent is to have a reorganization proposal ready for Congressional review in the Fall timeframe.

51. How does the interim progress report of the Interagency Climate Change Adaptation Task Force, released March 16, 2010, impact NOAA's plans for the NOAA Climate Service?

Answer: The interim progress report of the Climate Change Adaptation Task Force recognizes the federal government role in adaptation and improved resilience to minimize risk to people, natural systems and places, and key infrastructure. The Task Force formed workgroups to consider the capabilities of

the federal government to respond to the impacts of climate change in various critical sectors, institutions, and agency mission responsibilities.

NOAA is a co-chair of the Task Force, and NOAA staff members are participating on many of the workgroups. Therefore, NOAA's substantial experience and expertise in climate science and services is contributing across the Interagency Climate Change Adaptation Task Force process. NOAA's engagement in this process is being integrated into the strategy for implementing a climate service, including plans to provide authoritative information about present and future climate that will be essential to effective adaptation planning. The new networks of partnerships now being created through the work of the Task Force will in turn inform the development of new services.

Southwest Fisheries Science Center

The Southwest Fisheries Science Center is being built in La Jolla, California, because the old building was at risk due to cliff erosion. Until the new building is completed, National Marine Fisheries Service personnel are being housed in GSA rental space.

52. What is the cost of this rental space annually?

Answer: The rental cost for the temporary space is \$2.4 million annually.

In FY10, the budget requested \$1 million for the rent for this location. In FY11, no request has been made.

53. Explain the reason for any discrepancy between the actual cost of the rent and the funding requested in FY10 and FY11.

Answer: The occupancy of a leased space began in June 2008. NOAA worked with General Services Administration (GSA) to identify the delineated area within which the space could be located and to conduct the competition for the lease. The leased facility was the lowest priced space offered within that area, is approximately 2 miles from the original SWFSC, and houses approximately 130 employees. The lease is \$2.4M per year, \$1.4M more than provided in the SWFSC PPA from FY08 to FY10. NMFS identified the additional funds within several PPAs, more details provided below. It was determined that the additional expense was an optimal tradeoff to retain productivity and staffing at the SWFSC throughout the lease period for the following reasons. Due to its location near the original facility it retains comparable travel times for commuting staff and remains in close proximity to Scripps to continue close scientific collaboration and sharing of lecture space. In addition, the space houses specialized laboratories and equipment for the analysis and storage of physical, chemical, and biological samples. It was determined this scientific space would best meet the needs of the SWFSC. This space also holds all staff rather than housing some staff in modular buildings on the existing site, which would increase

logistical issues for staff collaboration. This also resolved the issue associated with the construction and placement of these buildings within limited space.

SWFSC is a focal point for survey and assessments of Pacific transboundary species, the development and application of ecosystem-based approaches to management, research on the impacts of environmental variability and climate change on marine ecosystems, and fisheries and conservation socio-economics.

Funding information:

- NOAA moved into the facility beginning in June 2008, part way through the fiscal year and spent \$0.652 million.
- Funding was provided in a separate line item from FY 2008 through FY 2010 for \$1.0 million, a difference of \$1.4M.
- The remaining funds were identified within several other PPAs.
 - \$0.2 million was provided out of the NMFS Facilities Maintenance funding line.
 - \$0.5 million was provided out of various Protected Resources lines.
 - \$0.6 million from the Fisheries Research and Management Programs PPA.
 - \$0.07 million was provided from the Habitat Conservation PPA.
 - \$0.03 million was provided in small increments out of several other program lines.

54. If the rental costs for FY10 and FY11 exceed the amount requested for those costs, what is the source of the required additional funding?

Answer: In FY11, NMFS has identified several additional sources which will provide for the full \$2.4M. The lease runs through June 2013, a 5 year lease is standard to avoid price premiums. The new facility is scheduled to be complete December 2011, and occupancy is estimated to begin in February 2012. NMFS will work with GSA to attempt to sublet the space for the remainder of the lease.

NOAA Education Program

NOAA's current vision is "An informed society that uses a comprehensive understanding of the role of the oceans, coasts and atmosphere in the global ecosystem to make the best social and economic decisions."

55. Will education remain equally prominent in the new mission and vision statements under development now?

Answer: NOAA's is currently in the process of developing a new mission statement. A key component in developing the statement is to highlight the importance of NOAA sharing information and knowledge with others. The mission statement will also address resilience, which implies a society that understands and adapts to changing conditions. In addition, one of the cross-cutting enterprise objectives is specific to education and an informed society and the climate goal specifically calls out the importance of a literate public.

56. How informed is "society" at this point, how is this assessed, and what are NOAA's most important strategies for creating an informed society?

Answer: In a recent survey by *The Ocean Project* (funded in part by an ELG grant), the public expresses concern for the ocean, but lacks a sense of urgency or deep understanding of the issues (<http://www.theoceanproject.org/resources/opinion.php>). The report recommends a larger role for museums, zoos and aquariums, as the public looks to provide guidance on environmental issues. The report is being used by the informal education community in designing new education programs focused particularly on connecting climate change and the ocean.

NOAA works directly with students, educators and the public, as well as stakeholders and users of NOAA's data and information. In addition, NOAA uses competitive grants to support partners in formal and informal education to create an informed society. Evaluation is used to assess the effectiveness of education projects. NOAA is developing an evaluation and monitoring framework with common metrics to better assess NOAA-wide impacts of the education portfolio.

57. How do NOAA education programs specifically promote "a comprehensive understanding of the role of the oceans, coasts and atmosphere in the global ecosystem to make the best social and economic decisions"?

Answer: NOAA's education programs are aligned to the Essential Principles of Ocean Science and the Climate Literacy Principles. These documents define ocean and climate literacy as well as a set of ideas an individual should be able to grasp by the time they graduate from high school. These principles are used by individual NOAA educators to develop activities and are a requirement for applicants to competitive education grants.

58. Is there a consistent view within NOAA about the key principles and concepts that NOAA education needs to promote? Are the human, economic and social components as strong as ocean and climate science?

Answer: NOAA played an integral role in developing the Essential Principles of Ocean Science and the complementary Climate Literacy Principles. These documents define ocean and climate literacy, as well as principles the public should understand as high school graduates. Because these issues are multi-disciplinary, the principles incorporate human and societal components. For example, the sixth ocean literacy principle is: *The ocean and humans are inextricably interconnected.*"

59. Where should NOAA's education program go in the future? What is the most important new education program, if any, that NOAA needs to establish?

Answer: NOAA envisions a complementary suite of education programs that build on NOAA's wealth of assets, including scientists, research laboratories and vessels, and places such as National Marine Sanctuaries and National Estuarine Research Reserves. The National Research Council recently concluded a Review and Critique of NOAA's education programs. The study reported that NOAA is particularly strong in ocean education, but could strengthen atmospheric education particularly with respect to climate. NOAA is building out our climate education portfolio in coordination with NSF and NASA. In addition, with congressionally directed funding, NOAA has reengaged with the GLOBE program.

NOAA requests very little for education operating funds. In FY10, the request was \$20.6 million compared to the \$38.5 million provided by Congress; in FY11, the request is \$20.7 million.

60. Why are the requests so limited? How can NOAA meet its presumably evolving annual education goals and objectives with such a limited pool of funds, especially since current programs have been created over time in isolation from each other rather than part of a coherent overall strategy?

Answer: NOAA's education mission is a priority for the agency and the \$20.7 million figure that you cite is supplemented by spending on education in many other NOAA programs. In 2008, NOAA contracted the National Research Council to perform a review of its Education program and provide recommendations for optimizing NOAA's investment in education. The NRC report "NOAA's Education Program: Review and Critique" was released on 3/3/10. The report is very supportive of NOAA's education programs and makes recommendations for moving forward (<http://www.nas.edu/morenews/20100303b.html>). We will use the recommendations from this review to decide which education activities will be

important to fund in the future and how to move forward in building a coherent NOAA education program that leverages the significant capabilities across the agency.

The National Research Council recently concluded a Review and Critique of NOAA's education programs, noting: "Management of a federal education portfolio is complicated, and NOAA has characteristics that make it particularly challenging. Individual education programs may have separate mandates and often have local components with local control...The Education Council is the primary means for NOAA to manage its education portfolio...however, the Education Council does not have budgetary or institutional control over the education efforts of the line and program offices, which limits its effectiveness in carrying out the agency's education mandate...Although NOAA has created a large number of education initiatives with its limited education budget, there is evidence of impact for only a small proportion of them... NOAA should better align and deploy its resources."

61. Do you agree with the NRC's recommendation that NOAA "increase attention to climate and atmospheric science education programs to complement the current focus on ocean science? If so, do you have any preliminary thoughts on how to go about doing this?"

Answer: Yes. Historically the ocean portfolio has had stronger mandates and resources for education. It is important to have a balanced STEM education portfolio that supports NOAA's broad mission. In light of the realities we face with a climate that is increasingly changing, a greater emphasis on climate and atmospheric science education is both timely and sound. Building upon a strong scientific foundation and decades of engagement with stakeholders, NOAA will advance its long-term goal of having an informed society anticipating and responding to a changing climate and its impact by improving public knowledge of this issue. To this end, NOAA has increased its Climate Education program activities across the agency and in coordination with other federal agencies and our partners. Through NOAA's Competitive Education Grants Program, NOAA works with external partners to fund a broad array of educational organizations and institutions that use innovative technologies, such as Science on the Sphere, to reach out to millions of people across the country on NOAA-related areas, including climate and atmospheric sciences. NOAA will coordinate the integration and evaluation of climate literacy principles into formal and informal education efforts nationwide to reach out to the public as well as influence the formal educational systems. In the near future, NOAA will conduct needs assessments to identify gaps in various audience needs around climate change education products and materials, as well as develop a climate engagement programmatic impacts system.

62. How do NOAA's various education programs fit together - what is the "whole" that is made up of these parts? Does the fact that these programs are spread throughout the agency and not all under one roof hinder their effectiveness?

Answer: Education is a truly cross-cutting activity in NOAA that consists of many programs in NOAA. Several of these programs have explicit education statutory mandates, because education is recognized as an important capability for these programs. The America COMPETES Act of 2007 provided for the first time an important NOAA-wide mandate for STEM education. Since enactment of America COMPETES, NOAA has made much progress toward bringing the individual education programs together as part of a coherent whole to focus on agency-wide education priorities. In 2009 NOAA developed the 2009-2029 Education Strategic Plan, which outlines our educational goals, outcomes, and strategies for the next 20 years (<http://www.education.noaa.gov/plan>). The NOAA Education Council, comprised of all the major education programs in NOAA, is advancing the priorities outlined in this plan, with a clear implementation strategy for the next five years (http://www.oesd.noaa.gov/planning_policy/lplanFinal_21210.pdf). The strength of NOAA's education portfolio lies on how diversified and spread across the agency it is. This not only brings together the expertise that is unique to each program, but also ensures that STEM education has an overarching presence and supports NOAA's broad mission.

63. How will the GLOBE Program fit into NOAA's overall education program?

Answer: Collaborating across federal agencies and connecting students to their environment through inquiry-based activities are two of our key operating principles and are explicitly called out as outcomes (1.3 and 1.5) in the NOAA Education Strategic Plan (<http://www.education.noaa.gov/plan>). We see beneficial relationships that can be built between GLOBE and NOAA's existing education programming and NOAA's competitive funding opportunities for educational programs like GLOBE. We recognize the potential GLOBE possesses in supporting the President's Educate to Innovate campaign and implementing NOAA's education mission. GLOBE provides a unique and valuable model for how hands-on environmental education can be performed through global collaboration. NOAA values technology as an important tool for achieving environmental literacy (as reflected in our Education Strategic Plan's focus on "using emerging technologies"). We believe that as a truly global community, GLOBE not only needs effective use of current technologies for achieving its potential but also offers a unique vehicle for the development and deployment of new and innovative ones.

Overall, NOAA's education programs have a tremendous reach - tens of thousands of educators are touched by NOAA each year, a potentially huge network for learning and collaboration.

64. Is there a systematic effort being made to use this tremendous asset – perhaps by "cross selling" between programs? For instance, an education literacy grant (ELG) applicant in the Northeast could be informed about local Estuary programs, or Sea Grant educators could be connected to their local network of BWET educators?

Answer: Yes. Each education program in NOAA has a seat at the Education Council. This is the formal body through which NOAA collaborates on and coordinates education activities and policy across the agency. Each network mentioned above is represented at the Education Council, which allows cross-pollination across NOAA's education programs. The NOAA Education Strategic Plan also includes many opportunities for leveraging assets and cross-pollination across NOAA's education programs. As a result of this plan, NOAA has developed a 5-year implementation plan and has formed working groups, with broad representation across NOAA, to advance specific focus areas pertaining to STEM education. Routinely, Council members engage with the Council on current and future opportunities that could be appropriate for leveraging resources and expertise from other education programs and networks. One specific example of leveraging assets is that all Environmental Literacy Grant applicants are required to utilize NOAA resources and are strongly encouraged to partner with the various education networks. So for example, an ELG proposal from the Northeast might be expected to seek partnerships with the local sanctuary, reserve, laboratory, or Sea Grant program.

65. How does NOAA see its programs in education as contributing to the reform of science, technology, engineering, and math (STEM) education in the US?

Answer: NOAA education programs seek to increase STEM competitiveness by making science education exciting, integrated, relevant and rigorous. NOAA's education programs support the President's *Educate to Innovate* campaign as well as other efforts to improve STEM education in the U.S. As the Nation's leading ocean and atmospheric science and service agency, NOAA supports formal and informal education programs and initiatives covering a wide range of STEM fields, including ocean, atmospheric, climate, and environmental sciences. Combined, these programs form a robust education portfolio that not only makes use of NOAA resources and capabilities, but also leverages those external to NOAA through a wide array of partnerships with schools, academic institutions, zoos, aquariums, museums and others. NOAA education programs seek to increase STEM competitiveness by promoting understanding of the world we live in and the environmental services we benefit from. NOAA is working hard to

create a future workforce in NOAA-related fields that reflects the diversity of the nation.

NOAA participates in the NRC Climate Change Education Roundtable to provide a critical mechanism for developing a coherent, national strategy to advance climate change education guided by the best available research evidence. NOAA also participates in the NRC common core standards discussions that will be critical to reforming science education standards. We will review the draft conceptual framework when it is released later this summer.

66. What role is NOAA playing as a science agency in coordination with STEM education programs of other agencies, particularly the Department of Education?

Answer: NOAA is an active member of the Education Subcommittee under NSTC's Committee on Science. The Subcommittee is co-chaired by Department of Education, OSTP and NIH and is an important venue to discuss common education goals and coordination across the mission agencies. In addition, NOAA co-leads the Interagency Working Group on Ocean Education and the Education Interagency Working Group formed under the U.S. Global Change Research Program. NOAA is also on the Advisory Group for the Department of Education's 'Education for a Green Economy' Summit.

Representative Adam Schiff
Questions for the Record

Catch Shares

- 1. Pacific fisheries are an important part of our economy and ocean ecology, and I am interested in understanding what NOAA is doing to support them. Specifically, what is NOAA doing to ensure that West Coast fisheries are both on the path to sustainability and improved profitability and job security for fishermen? How are you prioritizing investment in the Pacific groundfish fishery, including for the catch share program that is slated for implementation in 2011?**

Answer: NOAA is working to ensure West Coast fisheries, like the rest of the nation's fisheries, are on the path to sustainability, improved profitability and job security for fishermen. The Magnuson-Stevens Reauthorization Act of 2006 (MSRA) established new requirements to end and prevent overfishing through the use of annual catch limits (ACLs) and accountability measures (AMs). NOAA is working the Regional Fishery Management Councils to establish mechanisms for ACLs and AMs by 2010 for stocks subject to overfishing and by 2011 for all others. In addition, the MSRA includes significant language on limited access privilege programs, a type of catch share. NOAA is working to support the development and implementation of Catch Share programs, where appropriate, through both budget and policy support. NOAA has requested a \$36.6 million increase in FY 2011 for its Catch Share program. NOAA's draft Catch Share policy emphasizes that well-designed, stakeholder designed programs can help address overfishing while also providing improved economic stability for the fishing industry and fishing communities.

The implementation of the Pacific Groundfish Trawl Rationalization program in 2011 is a high priority for the agency. In FY 2010, NOAA is providing \$2.7 million and additional expert staff resources to make certain this timeline is met. In FY 2011, NOAA has requested \$12.7 million for implementation and operation of this catch share program. The request supports the transition to the catch share program by funding at-sea monitoring/observing administration, training and deployment. Implementation activities include hiring management staff, establishing program specific share accounting databases and reporting systems, identifying eligible participants, issuing catch shares, computing annual quota for each participant, and adjudicating administrative appeals of the eligibility and catch share decisions. Operational activities include program administration, enforcement, and science evaluation. The final recommendations to Amendment 20 to the Pacific Groundfish Fishery Management Plan, which specifies the management system that will be used to rationalize the trawl fishery, and Amendment 21, which involves determining the proportion of the available catch that will be allocated to the trawl fishery, will be submitted to NOAA for approval this spring. If the Secretary approves the Council recommendations, NOAA will develop the appropriate rulemaking to implement the program by January 1, 2011.

Representative C.A. "Dutch" Roppersberger
Questions for the Record

- 1. Why do you think we shut down the NPOESS program? Do you think we shut down the program too early?**

Answer: The major challenge of the NPOESS program was jointly procuring the system among three agencies of different sizes with divergent requirements and objectives. The restructured program will resolve this challenge by separating the procurements, although continuing a partnership among the agencies in those areas that have been successful in the past.

- 2. Do you think we shut down the program too early?**

Answer: No. The NPOESS program had a history of vexing technical challenges, cost growth and schedule slips. An Independent Review of the program by respected space acquisition experts concluded that the program was not executable with its existing budget and management structure. An Administration task force comprise of the three NPOESS agencies (DoD, NOAA, and NASA) and led by the Office of Science and Technology Policy and the Office of Management and Budget concurred that a restructuring of the program was the only viable path forward.

- 3. Do you think NOAA and NASA will be able to get the successor program, the Joint Polar Satellite System up and running in a timely fashion?**

Answer: Yes. NOAA and NASA have a long-standing history of collaboration on satellite development and acquisition. In the early 1960s, NOAA and NASA collaborated in developing NOAA's Polar-orbiting Operational Environmental Satellite (POES) Program. In 2009, the last of the POES series - NOAA-19 - was successfully launched. This partnership deepened in the early 1970s when NOAA and NASA collaborated to develop and launch the first Geostationary Operational Environmental Satellite (GOES) in 1974. The last of the GOES-N Series, GOES-P, was launched on March 4, 2010.

NOAA and NASA continue this history of collaboration and partnership in satellite acquisition with the more recent efforts of GOES-R, the next generation geostationary satellite series. Additionally, NOAA and NASA are also collaborating on the development of climate sensors de-manifested from NPOESS during the Nunn-McCurdy restructure.

NOAA's partnership with NASA to acquire and operate the JPSS will take advantage of the competencies and assets of both agencies. NASA has tremendous experience in developing space systems. Likewise, NOAA has a long standing history of developing and operating the ground systems to both control spacecraft and provide key operational products and services. The JPSS

will build upon the decades-long partnership these two agencies have successfully employed to support our nation's weather and climate needs.

- 4. What management and acquisition reforms are you implementing to ensure that we don't run into past problems? I would like it if we could get frequent updates on the reform efforts and how this satellite is moving forward.**

Answer: NOAA and NASA plan to utilize the same approach they have employed in past successful missions to manage and acquire the JPSS. This will include direct government oversight of the key elements (spacecraft, instruments and ground systems) of the mission, alignment of management responsibilities with agency competencies, and applying appropriate levels of budget and schedule reserves throughout the life cycle of the program.

- 5. Can you explain to us how the procurement transition is moving forward between NOAA and the Air Force? Can we see a report on that transition?**

Answer: NOAA, NASA and the Air Force are working closely to transition the relevant parts of the NPOESS program to JPSS. Reviews are underway to determine what procurements need to be transitioned, when those procurements should be transitioned and mechanisms are being put in place at NASA to receive the transitioned procurements. A briefing to you can be scheduled when the transition planning has been completed.

- 6. How is the transition going to set up a Joint Polar Satellite System office and Goddard going?**

Answer: NOAA and NASA have identified transition team members who are actively working on the JPSS transition efforts. NOAA has an acting System Program Director who is managing the day-to-day efforts of the JPSS program in coordination with NASA Goddard. NASA Goddard has put in place a team to work on the JPSS program in their role as an acquisition center for NOAA.

- 7. How much does NOAA spend in support of maintenance and testing of European weather satellites?**

Answer: NOAA will continue to spend approximately \$10 million per year to maintain the capability to support maintenance and annual testing of U.S. instruments on the to-be-launched MetOp B and C weather satellites.

8. What are we doing with the sensors that are leftover from NPOESS program?

Answer: All the NPOESS sensors will be used by either JPSS or the Defense portion of the restructured NPOESS program. There will be no leftovers. NOAA's JPSS afternoon orbit will maintain the observations that were planned for NPOESS in the afternoon orbit. JPSS will fly the Visible/Infrared Imager/Radiometer Suite (VIIRS), Cross-track Infrared Sounder (CrIS), Advanced Technology Microwave Sounder (ATMS), and Ozone Mapping and Profiler Suite (OMPS). JPSS will also fly instruments that are being procured with funds from the NOAA Climate Sensor Program: the Cloud and Earth Radiant Energy System (CERES)/Earth's Radiation Budget Sensor (ERBS) and the Total Solar and Spectral Irradiance Sensor (TSIS) instruments.

NOAA Catch Share Program

9. Please describe to me NOAA's Catch Share program. How can it help U.S. business while rebuilding our depleted fish stock? Also, the Maryland's Waterman Association and the Environmental Defense Fund have a formal memorandum of understanding about finding alternative fishery management solutions for the blue crab. Do you think catch share could work to protect and rebuild Maryland's blue crabs?

Answer: The current sustainability of many fishing communities is threatened or in decline as a consequence of many factors. This includes past management practices that have resulted in too many fishermen trying to catch too few fish (overcapacity), leading to lower catches and shorter seasons. This is biologically and economically unsustainable, and many fishermen are struggling or have left the profession. Catch share programs use a biologically based annual catch limit for each fish stock and allocate a specific portion of that catch limit to entities, such as fishers, cooperatives, or communities, and the recipient of the catch share is responsible to stop fishing when their specific share is reached. Experience shows us that catch share programs improve the biological condition of the fishery, increase landings, stability and season length and encourage product innovation and cost savings that result in higher profits. There are currently 15 catch share programs in operation and by FY 2011 a net one additional catch share will be operational for a total of 16. The Regional Fishery Management Councils have identified approximately thirty additional fisheries that have potential to develop into catch share programs, but this list is subject to change, and NOAA does not expect that all of these fisheries will necessarily be brought under catch share management.

NOAA has released a draft Catch Share policy that encourages the consideration and adoption of catch shares where appropriate in fishery management plans and amendments as a management approach to help achieve long-term

ecological and economic sustainability of the Nation's fishery resources and fishing communities. The development of catch share programs is voluntary and is based on close collaboration with federal, state, and industry partners through the Council process to evaluate catch share options and design programs that meet the unique objectives of the fishery.

NOAA does not manage the Maryland blue crab fishery; it is managed by the state of Maryland's Department of Natural Resources. However when designed correctly, catch shares can be an effective tool to help eliminate the race for fish, prevent overfishing, and reduce overcapacity and bycatch, resulting in safer and more profitable fisheries.

Climate Service and Business Information

10. Every person and every business is concerned about the impacts of climate change. Businesses need access to reliable and accurate climate change data to make fiscal decisions. For business, the debate over the science is irrelevant. Climate change represents a potential major market shift. Businesses rely on hard data and real time modeling to make decisions. What is NOAA doing to make sure that the most accurate and reliable data is available to businesses?

Answer: NOAA, with its climate capabilities spanning operational climate observing networks, global greenhouse gas monitoring, climate predictions and projections, climate research, and climate data stewardship, is already mandated to monitor and provide access to climate data and information. Earlier this year, NOAA unveiled a new Web site – <http://www.climate.gov> – that will serve as a single point of entry for NOAA's extensive climate information, data, products and services. This climate portal will provide information about the impacts of climate on nearly every aspect of our lives from agriculture and energy to transportation. On February 8, 2010, Secretary Locke announced his intent to create a NOAA Climate Service line office through a reorganization of NOAA's current climate services. We are currently developing a proposal for this reorganization and once approved by Congress, this NOAA Climate Service will create a stronger position for climate leadership within NOAA to more deliberately guide all climate research, monitoring, and assessment work in a coordinated fashion and to better coordinate efforts with partners to ensure the reliable delivery of climate services and information.

Our expectation is that the NOAA Climate Service would use NOAA's national and regional infrastructure to provide more accurate climate information helping communities better prepare for future heat waves, poor air quality, drought, forest fires, coastal inundation, and other climate phenomena. It is our intent that a single Climate Service office in NOAA would create a visible and easy to find, single point of entry which would enable more coordinated information sharing and more productive partnerships with federal agencies, local governments, private industry and all users and stakeholders.

NOAA continues to work on an ongoing basis with businesses to understand the needs for climate data and information. For example, the data currently provided by NOAA's air freezing index program allows building foundations to be more economically constructed, reducing material costs of the U.S. construction industry by approximately \$300 million per year. NOAA and partnering agencies also provide much needed drought information through the National Integrated Drought Information System (NIDIS), which prepares the agricultural sector for periods of drought and guides infrastructure investments and understanding of long-term regional climate trends. Further information that would be made available to businesses would include both relevant historical data and data from state-of-the-art climate models for future investment and planning.

Ranking Member Frank R. Wolf

Questions for the Record

Dr. Jane Lubchenco
NOAA Administrator**NPOESS Transition to JPSS**

- 1. The FY11 budget proposes a split in the NPOESS program, and funds new separate programs in NOAA and DOD. Last year there was an independent review of the NPOESS program led by Tom Young. What were the key findings of that review, and how does the new JPSS program respond to that team's specific recommendations?**

Answer: The NPOESS Independent Review Team (IRT) led by Tom Young provided key insights and independent confirmation of the challenges that the NPOESS program faced. The report, along with input from other sources and the Tri-agency NPOESS government partners, informed the February 1, 2010 decision made by the Executive Office of the President (EOP) to restructure the NPOESS program. The EOP's "Implementation Plan for Polar-orbiting Environmental Satellites In response to National Defense Authorization Act Section 913 Report" provides the Administration's response to many of the IRT's recommendations.

The IRT stated that the NPOESS program has an extraordinary low probability for success and the current structure was at great risk for years-long data gap in the event of a launch failure. Further, the IRT stated that the NPOESS program was not being managed to achieve mission success due to a number of factors. One of the factors cited was the Tri-agency structure which prevented the Executive Committee from making timely decisions since the three agency's priorities were not aligned. The IRT noted that the lack of alignment with a space acquisition center was a major impediment. It also stated that the program's budget was not structured at the 80 percent confidence to include a management reserve of sufficient amount to address technological risks in a timely manner. This problem was exacerbated by annual funding shortfalls that were causing decisions to be made that are adding risk and increasing cost to the program. This has resulted in the government relying on the risk reduction mission, NPP, as a source of data to avoid operational data gaps for weather forecasting and climate assessments. The IRT noted that the NPOESS contract's award fee was not structured to provide an effective tool for managing the prime contractor's activities.

The EOP February 1 decision implemented many of the IRT's recommendations which directed NOAA, NASA, and DoD to restructure the means by which they cooperate to achieve these observation requirements. NOAA, NASA, and DoD will be responsible for meeting these requirements through its assigned orbits.

- NOAA, with NASA acting as the acquisition agent, will be responsible for the afternoon (PM) orbit. The program servicing this afternoon orbit is called the Joint Polar Satellite System (JPSS).
- DoD will be responsible for the early morning (AM) orbit.
- European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) will continue to provide observations in the mid-morning orbit.

Additionally, NOAA is solely responsible for the ground system which will provide operations and data handling for both the DoD's early morning and NOAA's JPSS afternoon orbits.

The Transition Team has been formed and it is actively working on the JPSS transition efforts. NOAA has an acting System Program Director who is managing the day-to-day efforts of the JPSS program and its transition in coordination with NASA Goddard.

- 2. The NOAA program, JPSS, costs over \$1 billion in FY11, an increase of \$679 million above the current year funding for NPOESS. What will be the estimated life-cycle costs of the new programs in comparison to the costs of NPOESS, and what are the benefits, if any, that will result from these increased costs?**

Answer: The Tri-agency NPOESS Program of record was estimated to have a life-cycle cost of \$13.9 billion, however, the NPOESS Integrated Program Office indicated that those costs would increase by more than \$1-2 billion and trends indicated additional launch schedule delays were to be expected.

With respect to the cost of the restructured program, a new total for the restructured program is unavailable and is pending the DoD action to complete its assessment of the cost of implementing its responsibility to continue observations in the early morning orbit. For the afternoon orbit, it will cost NOAA an estimated \$11.9 billion (which includes the \$2.9 billion invested through FY2010) through FY 2024. These costs include NOAA's responsibilities to acquire the ground system for JPSS and DoD's early morning orbit spacecraft constellation. The benefit of JPSS is that the budget reflects high confidence for meeting the schedule and the program is structured to succeed and deliver the measurements that it is required to provide.

- 3. You are calling the new program JPSS. How many sensors are slated to fly on the JPSS compared to the original plan for NPOESS and the latest plan for NPOESS?**

Answer: Prior to the NPOESS Nunn-McCurdy certification in 2006, the NPOESS program was slated to manifest 13 sensors in varying combinations over three orbits; after the Nunn-McCurdy process the program reduced the number to nine sensors in two orbits. The JPSS program will manifest eight of the NPOESS

sensors and plans to acquire data from an international partner. NOAA's JPSS afternoon orbit will maintain the observations that were planned for NPOESS in the afternoon orbit.

JPSS will fly the Visible/Infrared Imager/Radiometer Suite (VIIRS), Cross-track Infrared Sounder (CrIS), Advanced Technology Microwave Sounder (ATMS), and the Ozone Mapping and Profiler Suite (OMPS). JPSS will also fly instruments that are being procured with funds from the NOAA Climate Sensor Program--the Cloud and Earth Radiant Energy System (CERES)/Earth's Radiation Budget Sensor (ERBS) and the Total Solar and Spectral Irradiance Sensor (TSIS) instruments that were in the original plan. Development of the Space Environment Monitor (SEM) instrument remains subject to completion of DoD's review of its requirements and analysis of alternatives to fulfill them. The JPSS program architecture maintains capability for SEM observations in the afternoon orbit.

4. What sensors are being dropped from the new program? What data will be lost as a result and what is the significance of not flying those sensors on JPSS?

Answer: NOAA will not seek to procure a Microwave Imager Sounder (MIS) for the JPSS program. Instead, NOAA has initiated discussions with the Japan Aerospace Exploration Agency (JAXA) to collaborate in its Global Change Observation Mission (GCOM) missions. The GCOM's Advanced Microwave Scanning Radiometer (AMSR) instrument will satisfy some of the Key Performance Parameters that the MIS instrument would have supported and, along with the JPSS ATMS, will continue the legacy microwave capability in the afternoon orbit established by the Polar-orbiting Operational Environmental Satellite (POES) sounders and the AMSR on the NASA Earth Observing System (EOS) Aqua mission. NOAA does not expect significant loss of capability by utilizing the data from the AMSR instrument since this instrument currently flies on the NASA EOS (Aqua) satellite and the data is currently widely used. NOAA is currently waiting for DoD to express their decision and intentions regarding MIS.

5. Are there any capabilities that we were going to get with NPOESS that now we will have to acquire from other agencies or other countries' satellites?

Answer: As part of the NPOESS restructure, data from the mid-morning orbit will be provided from the EUMETSAT MetOp weather satellites. The U.S. currently relies on data in the mid morning orbit from the European polar satellite system under a 1998 international cooperative agreement between NOAA and EUMETSAT.

As discussed above, NOAA has initiated discussions with JAXA to collaborate in its GCOM missions. The GCOM's AMSR instrument will satisfy the Key Performance Parameters that the MIS instrument would have supported and,

along with the JPSS ATMS, will continue the legacy microwave capability in the afternoon orbit established by NOAA's POES sounders and the AMSR on the NASA EOS Aqua mission.

6. Are there additional costs for that?

Answer: No additional funds are required. In fact, the acquisition of the AMSR data is significantly less expensive than the cost of developing the MIS instrument. The budget for receiving and processing the AMSR data from JAXA's GCOM mission is included in the JPSS budget request. Development and testing of the NOAA instruments on the MetOp satellite are budgeted in the POES budget line.

7. With the new JPSS program, what is the estimated launch date of the first JPSS satellite?

Answer: The JPSS is planning toward a launch readiness date for the first satellite (JPSS-1), no later than FY 2015 in order to minimize any potential loss of data continuity for the afternoon orbit. JPSS-2 is currently planned for FY 2017 launch, and NOAA will confirm the final readiness date once the Transition Team recommends the best possible schedule and determines an appropriate timeline.

8. What was the estimated launch date of the first NPOESS satellite?

Answer: The launch readiness date of the first NPOESS satellite was December 2014, however, that date was under review at the time of the Administration's decision to restructure the NPOESS program. NOAA had been projecting actual readiness up to a year delay due to existing technical risks.

9. Does the new program's launch date increase the risk of a gap in critical weather and climate data?

Answer: No. NOAA does not believe that the launch readiness date of the first JPSS satellite increases the risk of a gap in critical weather or climate data. In fact, with the more robust structure to develop the JPSS instruments and spacecraft, NOAA is more confident that JPSS will be able to complete acquisition on a schedule which will meet or improve the currently planned launch readiness dates.

10. Does your FY11 budget request reflect a high-confidence estimate of the costs, not only to conduct the new JPSS program, but also to close out any remaining liabilities related to NPOESS?

Answer: Yes. The NOAA FY 2011 budget and life cycle cost for JPSS was developed at an 80 percent confidence level and has the necessary level of funding to address known and unknown risks.

11. Will the costs to NOAA be affected by what DOD might propose to pursue for their follow-on program? If so, how? And what is the range of additional costs that NOAA may be facing, on top of the amounts shown in the budget?

Answer: No. NOAA's plans for the JPSS program are independent of the new program that DoD may propose for data coverage in the early morning orbit. NOAA's JPSS budget does include the funding required to complete the ground system that will be required to operate both the JPSS satellites as well as the future DoD satellites when they are launched. NOAA currently operates DoD Defense Meteorological Satellite Program (DMSP) spacecraft on a reimbursable basis from the NOAA Satellite Operations Facility (NSOF). NOAA will continue this arrangement for the rest of the DMSP satellites and NOAA anticipates that DoD would provide funds to NOAA to continue operation of its satellites which would implement its early morning orbit portion of the restructured NPOESS program. Additionally, NOAA expects that DOD will contribute to the cost of operations and maintenance of this shared ground system.

12. As a post-mortem on NPOESS, what would you identify as the characteristics that led to failure, and how has that experience reshaped NOAA's approach to satellite programs in general?

Answer: NOAA recognized that the major challenge of NPOESS was jointly executing the program between three agencies with different technical objectives, acquisition procedures, engineering and management philosophies, risk tolerance, and approaches to managing budget adjustments. Trying to find common ground on a single program (with a single common platform and a uniform set of instruments) proved to be an extraordinarily difficult task.

The IRT confirmed NOAA's own conclusion that the differing processes and objectives among the Tri-agency partners guaranteed that the NPOESS program as constructed had little chance of success. The restructured NPOESS program, specifically JPSS, will resolve this challenge by splitting the procurements. The platforms for the respective orbits will be developed and procured so as to leverage off the strength of each agency, and also to best harness the experience each agency has in continuing and improving on legacy measurements. Each agency will take the appropriate acquisition planning and

implementation actions to meet the needs for their respective orbits. The agencies will continue to partner in those areas that have been successful in the past, such as a shared ground system and operation of both morning and afternoon platforms by NOAA. The restructured programs will also eliminate the NPOESS tri-agency structure that has made management and oversight difficult, contributing to the poor performance of the program.

The IRT noted that the NPOESS program was isolated from an acquisition center. The program also lacked timely access to technical expertise, broad mentoring and development opportunities for staff, and rigorous checks and balances of engineering and program processes. The Administration followed the recommendation of the IRT concerning alignment of the program with an established acquisition center. NASA's Goddard Space Flight Center will be NOAA's acquisition agent for the afternoon orbit, and the Air Force Space and Missile Center will be DoD's acquisition agent for the early morning orbit.

13. What are the key characteristics that we should now consider as essential elements in a sound NOAA satellite program?

Answer: The key characteristics of a sound NOAA satellite program include a well understood, vetted and stable set of requirements, a corresponding budget at an 80 percent confident level providing adequate management reserves, alignment of the program with an established space acquisition organization, and oversight by a senior management body with decision making authority.

Budget for Restoring Climate Sensors

14. Another major budget impact that results from the experience with NPOESS is the separate budget line item that was created for Restoring Climate Sensors that were dropped when NPOESS was restructured the last time. Congress has provided \$137 million to-date for this separate line item. You are requesting \$49.4 million for FY11, and you plan on spending \$426 million in total on this effort. What sensors are being produced, why are they important, and why does it take such an extraordinary amount of money?

Answer: Under the NOAA Climate Sensors Project NOAA has funded the refurbishment of the CERES (Clouds and Earth's Radiant Energy System) FM-5 (Flight Model 5) for flight on the NPP satellite (\$36.3 million) and will develop CERES FM-6 as well as a follow-on instrument (\$116.5 million). NOAA will also develop two TSIS (Total and Spectral Solar Irradiance Sensor) instruments (\$193.9 million), and one OMPS- Limb (Ozone Mapping and Profiling Sensor- Limb) instrument (\$80 million). The earth radiation instruments, CERES and its follow-on, measure the reflected solar radiation from the earth's surface and clouds, and radiation emitted by the earth's surface and atmosphere. Accurate observations of the Earth's radiation are essential to determine the cause of

climate variability and change. The solar irradiance instrument, TSIS, measures the incoming radiation from the sun. Precise, long-term observations of the output of the sun's energy are needed to identify and isolate natural solar variations that impact climate in contrast to other factors, such as human influences. The ozone sensor instrument will provide vertical profiles of ozone that is critical to addressing our understanding of the stratospheric ozone located in the 12-30 kilometer altitude region where most of the halogen related depletion occurs. The OMPS-Limb instrument is essential to quantify trends in stratospheric ozone and to understand the large number of factors that influence ozone amounts.

- 15. Have you identified particular spacecraft that will carry these sensors, and what is the anticipated launch schedule? Are there other instruments currently flying that provide similar data?**

Answer: Climate sensors will be provided to the JPSS program for accommodation and flight on JPSS satellites. The specific assignment of these instruments on JPSS satellites will be determined as part of the NPOESS to JPSS transition activity. These climate instruments are currently flying on NASA EOS research satellites which have either reached or passed their mission life, placing uninterrupted data continuity at risk. Placing these sensors on JPSS will transition these research sensors onto an operational platform and mitigate any data gaps.

GOES-R Satellite Program

- 16. Your request for FY11 also includes \$730 million for the GOES-R Satellite program, an increase of \$62.5 million. Work on this program was suspended last year due to contract protests. Did this result in any changes to the life cycle costs or the launch schedule?**

Answer: The protest of the GOES-R spacecraft contract caused a 6 month delay to the launch readiness date, from April 2015 to October 2015. The GOES-R Program office has analyzed the current execution of all the contracts and does not foresee a need to increase the life cycle cost estimate.

- 17. I understand that there are changes to the budget profile of GOES-R in the FY11 budget, moving costs to later years. Why was that done?**

Answer: The GOES-R Program requested a funding profile change to reflect the lower than expected actual costs incurred by the Program. The costs were less than expected because of delays in awarding spacecraft and ground segment contracts.

18. I also understand you are conducting an independent review of the GOES-R program. Will this be similar to the review conducted for NPOESS last year? And what is the timetable for the completion of the review? Do you anticipate any significant program changes or budget impacts that may result from this review?

Answer: The upcoming GOES-R Independent Review Team (IRT) is a follow up to its initial independent review of the GOES-R program in 2007. In fact, the NPOESS program modeled its independent review after the 2007 GOES-R experience.

The subjects for the upcoming GOES-R IRT include:

1. GOES-R Annual Execution Review to assess adequacy of budget and schedule and identify any outstanding risks in these areas for the baseline program and impact of exercising ground options for improved latency and additional products.
2. Assessment of the need for, and readiness of the GOES-R program to implement, options for GOES-T&U spacecrafts including the adequacy of the budget, schedule, technical approach, and identify any outstanding risks in these areas.

19. The new GOES-R satellites will carry a number of environmental sensors to improve the accuracy of severe weather warnings. One of these sensors is the proposed Geostationary Lightning Mapper to provide lightning data and observations. Do you already have ground-based lightning sensing systems?

Answer: The Federal Government already purchased the ground-based lightning data from commercial sources; however, this data only provides cloud to ground flashes. In addition to this network, there is a new system (the GLD360) undergoing initial field testing. The GLD360 is not expected to provide the in-cloud lightning activity and related information with the detection efficiency, spatial accuracy, or day-night uniformity of the GLM. The GLD360 detects at most a few percent of the in-cloud lightning activity that is a key measurement for early alerts of severe storm and convective weather hazards. Studies have shown that in-cloud flash rates and total flash rates are highly correlated with storm intensification and severity, providing up to tens of minutes in additional warning lead-time with a probability of detection in excess of 80 percent. Notably some severe storms produce very high in-cloud flash rates with no cloud-to-ground lightning at all. Cloud-to-ground flash rates typically are uncorrelated with storm severity and updraft intensity, but rather are associated with the formation and descent of precipitation to lower levels of storm. During the early stage of thunderstorm development, the in-cloud lightning activity precedes the first cloud-

to-ground lightning by as much as ten or minutes on average, thus providing a reliable early indication of convective weather hazards that impact aviation safety and efficiency.

The GOES-R Geostationary Lightning Mapper (GLM) will map total lightning activity (in-cloud and cloud-to-ground flashes) continuously day and night with near-uniform spatial resolution of 8 kilometer and high detection efficiency (70-90 percent). The GLM will provide a product refresh rate of less than 20 sec from the west coast of Africa to New Zealand.

The 2006 NOAA Economic Statistics report indicates that lightning activity causes \$4 to 5 billion in losses each year in the civilian sector and that lightning has consistently been one of the top three causes of weather-related deaths in the country. It kills between 50 and 70 people and injures hundreds more each year. By having the GLM capability on GOES-R, NOAA will be able to provide earlier warnings that will save lives from lightning hazards. An earlier independent report from MIT Lincoln Laboratories estimated an annual benefit of \$40 million from the GLM through reduced property damage, business operating costs, and fatalities. NOAA anticipates that there will be a period of time when calibration and validation of the space-based GLM will require continued access to and procurement of the ground-based detection system. NOAA believes that its forecasts and warning that rely on lightning data will be significantly improved with the GLM, complemented by the ground-based network.

20. How much of the cost of GOES-R is for the Lightning Mapper instrument? And, what does the Lightning Mapper get us that we don't already have through the existing ground-based lightning networks?

Answer: The GOES-R Program has allocated \$207 million for the development of GLM. As discussed in the response above, NOAA believes that the space-based GLM will provide systems that the ground-based systems cannot provide. NOAA believes these systems to be complementary and used together, will contribute to significantly improved weather forecast and warnings by the NWS that will protect lives and property from harm due to severe weather conditions.

DSCOVR Mission

21. The FY11 request includes first-time funding for a space science mission called DSCOVR. The budget proposes life-cycle costs for NOAA of \$85 million. Congress added \$5 million to NASA's budget in FY10 for this mission. Why is this appropriate for funding under NOAA?

Answer: NOAA is pursuing using the refurbished NASA DSCOVR satellite as a source of solar winds data to support the work of the National Weather Service's Space Weather Prediction Center. Under a Memorandum of Understanding,

NASA will transfer the DSCOVR satellite to NOAA. NASA has determined that the DSCOVR mission does not meet any of its Decadal Survey objectives.

NOAA understands that NASA was directed to apply \$9 million in the FY 2009 Omnibus Appropriations Act and \$ 5 million in the FY 2010 Consolidated Appropriations Act to accomplish specific Congressionally-directed activities to refurbish the Earth Sensors (Earth Polychromatic Imaging Camera (EPIC) and NIST Advanced Radiometer (NISTAR) sensors. NASA did not apply these appropriated funds to support NOAA's space weather interest in DSCOVR.

As such, to initiate NOAA's plan to use DSCOVR as a space weather mission, it is requesting in FY 2011, \$9.5 million of the \$85 million, begin the following activities:

- a) Provide overall program management;
- b) Fund the Naval Research Laboratory (NRL) to develop the Coronal Mass Ejection (CME) Imager and supply the CME Imager for integration on to the DSCOVR spacecraft;
- c) Operate the spacecraft once the satellite has completed testing and post-launch checkout when in orbit at L1; and
- d) Coordinate the reception of all data through the Real Time Solar Wind Network (RTSWnet).

NOAA would fund and request that NASA conduct the following tasks:

- a) Refurbish the DSCOVR spacecraft and the PlasmaMag Suite sensor at NASA/GSFC in Greenbelt, MD;
- b) Integrate the NRL-built CME Imager onto the DSCOVR satellite;
- c) Perform launch integration;
- d) Operate the spacecraft through orbit insertion and post-launch checkout;
- e) Perform on-going software maintenance support to NOAA's National Satellite Operations Facility for the duration of the mission; and
- f) Conduct project management and system integration under NOAA's oversight.

NASA would transfer ownership of the DSCOVR spacecraft to NOAA (under the Federal Property and Administration Act) after completion of on-orbit checkout and a formal Handover Review.

22. Are other agencies also contributing funds on top of the \$85 million?

Answer: Subject to the availability of appropriated funds to the Air Force, the Air Force would procure the launch services required to place DSCOVR in orbit at the L1 point. Current planning estimates have shown that a launch readiness date in the first quarter of FY 2014 is possible if the Air Force receives sufficient FY 2012 funding.

23. What is the total life cycle cost of the mission from all funding sources including launch costs?

Answer: NOAA believes that the \$85 million will support its requirements to refurbish DSCOVR as a space weather mission. In addition to NOAA's \$85 million, the Air Force will contribute a launch vehicle which is valued at approximately \$90 million. Once the satellite is launched, NOAA will submit funding requests in the normal appropriations process for data processing and distribution of the space weather data.

As noted above, NASA has been congressionally directed to apply up to \$14 million towards refurbishing the Earth Science sensors. However, NOAA has not included funds in its budget to fund the completion of the Earth science processing algorithms and views this as an activity that NASA may pursue since NOAA is only pursuing DSCOVR as a space weather mission.

24. This mission was suspended by NASA more than a decade ago? What is the purpose of this mission to NOAA and to other agencies?

Answer: NOAA and the Air Force have an operational requirement for solar winds data to support its space weather forecasting needs. NOAA is currently using solar wind data from the NASA Advanced Composition Explorer (ACE), a research satellite has been providing these for 13 years. It is 8 years beyond its design life, and is experiencing intermittent operational failure. Solar wind measurements are the sole source of data critical to accurate geomagnetic storm warnings. Geomagnetic storms are the most damaging form of space weather and are capable of causing \$1-2 trillion dollars worth of damage to power grids and electronic systems of all types on earth ("Severe Space Weather Events," National Research Council, 2008). Advance warning from ACE provides lead time affected industries to critical infrastructure in advance of a solar storm.

The DSCOVR satellite, formerly designated Triana, was developed as a deep space Earth science and space physics measurements mission to be positioned at the Sun-Earth Lagrangian Point 1 (L1). The L1 point is located about 1 million miles inside the orbit of the Earth around the Sun, and is one of several locations in our solar system at which the gravitational forces of the Earth and Sun cancel each other. DSCOVR was placed into storage at the NASA Goddard Space Flight Center (GSFC) in 2001 after being removed from the Space Shuttle launch manifest. NOAA and the Air Force recently funded NASA to study and assess the feasibility of refurbishing the DSCOVR spacecraft and launching it to the L1 point to continue the solar wind measurements presently performed by the ACE spacecraft. The results of the study documented that NASA had not found any readily identifiable problems with the spacecraft or the space weather sensors that would preclude refurbishing the space weather instruments and the DSCOVR spacecraft for a five-year space weather mission.

DSCOVER's main purpose for NOAA and the Air Force is to provide continuous solar wind monitoring for the forecasting of geomagnetic storms.

25. Has this mission been included as a high science priority in any earth science or heliophysics decadal survey?

Answer: The 2003 National Research Council report "The Sun to the Earth and Beyond, A Decadal Research Strategy in Solar and Space Physics" recommended that NOAA assume responsibility for continuance of solar wind data as its highest priority. In 2007, the NRC report "Earth Science and Applications from Space" cited DSCOVER as a potential unique example of interagency leveraging of assets to meet NOAA's highest priority space weather need while also gathering innovative earth observations. However, NASA has determined that the DSCOVER mission does not meet any of its Decadal Survey objectives to pursue the next generation research and development challenge.

26. Why is it appropriate to re-start this mission in the austere budget climate we now face?

Answer: The pending loss of solar wind data will cause geomagnetic forecasts to cease unless a new data source is obtained. This situation is further exacerbated by the coming Solar Maximum in 2013 when geomagnetic storm frequency will drastically increase. A multi-agency US Government committee recommended DSCOVER as the best cost/risk solution for the US government for solar wind when compared to other options. As noted above, solar wind measurements are the sole source of data critical to accurate geomagnetic storm warnings that are used by utilities, airlines, satellite operators, and the telecommunications industry. Geomagnetic storms are the most damaging form of space weather and are capable of causing \$1-2 trillion dollars worth of damage to power grids and electronic systems of all types on earth ("Severe Space Weather Events," National Research Council, 2008).

27. Your budget justifies this mission on the basis of the space weather observations. However, the funding provided recently to NASA was to refurbish the earth science instruments. The main purpose of the mission as initially proposed by Vice President Gore was to make a live image of the Earth from space available on the Internet for educational purposes. Is that still part of the mission, and are there any earth observations of scientific value that would come from this mission?

Answer: NASA has determined that DSCOVER can still fly the Earth Science sensors, however, NOAA's interest in the DSCOVER satellite is solely to acquire solar winds to support its space weather data requirements. NOAA has informed NASA that if it places the refurbished Earth Science sensors on DSCOVER, NOAA could also operate the Earth Science sensors and provide a downlink of the data in a manner consistent with the original concept of operations for the original

mission which NASA would need to process and make available to the scientific community. Determining the scientific value of the observations acquired by the Earth Science sensors is a research mission that could be more appropriately studied by NASA. As an operational agency, NOAA will not apply its resources for research activities that have not proven to have operational merit.

28. How would you rank the priority of DSCOVR in comparison with your other requested increases for satellites, and the other requested program increases across NOAA?

Answer: DSCOVR is one of the top priorities among NOAA's satellite acquisitions priorities in the President's FY 2011 budget request.

National Weather Service – Aviation Weather

29. The largest increase proposed for the Weather Service is \$15 million to improve Aviation Weather services and to meet requirements of the NextGen initiative. What specifically will the NOAA funding support and how does it relate to the investments being made by the FAA?

Answer: Activities supported by the NWS FY11 funding request for Aviation Weather Services/NextGen fall into 4 categories:

- a. Improve aviation weather observations, analyses and forecasts (\$9,670,000). NextGen requires high resolution digital observational, analysis and forecast (temporal and spatial) information that is rapidly updated and consistent. To achieve this, NOAA must fully leverage its extensive investment in atmospheric observations through enhanced assimilation capabilities and integration of this data into its numerical weather prediction capabilities. It must also leverage the significant Federal Aviation Administration (FAA) investment that has produced automated 4-D weather predictions of icing, turbulence and convection by fully transitioning those products into NWS operations.
- b. Improve access to information (\$3,386,000). Aviation weather information must be provided to National Airspace System (NAS) decision makers in a timely manner, in standard formats that are compatible with user's systems. NOAA is working closely with FAA to develop interagency data standards and an architecture enabling the rapid transfer of weather information between users. These capabilities leverage investments in AWIPS-II, and will be compatible with NOAA's Global Earth Observation Integrated Data Environment (GEO-IDE) data standards. NOAA's IT infrastructure, including the National Digital Forecast Database (NDFD) for selected digital forecast data sets, and analyses in the National Digital Guidance Database will also be enhanced to meet NextGen data standards and performance requirements and to be compatible with the developed architecture.

- c. Assist in the integration of weather information into FAA and user decision support systems (\$780,000). NOAA will play a key role in ensuring weather information is appropriately integrated into NAS decisions by providing expert advice to FAA in the translation of weather information and its impact on air traffic management decisions. NOAA will utilize social science principles to ensure that aviation products, services, and information, with appropriate expressions of uncertainty, are effectively communicated to decision makers.
- d. Develop and field advanced operationally relevant verification capabilities (\$1,300,000). Forecast verification is the key for improving forecast quality, accuracy, and consistency, and is a major contributor to the common weather picture. New vertical digital analyses from the Analysis of Record (AOR) project are needed to support the verification of new gridded aviation forecasts. Enhanced verification techniques and concepts must be developed and deployed so that assessments of forecast quality and accuracy reflect the impact to the operational decisions of air traffic managers and airspace users. Verification tools that provide methodologies for assessment of the value added by the forecaster are also critically needed.

Primary FAA investments in NextGen Weather fall under three programs: Reduce Weather Impacts (RWI), NextGen Network-Enabled Weather (NNEW), and the Aviation Weather Research Program (AWRP). NOAA's NextGen program is working closely with all three programs to ensure compatibility between the agency systems, reduce overlaps in research and to smooth the transition of FAA funded research to NWS operations, when appropriate. This coordination effort is conducted under the supervision of the Joint Planning and Development Office (JPDO) and is governed by an SES level, interagency oversight board, the NextGen Executive Weather Panel, an adjunct to the NextGen Senior Policy Committee.

Tsunami Detection, Warnings and Forecasting

- 30. After the Indian Ocean tsunami a few years ago, Congress provided substantial increases through both Supplemental and regular appropriations to boost NOAA's networks of Tsunami DART Buoys. This network came into play recently with the Chilean earthquakes. Your request for the National Weather Service maintains base funding of \$23 million for the Tsunami Warning Network, but proposes no increases. Can you give us an update on the current status of the Tsunami Warning Network and what further enhancements you envision, if any?**

Answer: NOAA's FY 2011 Budget Request includes a total of \$23.3 million for strengthening the U.S. Tsunami Warning Program. In addition, NOAA will supplement this \$23.3 million in FY 2011 with approximately \$12.4 million in reimbursable funding provided by the National Telecommunications and

Information Administration (NTIA), from the analog spectrum auction proceeds as specified by the *Deficit Reduction Act of 2005*. Under this Act, NOAA will be provided a total of \$49.7 million in auction proceeds to be obligated between FY 2009-2012 at a rate of \$12.4 million/year to strengthen the Nation's tsunami program.

NOAA's request of \$23.3 million in FY 2011 will fund the following activities:

- \$3.0 million for operations and maintenance of the two dedicated 24x7 Tsunami Warning Centers (the Pacific Tsunami Warning Center and the West Coast/Alaska Tsunami Warning Center);
- \$12.5 million for operations and maintenance of the Nation's Deep-ocean Assessment and Reporting of Tsunami (DART) buoy station network (39 stations);
- \$0.75 million for the operations and maintenance of the NOAA/National Ocean Service) sea-level stations, for stations that have been installed or upgraded and provide high-frequency data for tsunami warnings;
- \$4.0 million to support expansion of the National Tsunami Hazard Mitigation Program to all 29 coastal ocean U.S. states, commonwealths and territories;
- \$0.75 million in support of NOAA's TsunamiReady communities;
- \$2.0 million for Tsunami Research and Development; and
- \$0.3 million to support NOAA's quality controlled tsunami data archive.

NOAA plans to spend the \$12.4 million in supplemental funding provided from NTIA via the spectrum auction proceeds as follows:

- \$3.3 million will modernize and upgrade NOAA's Tsunami Warning Center Operations and IT Systems;
- \$0.45 million will expand and enhance Caribbean and Pacific sea-level monitoring networks to improve tsunami detection and forecast capabilities;
- \$4.4 million will complete delivery and transition into operations of 11 high-resolution models for inundation forecasts for tsunami threatened coastal communities;
- \$0.2 million will incorporate social science into product development and mitigation activities to improve public response to forecast and warning products and information;
- \$1.5 million will expand NOAA's Tsunami Detection/Analysis research to improve its tsunami warning and forecast capability;
- \$1.35 million will accelerate NOAA's TsunamiReady Program to expand the TsunamiReady recognition of communities; and
- \$1.2 million will enhance State and Local tsunami preparedness through National Tsunami Hazard Mitigation Program grants to states.

Funding for operations and maintenance of the DART network is under review and some additional funding may be allocated from the NTIA transfer.

Since the 2004 Indian Ocean tsunami, the most difficult challenges NOAA has faced in its detecting, forecasting and modeling tsunami events have been:

- Operation & Maintenance of the Nation's 39-Station Deep-ocean Assessment and Reporting of Tsunami (DART) Network: DART station outages have occurred due to the extreme environmental conditions in some locations resulting in failed moorings. Fortunately, to date, these outages have not resulted in significant impacts on the ability to forecast and model tsunami events. Outages, however, have the potential to limit the ability to confirm tsunami propagation or to cancel warnings and advisories.
- Understanding the impacts of tsunamis at the coast: One of the major challenges is to better model tsunami impacts at the coast, including implementing a methodology for measuring tsunami-induced currents in harbors and at the coast, improve hydrodynamic modeling, develop credible fragility models of the interaction of tsunamis with the built and natural environment.
- Incorporation of International Data into existing Tsunami Modeling Capability: Improved capability to model tsunamis based on international data would enhance our tsunami forecast capability.
- Improved characterization of tsunami sources: The low density of the seismic network in some areas delays the identification and estimate of earthquakes, which may result in delays in warning issuance. An additional challenge is the detection and warning for sub-aerial and submarine landslides that generate tsunamis.

NOAA's Tsunami Program is also currently undergoing two external reviews as called for by the Tsunami Warning and Education Act, one by the General Accountability Office and another by the National Academy of Science, which evaluate the Program's success, and provide recommendations for improvement.

31. There were significant discrepancies between the wave heights that were part of the warnings for Hawaii, compared with actual heights. Does this reflect a shortcoming in the network, or does that type of discrepancy fall within the range of the expected forecasts? Are you concerned that overestimating the effects could result in people disregarding future warnings?

Answer: The tsunami height forecasts for Hawaii were higher than observed, but well within range of uncertainty in tsunami forecasting. U.S. Tsunami Warning Centers issued forecasts for 83 sites along the North American and Hawaii coast, and these forecasts had an overall error of only 8 inches when compared to the actual heights. Forecast models used during the event produced forecasts within expected performance ranges. The forecasts provided the Centers with justification to issue warning and advisory messages which prompted emergency management to take the proper level of response along the U.S. coast.

Hawaii was placed in a tsunami warning based on all information available at the time including: (1) the location and size of the earthquake; (2) historical Hawaii impacts from similar magnitude Chilean earthquakes; (3) maximum wave amplitudes from all forecast model runs which exceeded the warning threshold level of one meter amplitude; (4) the variation in forecast values representing the uncertainty of the forecast; and (5) sea level readings available at the time. Hawaii Civil Defense has gone on record to applaud the NOAA decision to issue a tsunami warning for the State of Hawaii and stated that the warning was the right course of action. According to Hawaii Civil Defense, without a warning issued and the appropriate response, people likely would have been injured or killed due to the moderate impact.

Forecast levels throughout the U.S. West Coast, Canada, and Alaska indicated an advisory level event (0.3meter to 1.0 meter above normal sea level). Some areas, such as the coasts of Washington and parts of southern Alaska were very near the information only level (that is, less than 0.3 meters, no danger of tsunami-induced damage). Other areas, such as locations in San Luis Obispo County, California were at or just above the 1.0 meter warning level. Based on the safety factors built into these levels, coupled with projected low tides at the time of expected maximum impact, and contacts with California Emergency Management Agency, the entire region was placed in only an advisory status (advisory indicates that strong currents and danger to those in or very near the shore is likely, but no inundation is expected). The maximum impact experienced in southern and central California generally matched the impact forecasted in the advisory messages.

Representative Robert B. Aderholt

Questions for the Record

- 1. What efforts are being made within the department to expand the use of aquaculture? Do you believe aquaculture can be an effective tool to enhance fish stocks and expand domestic seafood production? Is there more that can be done in this area?**

Answer: NOAA is working to support and enable sustainable marine aquaculture in the U.S within the context of our marine stewardship mission. A more robust domestic aquaculture industry would provide greater control over food safety and environmental sustainability of seafood production, help to reduce dependence on seafood imports, provide jobs for economically depressed coastal communities, and increase regional food supply and security. In the absence of a national approach that enables sustainable domestic aquaculture, the United States will likely continue to increase seafood imports from foreign sources, which may not have similar conservation regulations, and outsource more of our nation's seafood supply and associated jobs.

To ensure that marine aquaculture in the U.S. develops in a sustainable manner, NOAA is developing a new National Marine Aquaculture Policy. The purpose of a national policy is to build on NOAA's significant work to date to safeguard U.S. coastal and ocean environments, while enabling sustainable domestic aquaculture that adds to the U.S. seafood supply, supports coastal communities and important commercial and recreational fisheries. The policy will include guidance for the potential development of aquaculture in federal waters. In April and May 2010, NOAA will host a series of listening sessions around the country to solicit public input on a draft policy. One listening session will be held near New Orleans, recognizing the interest in marine aquaculture by many in the Gulf of Mexico region. The draft policy will be published in the Federal Register for an additional round of comments prior to it being finalized.

In addition to Aquaculture Policy development, NOAA is working on a variety of management, research, and outreach to support sustainable aquaculture.

Examples include:

1. Working with the shellfish aquaculture industry and others to develop guidelines for sustainable shellfish farming.
2. Working with USDA to develop aquaculture feeds that require less forage fish (e.g., sardines, anchovies) as an ingredient, thereby helping ensure the continued sustainable harvest of forage fish stocks and reducing the very high cost of fish feed.
3. Funding aquaculture projects in which researchers and NOAA's Sea Grant extension agents work with and train commercial fishermen in the development, assessment, and commercialization new and improved sustainable aquaculture practices. Such efforts have contributed to the creation of several new aquaculture-based industries. These industries

include the Gulf of Mexico and South Atlantic soft shell crab industry, the Pacific Northwest oyster and clam industry, the hybrid striped bass industry, and the Mid-Atlantic and Florida hard clam industries.

4. Funding research grants to develop innovative technologies to improve efficiencies of marine aquaculture operations while reducing environmental impacts. NOAA has a number of competitive external grants programs available to fund such research, including the National Marine Aquaculture Initiative, the Small Business Innovation Research Program, and the Saltonstall-Kennedy Grant Program.
5. Funding surveys to inform decisions on where to site aquaculture operations in the context of marine spatial planning.
6. Serving on the Joint Subcommittee on Aquaculture (JSA). The JSA was created by the National Aquaculture Act of 1980 and serves as the Federal interagency coordinating body to increase the overall effectiveness and productivity of Federal actions supporting an environmentally sound aquaculture industry in the United States.

Stock enhancement or restoration is a type of aquaculture whereby fish and shellfish are raised in captivity and released to the wild to help rebuild depleted populations or stocks or to restore habitat. Stock enhancement has been proven an effective management tool for some species (e.g., oysters for habitat restoration, Pacific salmon for assisting in recovery efforts), and shows promise for reducing the natural rebuilding time required for some other depleted fish stocks. NOAA is funding stock enhancement research to assist fishery management and habitat restoration goals around the nation, such as: rebuilding stocks of Alaskan king crab, Pacific groundfish, and Pacific salmon; protecting and enhancing depleted near-shore fishery resources in Hawaii; and restoring oyster beds and coral reefs.

NOAA also funds stock enhancement research at the Science Consortium for Ocean Resource Enhancement (SCORE) - a national partnership of private and government laboratories researching marine stock enhancement in the United States. One SCORE partner is the Gulf Coast Research Lab (GCRL) at the University of Southern Mississippi. GCRL is using funding from SCORE, NOAA's Aquaculture Program and other sources to conduct studies on a variety of species with potential for stock enhancement and/or commercial aquaculture, including spotted sea trout (aka speckled trout) and red snapper. Research on both species has shown promise for potential stock enhancement, but additional research on each species is required to ensure that any future stock enhancement effort would be both effective and pose no significant risk to native populations.

2. What is NOAA doing to improve recreational fishing data? Is NOAA expanding any programs that will be used to improve what's known about the health of the fish stocks in the Gulf of Mexico?

Answer: The FY 2011 Request includes \$9 M for Marine Recreational Information Program (MRIP), which is the same as in FY 2010. The table below shows how the MRIP funds are being allocated to different program areas in FY 2010. The table shows the funding amounts allocated to each program area, lists the specific activities associated with each area, and shows the specific coasts where each of those activities are currently focused (Atlantic = ATL, Gulf of Mexico = GOM, Caribbean = CAR, Pacific = PAC, Pacific Islands = PI). NMFS expects to follow a very similar plan in FY 2011, although the final FY2011 spend plan will be determined by a collaborative strategic planning process that will be based on a more up-to-date assessment of funding priorities.

Marine Recreational Information Program (MRIP)	Planned Investments	ATL	GOM	CAR	PAC	PI
Staffing Support for the MRIP Projects	600,000					
Staffing Support for MRIP Operations Projects						
Staffing Support for MRIP Registry Projects						
Staffing Support for MRIP Communications & Education Projects						
Staffing Support for MRIP Information Management Projects						
Development/Maintenance of National Saltwater Angler Registry	2,400,000					
Federal Registration of Anglers in Non-Exempt States		X		X		X
Integration of Angler Registry Data Provided by States		X	X		X	
Integration of For-Hire Vessel Registry Data Provided by States		X	X	X	X	X
Development of State Feeds to National Saltwater Angler Registry	2,500,000					
State Projects to Provide More Complete & More Timely Registry Data		X	X		X	
Implement & Expand Registry-Based Telephone/Mail Surveys	500,000					
Pilot Studies: Dual-Frame (Registry/RDD) Surveys of Fishing Effort		X	X		X	
Projects to Improve Sampling and Estimation Designs	2,000,000					
Workshop: Evaluation of For-Hire Fishery Data Collection Methods						
Workshop: Sampling and Estimation Design Progress						
Project: Improve Estimation Methods for Current Catch Rate Surveys		X	X	X	X	X

Project: Improve Estimation Methods for Current Effort Surveys		X	X	X	X	X
Project: Improve Estimation Methods for Current Participation Surveys		X	X	X		X
Pilot Studies: Panel Surveys of Public and Private Site Catches		X			X	
Pilot Study: Improve Access Point Survey Design for Catch Sampling		X				
Pilot Study: Dual-Frame Mail Survey of Fishing Effort		X				
Pilot Study: Compare Telephone and On-Site Surveys of Fishing Effort					X	
Pilot Studies: Electronic Logbooks & Validation for For-Hire Fishery			X			
Pilot Study: Improve At-Sea Survey Design for Headboat Catch			X			
Pilot Studies: Improve Methods for Estimating Discards		X				
Pilot Study: Improved Telephone Survey Design for Hawaii						X
Pilot Studies: Improve Specialized Survey Methods for HMS Fisheries				X	X	
Improve Management of Data and Statistics	400,000					
Evaluate and Improve Data Management Practices		X	X	X	X	X
Improve Quality Assurance and Quality Control	200,000					
Evaluate and Improve Data Collection Quality Protocols		X	X	X	X	X
Evaluate and Improve Data Processing Quality Protocols		X	X	X	X	X
Improve Stakeholder Communications and Education	400,000					
Outreach and Education Campaign		X	X	X	X	X
Total: Marine Recreational Information Program	9,000,000					

- 3. Demand for seafood from the American consumer continues to grow. With the increased consumption come additional concerns related to the labeling, packaging and safety of our seafood. What efforts are being made to further our food safety efforts through the development of training, best management practices and genetic sampling techniques that can increase the quality assurance and safety of both domestic and international seafood supplies?**

Answer: NOAA has been a leader in providing the industry with training, assistance with implementation of best management practices, development of statistics-based sampling techniques, and the development and implementation of genetic and other seafood fraud analyses. These developments are in accordance with the process-based requirements in the regulation which were designed to increase the quality and safety of the U.S. seafood supply from both domestic and international sources.

The NOAA Seafood Inspection Program is authorized under the Agricultural Marketing Act of 1946 (16 U.S.C. 1621, *et seq.*) to provide inspection, certification and training services for fish, shellfish, and fishery products to the seafood industry on a fee-for-service basis. The inspection services assure compliance with all applicable food regulations as well as additional industry specifications. Sanitation inspections as well as system and process audits are conducted in facilities, on vessels, or any foreign or domestic processing establishment where seafood is handled, processed, or stored. In 2008, NOAA inspected approximately 43% of seafood consumed in the U.S. (based on per capita consumption).

In particular, the NOAA Seafood Inspection Program conducted extensive training of processing, food service, and retail professionals on Hazard Analysis Critical Control Point (HACCP) principles, sensory techniques, and auditing and evaluation of quality management systems. NOAA personnel were members of the original National Seafood HACCP Alliance, comprised of federal and state food inspection officials, university food science educators and seafood industry representatives. The group is credited with designing an in depth training curriculum to meet the Food and Drug Administration (FDA) requirement in the Seafood HACCP regulation in order for seafood professionals to be deemed qualified as a "trained individual" according to the requirements in the regulation. The NOAA program has a full time training staff that conducts regular training courses on HACCP, sensory science, quality management and customized training upon request. Since 1992, NOAA personnel have trained more than 8,000 seafood professionals, Federal inspectors with the U.S. Department of Agriculture (USDA) and FDA and, State cross-licensed inspectors. The program continues to offer training around the country today.

The NOAA Fisheries Service's National Seafood Inspection Laboratory (NSIL) located in Pascagoula, Mississippi is a leader in efforts to detect mislabeled seafood products through the development and implementation of statistically-based sampling techniques and seafood species identification analyses. NSIL is collaborating with the FDA, Customs and Border Protection, and NOAA's Northwest Fisheries Science Center (NWFSC) and National Ocean Service's Marine Forensics Program (NOS) to create a Federal agency-wide library of seafood species standards. Such a library of documented seafood species standards shared among Federal agencies will lead to increased program efficiencies and effectiveness by reducing duplication and creating a more comprehensive collection of seafood species standards.

The NWFSC forensics laboratory located in Seattle also has established a specialized voucher collection for genetic identification of selected fish species. NSIL and NWFSC, along with other NOAA and Federal agencies, are evaluating methods and performing research needed to more rapidly detect species substitution in seafood products. The NWFSC is participating in efforts to

develop gene-based species identification methods with the Consortium for the Barcode of Life and other federal agencies (FDA, USDA, EPA), and is participating in a multi-agency validation test of DNA barcoding for species identification. In addition to genetic testing for seafood substitution, NSIL is developing a cost effective, rapid throughput methodology for seafood species determination. Such efforts help ensure a safe seafood supply and combat seafood fraud in both domestic and international seafood supplies.

As a final note, the NOAA Office of Law Enforcement has investigated, and the NOAA General Counsel and the U.S. Department of Justice have successfully prosecuted cases involving substitution of lower value species being sold as a higher value species. Species substitution is not only a major economic fraud problem but, can pose a food safety risk if the species contains harmful toxins or allergenic substances.

4. **The Administration's FY11 budget request includes a recommendation, based on an interagency review led by Dr. Holdren of OSTP, to break up the tri-agency National Polar-orbiting Operational Environmental Satellite System (NPOESS) into separate civil and military polar-orbiting weather satellite systems. I understand the NPOESS program has delivered four of five sensors for the NPOESS Preparatory Project (NPP), scheduled for launch in 2011, and has made considerable progress toward the launch of the operational NPOESS system in 2014. Please explain the administration's reasoning behind this major change.**

Answer: The major challenge to the success of the NPOESS program was jointly procuring the system between three agencies of different sizes with divergent requirements and objectives. The restructured program will resolve this challenge by separating the procurements, while continuing partnerships among the agencies in those areas that have been successful in the past.

The NPOESS program had a history of cost growth and schedule slips. The Administration decision is a means of breaking that cycle. The track record of cost growth on this program has been troubling – the cost of the program grew 87 percent from 2004 to November 2009 and the number of spacecraft to be procured reduced by a third from six to four. During the same period, the launch of the first NPOESS satellite was delayed by more than five years. The negative cost and schedule trends were continuing when an Independent Review Team comprised of space acquisition experts concluded that the program was unexecutable as it was structured from both a management and budget perspective. This Administration could not allow such a track record to continue since it would only put the nation's climate and weather information further at risk. The Executive Office of the President (EOP) did not make this decision to restructure the NPOESS program lightly.

The EOP will rely on the civil and defense agencies to construct, manage and operate the satellites in their respective orbits by implementing proactive approaches to control cost, meet schedule needs, and achieve performance goals. The civil and defense weather and climate communities are critically dependent upon data from all the orbits. The partitioning of acquisition responsibilities for the orbits clarifies decision making and allows each agency to carry out their acquisition within their individual approaches to manage requirements, performance, cost, and schedule. This major change will ensure continuity of critical earth observing instruments required for improving weather forecasts, climate monitoring, and warning lead times of severe storms

Representative Jo Bonner

Questions for the Record

- 1. Most scientists believe the red snapper population in the Gulf of Mexico to be at historically high levels as a result of thousands of artificial reefs that are unique to the Gulf environment including private structures and oil and gas platforms. Do you believe that increased historical levels mean the Gulf's potential has increased and thus we should be mandated to rebuild the snapper population to new, higher levels?**

Answer: Most of the scientists participating in the red snapper Southeast Data, Assessment and Review (SEDAR) process and Gulf of Mexico Fishery Management Council's Scientific and Statistical Committee (SSC) did not consider the red snapper population in the Gulf of Mexico to be at historically high levels. Many scientists however, acknowledged that the current population may be able to sustain higher yields than in the early years of the fishery if allowed to rebuild from its depleted state. Possible mechanisms discussed for this increased potential, included: reduced natural mortality (owing to the depletion of sharks and other large predators); changes in oceanographic conditions; increased recruitment of young fish from waters off Mexico; and increased artificial habitat. The absence of baseline data from the early years of the fishery makes it difficult to determine if the "Gulf's potential" has truly increased, and even more difficult to assign the cause of any such increase.

- 2. The current models say that the maximum sustainable yield (MSY) for red snapper is between 16 and 20 million pounds annually in the Gulf of Mexico fishery. However, we have never harvested more than 10 million pounds of red snapper in any year. How then can we be overfishing our Gulf red snapper?**

Answer: According to the best available data, Gulf of Mexico red snapper is overfished with a stock size well below the maximum sustainable yield (MSY). A stock is considered overfished when its population size falls below the minimum stock size threshold, a point where the stock is exploited beyond an explicit limit in which its abundance is considered 'too low' to ensure safe reproduction. Fishery-related mortality of Gulf of Mexico red snapper are due not only to fishery landings, but also due to being caught as bycatch in the shrimp fishery and discards in other fisheries. These other sources of mortality can reduce the amount of the MSY that is available for the directed commercial and recreational red snapper fishery. Regardless of the cause of fishery-related mortality, the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires that overfished stocks be rebuilt to the biomass that supports MSY, B_{MSY} . Because the stock size is so low, an annual harvest rate that is less than MSY can result in fishing mortality rates exceeding the overfishing limit. The current red snapper rebuilding plan is designed to end overfishing of red snapper between 2009 and 2010, and to rebuild the red snapper stock (achieve B_{MSY}) by

2032. The 2009 update stock assessment of the Gulf of Mexico red snapper stock indicated that although the stock is still overfished, the stock is rebuilding, overfishing was projected to end in 2009 and that the total allowable catch (TAC) could be increased consistent with a fishing mortality rate that produces MSY. However, the TAC will be still below MSY because the red snapper biomass is below B_{MSY} .

- 3. The stock is clearly in better condition than predicted from most fishery dependent stock assessments, and the utilization of fishery independent data collection, which takes advantage of a variety of technology to measure a fishery without relying solely on takings data from fishermen, seems appropriate. Why is there such a delay in funding this type of work? Why have repeated attempts to incorporate fishery independent data collection, including report language from this subcommittee, been rejected?**

Answer: Fishery-dependent (e.g., commercial and recreational landings and fishing effort) and fishery-independent data (collected via research cruises) are both important inputs to stock assessments. We agree that increasing the spatial and temporal resolution of current fishery-independent data collections will have a high impact on the quality of stock assessment for harvested species in the Gulf of Mexico, and this continues to be a high priority within NOAA. Fishery-independent data collections in the Gulf of Mexico are conducted by the Southeast Fisheries Science Center and through collaborations with the states, academic institutions, fishing industry and the Gulf States Marine Fisheries Commission. The addition of the state-of-the-art NOAA ship, PISCES greatly increased our capacity to conduct fishery-independent collections in the region. The FY 2011 President's request includes planning and design funds for the shallow-draft Fisheries Survey Vessel 5. Timely construction of this vessel is critical to ensure the continuity and expansion of fishery-independent data collections in shallow nursery habitats when the OREGON II is decommissioned. Additional investments in fishery-independent surveys provide high returns in terms of improved statistical confidence for stock assessments. Balanced with that benefit is the fact that unit-for-unit of data, fishery-independent data collections are considerably more expensive to conduct than fishery-dependent collections.

- 4. The conference report accompanying the FY10 Consolidated Appropriations Act directed the agency to "create a thorough report detailing the potential economic impact any new restrictions would have on Gulf of Mexico communities before moving forward with any changes impacting the red snapper fishery." When do you anticipate the committee will receive that report?**

Answer: In February 2010, the Gulf Council approved for Secretarial review a regulatory amendment that would increase the red snapper total allowable catch

quota from 5.0 to 6.945 million pounds in 2010, consistent with the assessment update findings and the recommendation of its Scientific and Statistical Committee. If approved, the commercial and recreational red snapper quotas for 2010 will be 3.542 million pounds and 3.403 million pounds, respectively, and the recreational fishery will be open between 51-60 days. The Council and NMFS have thoroughly evaluated the potential economic impacts of this regulatory change on page 40 in the "Final Regulatory Amendment to the Reef Fish Fishery Management Plan to Set Total Allowable Catch for Red Snapper," which is available online at

<http://sero.nmfs.noaa.gov/sf/pdfs/Final%20Red%20Snapper%20Regulatory%20Amendment.pdf>

The public may comment on this analysis during the comment period on the proposed rule to implement the regulatory amendment. That comment period ends April 14, 2010.

TUESDAY, FEBRUARY 23, 2010.

**NATIONAL INSTITUTE OF STANDARDS AND
TECHNOLOGY**

WITNESS

DR. PATRICK GALLAGHER, DIRECTOR

OPENING REMARKS

Mr. MOLLOHAN. The hearing will come to order. Good afternoon. Today we will explore the fiscal 2011 budget request for the National Institute of Standards and Technology.

NIST's critical role in measurement science and standards fosters innovation and encourages economic growth. The agency is a world leader in the physical sciences and technology.

The total NIST request is \$918.9 million, an increase of \$62.3 million over the fiscal year 2010 enacted level of \$856.6 million, or just over seven percent.

We will explore NIST's progress in awarding American Recovery and Reinvestment Act funds, including specific details on how the funds are being utilized and their importance in supporting NIST's mission while addressing National priorities.

NIST received \$580 million in ARRA funding, including \$220 million for research, competitive grants, additional research fellowships, and advanced research and measurement equipment and supplies: \$180 million to address NIST's backlog of maintenance and renovation needs, and for the construction of new facilities and laboratories; and \$180 million for the relatively new and well-received competitive construction grant program for research science buildings.

I would like to acknowledge that this is Dr. Gallagher's first time testifying before this Subcommittee.

I understand, Dr. Gallagher, that you have some practice with authorizing committees, however, so it is not exactly new territory for you.

Welcome, and we look forward to your testimony. Your written statement will be made a part of the record. Following Mr. Wolf's opening statement, we will ask you to briefly summarize your written statement.

Mr. Wolf.

OPENING REMARKS

Mr. WOLF. Thank you, Mr. Chairman.

Dr. Gallagher, we welcome you and look forward to hearing your testimony.

And I yield back. Thanks, Mr. Chairman.

Mr. MOLLOHAN. Dr. Gallagher.

OPENING STATEMENT BY DR. GALLAGHER

Mr. GALLAGHER. Well, thank you very much. It is a real pleasure to be here for my first hearing before this Subcommittee.

And I want to thank you, Chairman Mollohan and Ranking Member Wolf and the other members of the Subcommittee, for allowing me to appear before you today to summarize the President's request for the National Institute of Standards and Technology for fiscal year 2011.

I also want to take this opportunity to thank you for your continued support of NIST. This budget reflects, I hope you will agree, the important role that NIST plays into the President's Plan for Science and Innovation.

The President's fiscal year 2011 budget request for NIST is \$918.9 million. This is a 7.3 percent increase over the fiscal year 2010 appropriation for the agency.

This budget maintains the President's commitment to double the NIST laboratory budget by 2017 and to increase funding for the Hollings Manufacturing Extension Partnership or MEP Program.

The request for our Scientific and Technological Research Services account which funds NIST laboratory programs is \$584.5 million, an increase of \$69.5 million above last year. This increase is focused on critical areas such as manufacturing, cyber security, standards for interoperable health records, Smart Grid, advanced photovoltaic research, and disaster resilient buildings.

The request for our Industrial Technology Services or ITS account, which is comprised of the MEP Program and the Technology Innovation Program or TIP, is \$209.6 million and includes increases of \$4.6 million for MEP and \$10 million for TIP. The request also includes \$124.8 million for our Construction of Research Facilities account.

So let me briefly summarize some of the initiatives in the request.

In the laboratory initiatives, the standard for conformity assessment for interoperability and emerging technologies initiative covers the development of framework of documentary standards and conformity assessment requirements to enable interoperability and new technologies. This initiative specifically includes our efforts in Smart Grid and health IT.

The scalable cyber security for emerging threats and technologies initiative will support the development of tools and standards necessary to enable a robust, usable, and accessible cyber security framework and will include a specific program of competitive grants to strengthen U.S. capabilities in cryptography.

Our green manufacturing and construction initiative will provide for the development of tools to improve energy efficiency in manufacturing and construction and to benchmark and stimulate the utilization of sustainable materials in manufacturing.

The innovations for 21st century U.S. manufacturing will accelerate the development and adoption of advanced manufacturing technologies, including nano manufacturing capability. This initiative is also in line with the President's framework for revitalizing American manufacturing.

NIST's advanced solar technology initiative, consistent with the Administration's support for the development of alternative energy sources, will focus on bridging the current gap in measurement technology needed to develop both advanced technology of photovoltaics and to promote their commercial use.

The disaster resilient buildings and infrastructure initiative will fund improved techniques, tools, and guidelines for evaluating and rehabilitating existing buildings based on analytical and experimental studies. It also supports efforts to work with national code organizations so that we can incorporate those tools and products into improved model codes.

The nano material environment health and safety initiative builds on our current efforts to characterize nano materials and to begin developing the standards and reference materials framework, including measurement methods and instruments needed to support research and standards on nano material safety.

For our biologic drugs initiative, we're working with industry stakeholders to develop a program to provide reference materials and tools to control the manufacturing of biologic drugs and to support their eventual regulation. This initiative will include funds for grants to stimulate advances in these new measurement technologies.

The Strategic and Emerging Research Initiatives fund, or SERI, is a Director's discretionary research account, enabling the NIST Director to respond quickly to critical research needs. The NIST NRC Postdoctoral Research Associateships program initiative will enable NIST to support up to 23 additional new postdoctoral associateships per year through this highly competitive program.

Our request for MEP this year is the second year of proposed increases to the program. This is consistent with the trajectory for the program that was outlined in the America COMPETES Act. This initiative will enable the program to expand its suite of business growth services, which we call Next Generation MEP services, to promote the acceleration of new technology, to promote green and sustainable manufacturing, and to open up new markets for U.S. small- and mid-size manufacturers.

The requested increase for the TIP Program will support new competitions and cover any remaining commitments from previous competitions in areas of critical national need like civil infrastructure, advanced manufacturing, energy, healthcare, or green chemistry.

Our Construction of Research Facilities request reflects three major goals for the agency. First, to fund the repairs and maintenance of our existing building systems, second, to renovate a dangerously obsolete Building 1 at our Boulder campus, and, finally, to begin detailed planning for the most cost-effective way for a future renovation at our aging general purpose laboratories in Gaithersburg.

Mr. Chairman, this request reflects the Administration's recognition of the important role that NIST plays in innovation and our impact on the future of manufacturing and hopefully of moving this Nation from recession to recovery.

I am looking forward to working with this Committee and look forward to answering any questions you have.

[The written statement of Dr. Patrick D. Gallagher, Director of the National Institute of Standards and Technology, follows:]

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Testimony of

Patrick D. Gallagher, Ph.D.
Director
National Institute of Standards and Technology
United States Department of Commerce

Before the
United States House of Representatives
Committee on Appropriations,
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Agencies

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Chairman Mollohan, Ranking Member Wolf, and members of the Subcommittee thank you for the opportunity to appear before you today to present the President's Fiscal Year 2011 budget request for the National Institute of Standards and Technology (NIST). This budget reflects the important role that NIST plays as part of President Obama's Plan for Science and Innovation. It also reflects how NIST's expertise fits squarely in the middle of key Administration priorities by making critical investments in key areas that will help preserve our nation's economic security.

The President's FY 2011 budget request for NIST is \$918.9 million, a 7.3 percent increase over the FY 2010 appropriations for the agency. The budget maintains the President's commitment to double the NIST laboratory budget by 2017, and to support and enhance our world leadership in the physical sciences and technology. The FY2011 request includes 10 laboratory-related initiatives totaling \$69.4 million for the Scientific and Technical Research and Services (STRS) account. The initiatives, detailed below, address critical measurement and standards challenges in manufacturing, advanced alternative energies, cybersecurity, the Smart Grid and a number of other critical issues.

The FY2011 request for our programs under the Industrial Technology Services (ITS) account includes an additional \$4.6 million above base in support for the Hollings Manufacturing Extension Partnership (MEP) that will continue to deliver new services to America's manufacturers such as tools to help stimulate adoption of green and sustainable manufacturing processes and support market diversification efforts. The request for the Technology Innovation Program (TIP) includes an increase of \$10 million to stimulate the development of game-changing new technologies that will address critical national needs and foster the development of new industries. These increases will allow NIST to increase its support for small manufacturers and continue funding high-risk, high-reward research, both of which will ultimately enable the creation of the types of high-wage jobs necessary for a strong and vibrant economy. The request also includes \$66.1 million above base in funds for the Construction of Research Facilities (CRF) appropriation to continue renovations of NIST's Boulder campus and to provide for increased maintenance of all NIST facilities to ensure that NIST has 21st century facilities in which to conduct the world-class research for which NIST is well-known.

NIST Supporting Innovation for the 21st Century Economy

Today, the Nation is facing significant economic challenges. But as this Subcommittee is aware, investments in science and technology are the foundation for the innovations and technological breakthroughs that will be key to our Nation's long-term economic growth and prosperity. As such, NIST's mission is more important than ever. Today, the NIST Laboratories address increasingly complex measurement challenges. For example, NIST develops measurements focusing on the very small—nanotechnology devices—and the very large—skyscrapers, and develops methods for characterizing everything from strands of DNA for forensic testing, to the performance of walk-through metal detectors. Working closely with U.S. industry and academia, NIST plays a central role in advancing and maintaining this technology support system which helps enable innovations and future technologies that lead to the jobs of the future. Several recent trends have highlighted the urgent need for expanded investment in this

technology support system, and by extension on the need for increased investment in NIST programs.

In the area of manufacturing, U.S. industry faces relentless competition that has trimmed the nation's share of global manufacturing output from 25 percent in 2000 to about 20 percent today. To reap the economic benefits of our ability to innovate, our nation's manufacturing sector must be able to renew itself by adopting new technology and growing into new markets. The Nation's more than 335,000 manufacturing plants must respond quickly and effectively to an ever-changing mix of requirements, risks, and opportunities, from new regulations to rising energy costs to emerging technologies and markets. The revitalization of the U.S. manufacturing base is critical to driving innovation and job creation in the future and will play a major role in building an economy that can help raise the standard of living for all Americans.¹

NIST's FY2011 budget request specifically targets these challenges with critical support for manufacturing in a number of areas including: advanced manufacturing capabilities necessary to capitalize on advances in nanotechnology and to enable rapid prototyping and manufacture of multiple high technology components; measurements to enable the efficient manufacture and regulation of biological drugs; and the measurement and data tools to support sustainable manufacturing practices.

Newly emerging technologies such as an electric-power Smart Grid and national health care information systems promise to transform our society and revitalize the U.S. economy. To be effective the many interconnected components in these systems must be fully interoperable, to allow information to be exchanged and used seamlessly across the system. Interoperability is not easy to achieve in these complex systems. NIST has deep experience and technical expertise in this field, and is helping to establish a framework of standards and related test protocols, and conformity assessment requirements to ensure seamless, end-to-end interoperability for both of these technologies. As a respected and trusted technical partner NIST is uniquely positioned to bring together stakeholders from industry, government, academia and standards development organizations to establish consensus-based interoperability standards and conformity tests. The President's budget request for NIST will support continued efforts in these critical areas as well as provide the infrastructure necessary to address other emerging interoperability challenges.

Another major challenge facing the nation is in the area of cybersecurity. Cybersecurity is vital to the economic 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 life-critical functions such as air traffic control and electric power distribution. Our nation's computers face ever-increasing threats from malicious individuals, organizations, and nation states. Effective computer security tools are often too complex for most administrators to understand and use. 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.

¹ Executive Office of the President, *A Framework for Revitalizing American Manufacturing*, Dec. 2009.

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. An example of how NIST is supporting advances in secure IT is conducting research and developing voluntary consensus documentary standards for cryptography practices to safeguard the confidentiality and integrity of information and systems. This budget request will strengthen NIST's contribution to the development and promulgation of effective and usable cybersecurity systems.

Developing clean energy technologies that provide reliable, carbon neutral energy sources has become a top priority of the nation. Rapid progress will depend on innovations from many quarters, both private and public. However, a prerequisite for U.S. success will be measurement and data evaluation methods to enable the development and manufacture of these new technologies. For example, new nanotechnology-based photovoltaic materials—so called third-generation solar technologies—may greatly enhance the absorption properties of photocells through multi-layer structures optimized to absorb light at specific wavelengths spanning the full spectrum of the sun's output. However, the new materials lack the durability needed for commercial applications and developers need measurement tools to systematically optimize the electricity-generating properties of the devices.

By focusing on these challenges and others, NIST will continue to provide the Nation with unmatched measurement capabilities, tools, and facilities that provide key support at every level of the Nation's innovation system from ground-breaking basic research to the development of standards that promote fairness in the marketplace.

FY2011 President's Budget

Scientific and Technological Research Services: The request totals \$584.5 million (excluding a \$3.3 million transfer from the Election Assistance Commission), an increase of \$69.5 million above FY 2010. NIST's request is consistent with the intent of the President's Plan for Science and Innovation to double NIST laboratory research. With this amount, NIST will fund a total of \$69.4 million in program initiatives and the remainder for adjustments-to-base (ATBs).

I will now highlight the 10 new initiatives in our laboratory programs accounts in more detail:

Standards and Conformity Assessment for Interoperability in Emerging Technologies - (+\$10,000,000)

Lack of standards that allow interoperability within and between cross-cutting technologies such as Smart Grid and Healthcare Information Technology (Health IT) can significantly stifle the realization of benefits from these emerging technologies. Interoperability stimulates significant confidence in industry about investing in these new technologies by broadening the market and decreasing the limitations inherent in legacy systems. It also obviates potential concerns about stranded investments, which may arise due to lack of interoperability between components of systems. Furthermore, clearly defined interoperability requirements and standards to support such implementations promote innovation and competition amongst the suppliers of components to the systems, thereby reducing costs of implementation and providing greater choice to

consumers. This initiative addresses architectural framework development for documentary standards and conformity assessment requirements that will enable interoperability in emerging technologies such as Smart Grid and Health IT.

Scalable Cybersecurity for Emerging Technologies and Threats - (+\$10,000,000)

Cybersecurity is vital to the economic and national security interests of the United States. The Obama Administration has declared the cyber infrastructure a strategic asset. These networked systems face an ever-increasing threat of attack from individuals, organizations, and nation states that target key information technology operations and assets. The requested funds will support the development of tools and standards necessary to enable a robust, useable, and accessible cybersecurity framework, addressing a number of factors including cryptographic key management, security automation technologies, and improved modeling and attack detection capabilities. NIST's programs will include competitive grants to strengthen U.S. capabilities in cryptography.

Green Manufacturing and Construction - (+\$10,000,000)

Promoting innovative energy technologies to reduce dependence on energy imports and mitigate the impact of climate change while creating green jobs and new businesses is a priority of the Administration. To address this issue, NIST is focusing on programs that will develop a common framework of measurements and standards to promote sustainable operations and improve energy efficiency in both the construction and manufacturing sectors. This initiative will provide for the development of data, models, and support tools to improve energy efficiency in manufacturing and construction processes and to benchmark and stimulate the utilization of sustainable materials.

Innovations in Healthcare – Measurement Science and Standards to Support Manufacturing and Regulatory Approval of Biologic Drugs - (+\$10,000,000)

Biotechnology drugs, and protein and cell-based medications represent the fastest growing category of therapeutic drugs in the U.S. Improved characterization and manufacturing of follow-on biologic drugs will support the growth of a new industrial sector that is vital to reducing the cost of healthcare. Measurement science and standards are necessary to enable regulators to assess the "sameness" of a biologic drug made by different manufacturers and/or different manufacturing processes, and to enable manufacturers to improve efficacy and safety, and the efficiency and reliability of biopharmaceutical manufacturing processes. NIST will work with industry stakeholders to develop a program that provides reference methods for characterization of protein biopharmaceuticals' structure, function, immunogenicity and tools to test and optimize manufacturing processes. This initiative will include funds for grants to stimulate advances in biomanufacturing processes.

Innovations for 21st Century U.S. Manufacturing - (+\$10,000,000)

The President's Framework for Revitalizing American Manufacturing calls for investment in new technologies that will spur innovation and increase the competitiveness of the U.S. manufacturing sector. This initiative will enable NIST to support efforts in nanomanufacturing that will develop the metrology tools required to quickly, inexpensively, and accurately characterize products at the relevant scales of one to hundreds of nanometers; and allow in-line, fast and inexpensive nanoscale metrology techniques necessary to enable and maintain complex, multi-step assembly processes that are needed to develop true high-capacity nanomanufacturing capabilities. Working collaboratively with industry and academia NIST will also invest in programs targeted at technological innovations to increase manufacturing efficiencies in areas such as advanced sensor development, advanced robotics, and rapid prototyping.

Disaster Resilient Buildings and Infrastructure - (+\$5,000,000)

The United States depends on a robust physical infrastructure² to provide a high quality of life for its citizens and to ensure competitiveness in the global economy. Much of the Nation's enormous physical infrastructure is nearing the end of its service life, and needs to be repaired or replaced, which is estimated to cost close to \$2.2 trillion.³ Considering that a large percentage of the Nation's infrastructure is at risk from multiple natural hazards (earthquakes, fires, hurricanes) that can cause significant financial losses, it is important to ensure that as we renovate our Nation's infrastructure we do so in a way that minimizes susceptibility to damage from natural hazards. The request will fund improved techniques, tools, and guidelines for evaluating and rehabilitating existing buildings based on analytical and experimental studies, studies on the fire performance of structures, and efforts to work with national model building code organizations to incorporate those products in appropriate model building codes.

Advanced Solar Technologies -- Third Generation Photovoltaics - (+\$5,000,000)

The Administration supports the development of alternative energy sources that can meet our Nation's increasing energy needs while mitigating global climate change, reducing energy imports, and creating green manufacturing jobs. Solar energy remains one of the most promising alternative sources of energy as it is readily available, free from geopolitical issues, and does not contribute to the environmental problems associated with carbon emissions. Despite the continued growth of solar energy technologies, adoption of these technologies is limited by the relatively high-cost and low-efficiency of conventional photovoltaic solar cells. Third-generation photovoltaic technologies have the potential to overcome these barriers through the application of nanotechnology, which can enable more efficient absorption of solar energy, and simultaneously be more cost effective to manufacture. With these funds, NIST will focus on developing novel instrumentation and methods for measuring critical photovoltaic device

² Physical infrastructure includes airports, bridges, tunnels, roads, ports, and other fixed portions of transportation systems, power generation and distribution facilities, water and waste facilities, government buildings, and public arenas.

³ ASCE 2009 Report Card for America's Infrastructure. Available at <http://www.asce.org/reportcard/2009>.

phenomena. The request will help bridge the current gap in measurement technology needed to enable these promising new technologies.

Nanomaterial Environmental, Health and Safety - (+\$4,000,000)

There are currently over 1,000 products that contain nanomaterials on the market produced by 485 companies⁴ and valued at \$166 billion⁵; the value of nano-enabled products is projected to climb to \$2.6 trillion by 2014⁶. To ensure market viability of nanomaterials and products that incorporate these materials, it is important that manufacturers and regulators have the tools to ensure a deep and accurate understanding of the characteristics of nanomaterials. A science-based approach is needed for industry and regulatory agencies to assess and manage these risks. Regulatory agencies and industry have called on NIST to lead the effort on physical and chemical property measurements and standards. Building on our existing Nanomaterials Environmental Health and Safety program, in coordination with other agencies participating in the National Nanotechnology Initiative, NIST will identify measurement needs for critical nanomaterial characterizations, and begin developing reference nanomaterials with fully characterized physical and chemical properties.

Strategic and Emerging Research Initiatives (SERI) - (+\$2,000,000)

The SERI Fund provides the NIST Director the flexibility necessary to rapidly address high-priority research problems that require immediate attention. In addition, the SERI fund provides the NIST Director with programmatic flexibility to seed the development of new competencies that contribute effectively to future national needs and goals by investing in high-risk, high-payoff research to enable innovation.

NIST NRC Postdoctoral Research Associateships Program - (+\$3,400,000)

The Administration is committed to strengthening science, technology, engineering, and mathematics (STEM) education. The NIST National Research Council (NRC) postdoctoral program provides opportunities for outstanding young scientists to gain training in measurement science, and is a critical part of ensuring that NIST has access to the top technical talent necessary to maintain leading research programs that address critical national priorities. This request will enable NIST to support over 20 additional new post-doctoral fellowships per year.

Industrial Technology Services: The request totals \$209.6 million (including 148 permanent positions and 154 FTE). The request funds MEP at \$129.7 million, an increase of \$5.0 million above the FY 2010 enacted level (a \$4.6 million increase above the 2011 base). TIP is funded at \$79.9 million, an increase of \$10.0 million from the FY 2010 enacted level.

⁴ According to the Consumer Products Inventory maintained by the Woodrow Wilson International Center for Scholars, www.nanotechproject.org, August 25, 2009.

⁵ *The Nanotechnology Opportunity Report (NOR) 2008, 3rd Edition*, Research and Markets, June 2008.

⁶ *Taking Action on Nanotechnology's Value Chain*, Lux Research, October 2004.

Technology Innovation Program - (+\$10,000,000)

The Technology Innovation Program (TIP) supports, promotes and accelerates innovation in the United States through high-risk, high reward research in areas of critical national need. For FY 2011, NIST requests \$79.9 million, which includes an increase of \$10.0 million. These funds will support new competitions and any remaining mortgage commitments from previous competitions. Areas under consideration for potential future competitions are civil infrastructure, advanced manufacturing, energy, health care, complex systems and green chemistry. TIP funding will initiate innovative research and development (R&D) by small- and medium-sized U.S. based companies, universities, and national laboratories and other non-profit research organizations and will generate an equivalent amount of private sector R&D through the TIP cost-share provision. Further, it will foster research collaborations, enable the creation of intellectual property in the United States, disseminate new knowledge, and advance the state-of-the-art in technologies that address societal challenges. The FY 2011 request is the second year of proposed increases to the program to an eventual level of \$100 million by FY 2015.

Hollings Manufacturing Extension Partnership Program - (+\$4,637,000)

The Hollings Manufacturing Extension Partnership (MEP) program is a national network providing business and technology assistance to the Nation's manufacturing base. For FY 2011, NIST requests \$129.7 million for MEP, which includes a program increase of \$4.6 million. MEP services result in more than \$10 billion per year in increased and retained sales among thousands of manufacturing clients, and the creation and retention of more than 52,000 jobs annually. In FY 2011, MEP will continue to expand its services to better respond to future challenges and opportunities of U.S. manufacturers by supporting the adoption of technological innovations that spur economic growth and fostering the development of new products, expanded markets, process improvements, and creation of new green technology jobs. Long-term competitive advantage requires manufacturers to have access to a wide-range of resources that enable them to sell to new customers, compete in new markets, and develop new products, thus creating new, more profitable revenue streams. MEP will use additional resources in FY 2011 to expand the delivery of the collection of new services known as Next-Generation MEP. These services are focused on enabling manufacturers to strategically manage multiple factors, including continuous improvement, technology acceleration, supplier development, sustainability, and workforce challenges and opportunities in order to successfully compete over the long term in today's complex global manufacturing environment. The FY 2011 request is the second year of proposed increases to the program to an eventual level of \$180 million by FY 2015.

Construction of Research Facilities (CRF): The request totals \$124.8 million. The FY 2010 enacted level included funding that allows NIST to begin work to renovate Boulder's Building 1, and conduct a space study at the Gaithersburg site to analyze the best way to renovate aging facilities. The FY 2011 request includes \$66.1 million of initiative funding above the FY 2010 base amount for CRF to continue the Building 1 Renovation, begin design and planning for General Purpose Laboratories (GPL), and to provide a sufficient level of funding for NIST to

address deficiencies and maintain NIST's physical plant. NIST will invest these funds in the following manner:

Safety, Capacity, Maintenance, and Major Repairs (SCMMR) - (+\$13,832,000)

Aging and deteriorating buildings and infrastructure threaten NIST's ability to meet its mission. NIST's SCMMR program funds capacity, safety improvements, as well as ongoing, recurring and preventative maintenance and major repair of the NIST physical plant in Gaithersburg, Maryland; Boulder and Fort Collins, Colorado; and Kauai, Hawaii. NIST requires a \$13.8 million increase to the SCMMR base program to bring the program total to approximately \$72.5 million, which will provide a sufficient level of funding to address repair deficiencies and maintain NIST's physical plant with on-going, recurring, and preventative maintenance.

Boulder Laboratories Building 1 Renovation (+\$37,900,000)

This initiative is part of a long-term plan to renovate Building 1 of the NIST Boulder laboratories, which houses the majority of NIST Boulder research and measurement. The requested funding will allow NIST to continue with the efforts made in FY 2010. Specific work will include the exterior renovations of Wings 3, 5, 6, and the Center Spine, and the interior renovation of Wing 3 as well as most of Wing 5. The successful improvement of the NIST Boulder facilities – through construction of the Precision Measurement Laboratory and the extensive renovation of parts of the existing facilities – will enable NIST to support scientific discovery and technical development of transformational technology in homeland security, telecommunications, nanotechnology, precision timekeeping, hydrogen energy sources, precision electrical standards, biotechnology, applications of lasers, electromagnetic interference testing, quantum computing and quantum communications, and other national needs.

General Purpose Laboratories (GPLs) Renovations - (+\$14,400,000)

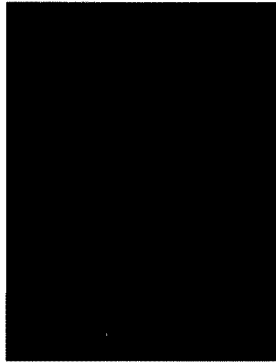
Nearly 45 years old, the Gaithersburg site GPLs house the majority of NIST research and measurement. Aging structural, mechanical, electrical, and safety systems significantly reduce the research and measurement productivity of the NIST Gaithersburg laboratories. This initiative is part of a comprehensive, multi-year plan for the phased renovation of all the GPLs at the NIST Gaithersburg laboratories. In FY 2010, a \$2.0 million Gaithersburg site space utilization study was funded. This FY 2011 request of \$14.4 million will provide funding for the initial cost of the planning documents based on the results of the FY 2010 study. This initiative will identify the phasing plans, the basis of design and budget for each phase of the renovation program. A comprehensive schedule will be developed for the GPL renovations as part of this initiative.

Summary

For more than 100 years, NIST has maintained the national standards of measurement, a role that the U.S. Constitution assigns to the Federal Government to ensure fairness in the marketplace. The FY2011 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 from recession to recovery by laying the foundation for long-term job creation and prosperity.

I look forward to working with you Mr. Chairman and members of the Subcommittee and would be happy to answer any questions.

Dr. Patrick D. Gallagher, Director

Dr. Patrick Gallagher was confirmed as the 14th Director of the U.S. Department of Commerce's National Institute of Standards and Technology (NIST) on Nov. 5, 2009. Gallagher provides high-level oversight and direction for NIST. The agency promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology. NIST's FY 2009 resources total \$1.6 billion and the agency employs about 2,900 scientists, engineers, technicians, support staff and administrative personnel at two main locations in Gaithersburg, Md., and Boulder, Colo. In addition to \$819 million in FY09 appropriations and \$125 million from other agencies, the American Recovery and Reinvestment Act of 2009 provides a total of \$610 million to NIST for building critically needed research facilities, expanding fellowships and research grants, and addressing important national priorities critical to the nation's future.

Gallagher had served as Deputy Director since 2008. Prior to that, he served for four years as Director of the NIST Center for Neutron Research (NCNR), a national user facility for neutron scattering on

the NIST Gaithersburg campus. The NCNR provides a broad range of neutron diffraction and spectroscopy capability with thermal and cold neutron beams and is presently the nation's most used facility of this type. Gallagher received his Ph.D. in Physics at the University of Pittsburgh in 1991. His research interests include neutron and X-ray instrumentation and studies of soft condensed matter systems such as liquids, polymers and gels. In 2000, Gallagher was a NIST agency representative at the National Science and Technology Council (NSTC). He has been active in the area of U.S. policy for scientific user facilities and was chair of the Interagency Working Group on neutron and light source facilities under the Office of Science and Technology Policy.

AMERICAN RECOVERY AND REINVESTMENT ACT

Mr. MOLLOHAN. Thank you, Dr. Gallagher.

In the American Recovery and Reinvestment Act NIST received a total of \$580 million. We are interested in knowing what you did with it, how many jobs it preserved or created. So let us just start with how much funding has been obligated to date.

Mr. GALLAGHER. The total amount of funding for Recovery Act varies according to the different programs. Where we have the most progress in obligations is through our grants programs.

Mr. MOLLOHAN. Uh-huh.

Mr. GALLAGHER. We have announced awards for all of our construction grants.

Mr. MOLLOHAN. Well, may I? Excuse me for interrupting you.

Mr. GALLAGHER. Yes.

Mr. MOLLOHAN. Let me start at the top. You had \$580 million in the Recovery, right? This is a total, a top line number, how much—

Mr. GALLAGHER. You want me to break that out? Yes, let me break it down because there were a number of pieces to it.

Of the \$580 million that NIST received, \$360 million was in our Construction of Research Facility accounts. Of that \$360 million, half of it, \$180 million, was for internal NIST construction. The other half was for the competitive construction grants program.

In the construction grants program, a third of that funding was awarded rather quickly based on proposals that had been received but were unfunded from the prior year.

Mr. MOLLOHAN. Uh-huh.

Mr. GALLAGHER. The remaining two-thirds was funded under a new competition and those awards have all been announced.

In the internal NIST construction, this is done through design and then build contracts. The design contracts have all been awarded and we are now moving into the construction contracts. Those contracts will be moving out between now and the middle of the summer which just reflects the two-phase process that occurs under construction.

Mr. MOLLOHAN. So \$360 million for construction, it is out, and construction will begin when the construction season starts, I assume?

Mr. GALLAGHER. That is correct.

Mr. MOLLOHAN. Okay.

Mr. GALLAGHER. The remaining \$220 million was in our laboratory base account, the so-called STRS line for NIST, and that was broken into a number of distinct programs. A little over half of that, approximately \$110 million, was for the purchase of high-end equipment needed for NIST research. We focused that specifically on large items of equipment. So that was good from a management perspective because it gave us a finite number of items to move, but it also complicates it because large contracts move a little slower than lots of small contracts.

We have awarded approximately 16 of those and the balance of those are pending with a very heavy season of awards anticipated through this spring and summer. In terms of equipment received,

there is not a lot yet. Three or four items have been installed and are underway.

Mr. MOLLOHAN. How much of that equipment is purchased in the United States from United States manufacturers, if you know?

Mr. GALLAGHER. My understanding is that almost all of it is. I only know of one exception that, because of a Trade Act issue, a foreign registered company was allowed to compete and I think obtained the contract. But everything else to date has been American-manufactured equipment.

Mr. MOLLOHAN. Uh-huh.

Mr. GALLAGHER. There are some details that go with whether we can restrict competition to U.S. companies or not, but we have done everything we know to promote U.S. manufacturers in this by identifying the nature of the equipment, make sure that it is the kind of equipment that we could buy from U.S. manufacturers.

Mr. MOLLOHAN. Uh-huh.

Mr. GALLAGHER. After the \$110 million, there are a number of programs that are various grants and contract programs. There is a \$35 million research grants program that was to support areas of research and that support NIST work and those are all announced.

We announced last week a fellowship program which will support positions not just postdoctoral or graduate student but all the way up to senior scientists at both our Gaithersburg and Boulder facilities.

There is also a \$22 million expansion of the NIST NRC Postdoctoral Research Associateships postdoc program in the Recovery Act that, in fact, we are also expanding in our 2011 request. Those positions are underway and are brought in as term appointments to NIST.

Mr. MOLLOHAN. So those are postdocs that would be working in with NIST as an agency?

Mr. GALLAGHER. That is correct.

In the research grants program, we were trying to have programs that would both bring people to work at NIST and provide grants to universities so they could fund students and postdocs at their institutions. So we tried to have both aspects of the program.

We also had a series of research contracts to support particularly our efforts in cyber security, health IT, and Smart Grid and about half of those have been obligated and are underway. The other half are in progress.

Mr. MOLLOHAN. Just because the efficacy of the stimulus program has been so questioned, can you translate your expenditure into jobs? Have you done that computation? You may not have. And if you have not, that is fine. If you have, we would like to have the benefit of your knowledge on that.

Mr. GALLAGHER. Well, you know, the Recovery Act, the part of the Recovery Act that NIST saw was very much in the investment side. So as you see, a lot of our spending is according to our anticipated profile, but it really peaks this year, not in the prior year.

We are required, as are all Recovery Act recipients, to report job creation through the recovery.gov web site.

Mr. MOLLOHAN. Can you do that here today or would you like to submit that for the record?

Mr. GALLAGHER. Well, yes. The numbers that come up, though, I can share those numbers. What we have so far is 115 jobs created, funded by the Recovery Act recipient-based reports.

But I want to point out that, one, there is this generic under-counting problem that everybody talks about which is just the limitation of doing the recipient-based reporting which is that, for example, when you buy equipment, we do not look at the jobs that are created in the supply chain of that manufacturer and so forth.

And specifically at NIST, there is an under-reporting because these are postdocs that are hiring under term appointments, and they are excluded from the count. So there is already another 53 positions where we have hired people, provided jobs, but they are not part of the job tally.

Mr. MOLLOHAN. Uh-huh. What about the construction jobs?

Mr. GALLAGHER. Well, in the—

Mr. MOLLOHAN. They are prospective as you are looking at them? That would happen when the construction starts?

Mr. GALLAGHER. Both the construction grant recipients and the internal construction have recipient reporting requirements for them to report. But most of the jobs will come with the construction phase, so we are not reporting many of those yet.

Mr. MOLLOHAN. So that is 360 million out of your expenditure?

Mr. GALLAGHER. That is correct.

Mr. MOLLOHAN. So they will hit, I assume, when that starts and that is in the summer?

Mr. GALLAGHER. Yes. They are fairly labor intensive as all construction projects. So as soon as we let those construction projects, we typically are breaking ground pretty quickly. So I anticipate the recipient reporting to follow that pretty quickly.

Mr. MOLLOHAN. Thank you, Dr. Gallagher.

Mr. Wolf.

MANUFACTURING FOCUS AT NIST

Mr. WOLF. Thank you.

Mr. Chairman, I have a number of questions and maybe we will get to them in the second round.

The manufacturing base of our country is eroding pretty rapidly. If you get on a train in Washington and take it up to New York, close your book and do not buy a newspaper and just look off to the right and the left, you will see factories are in decay. The windows are broken. There is graffiti on the walls. The weeds are growing out of the buildings.

And you are coming right up to the industrial heartland of the nation. You actually go through my old neighborhood and we had the largest General Electric switch gear plant, I think, in the world and it is gone. There is nothing there. When the wind blows, the weeds just tumble and kind of go through the buildings now.

There is the sign over the Delaware River from Trenton, New Jersey to Pennsylvania that says "Trenton Makes and the World Takes". Trenton does not make anything anymore that I know of. I think American Standard has since pulled out of Trenton.

And much of the funding are you doing that really deals with manufacturing and bringing about a renaissance in this nation with regard to creating jobs—not just a job because you are con-

structing a building out at NIST that lasts for one year—but a job that lasts for a long period of time?

So I guess the question is, do you agree that manufacturing is in the tank and we are really in a very difficult situation? Secondly, what of the funding that you have has been used to really create jobs in the private sector?

Mr. GALLAGHER. Well, thank you very much for that question.

I share your passion and your observation on the state of manufacturing in the United States. I happen to believe that this country needs a very strong production and manufacturing capability to be viable. And there are a number of reasons why I think it is so essential for us to build that.

The NIST programs themselves focus on manufacturing in a couple of different ways. And, in fact, the types of programs that NIST has authorized within the agency make it somewhat unique among federal agencies.

In the NIST laboratory program, our request for fiscal year 2011 has an unprecedented focus on manufacturing. And the motivation here is to use a research and development agency like NIST to both address barriers that manufacturers are facing and to give them a competitive advantage when they are looking at foreign competition.

And so the examples of that would be, for example, in terms of giving them advantages would be looking at Smart Grid or Health IT where you are looking at a new set of technologies and if you are going to manufacture devices and products in that space, rapidly having consensus on what interfaces those components have to have and doing it very quickly advantages U.S. manufacturers.

So in the case of Smart Grid, as we quickly deploy these interoperability standards, we can have U.S. manufacturers developing Smart Grid appliances and components and Smart meters. And because we are the first mover, we give our manufacturers a competitive advantage.

The other area is that we want to take advantage of the fact that U.S. manufacturers are in proximity to one of the strongest R&D activities in the world. And so giving them access, accelerated access to how to incorporate technology into their manufacturing process to improve productivity or efficiency or to create new products and services is something that those programs are focused at.

And then if you look at the MEP Program, we are working with small and mid-size manufacturers very directly on sort of a needs basis to give them the business services and growth services they need to support on a case-by-case basis what they do.

All that being said, I think that these are necessary things to have to happen, that we have to put U.S. manufacturers in the strongest position possible to compete. I think there are more pieces to the puzzle than the technology pieces that NIST is looking at.

And I know within the Commerce Department, we are very focused on looking at this issue to see rather holistically all of the issues in terms of both trade and export controls and looking at the technology issues that NIST does and rapid access to intellectual property and so forth so that we can try to do everything we can to support American manufacturing.

SMART GRID

Mr. WOLF. But can you attribute any of the current funding, and I know it is too soon, that will lead to actually creating manufacturing jobs?

Mr. GALLAGHER. Well, in the case of Smart Grid, I am aware of an economic analysis that was sponsored last year, it was published in the Wall Street Journal, that projected over 200,000 new jobs in Smart Grid-related fields by the end of 2011, which I found to be a very impressive, somewhat astonishing number.

But when they broke it out and you saw that it was both in appliances and new appliance capabilities, it was in Smart Grids, it was in installers that would have to be installing these, it was in terms of network support to make these things happen, and then on the bulk power side looking at the upgrades to our switch gear and power distribution systems, and then including the renewable energy, so it is one of these infrastructures that enables a very broad spectrum of new technologies. And the job creation potential is quite large.

JOB EXPANSION IN CHINA INSTEAD OF U.S.

Mr. WOLF. And I guess you are right. I just was reading the old book out by John Meacham, *Franklin and Winston*, whereby they from almost zero got up and running and built a fleet of ships and airplanes and manufactured and did things in order to win World War II, almost coming from nothing.

And it seems that today there is something missing. Why do you think jobs are expanding in China, and not in the United States?

And I was very disturbed. There was an ABC report last week that in the area of wind, there were a large number of turbines and equipment that were being made in China that were being funded through a Texas company. There were 55 jobs in Texas and thousands in China. But why do you think they are able to compete or do so well in China or India and not here?

Mr. GALLAGHER. Well, I think, you know, we have all heard sort of what I call the simple argument, that it was labor cost driven and it is cheaper to manufacture things where the labor is cheaper.

What I find interesting is that if you look at some of the manufacturers that are moving overseas now, they are not in areas that are strictly advantaged by labor costs. So advanced photovoltaics are being manufactured in China even though that was an American invention of photovoltaic technology. And the U.S. has lost market share rapidly in photovoltaic manufacturing.

Photovoltaics are an energy intensive and capital intensive manufacturing. And so companies are making these siting decisions not strictly on labor, but on a set of other issues.

Mr. WOLF. What are those other issues?

Mr. GALLAGHER. I am not sure we know them all, but the ones that I am worried about are, you know, there is going to be a total sort of cost environment that they are in. Maybe these sites are more aggressive at making regulatory and cost decisions that simply put product manufacturers that have very rapid product cycles in an environment where it is just more predictable from a business sense. We sometimes hear that from business leaders.

The other one that I am quite interested in is that many of the Asian markets have been much more systematic at building integrated supply chains so that when you start moving into a semiconductor type technology like photovoltaics, they have the assemblers, they have the device manufacturers, and they have simply paid more attention to the supply chain.

And I think that is what is driving a lot of the current discussion here in terms of regional and innovation type clusters so that we try to have the symbiotic relationship that occurs between manufacturers and their supply chain.

JOB REPATRIATION PROGRAM

Mr. WOLF. But are we looking at that, and not to just be critical of this Administration, but the previous Administration allowed jobs to go offshore? And I just wonder if there is not more that we can do from a practical point of view.

I would love to see any Administration put together what I will call a repatriation program whereby we repatriate jobs, not New Jersey competing with Pennsylvania or Pennsylvania competing with West Virginia, but to compete for jobs with China and India and Bangladesh and Mexico.

And I do not know that you are the right person, that you are the right agency, but somehow it seems that there ought to be a model put together, and the Department of Commerce has been asleep at the switch, both in this Administration and—let me just stress again in the interest of bipartisanship—in the previous Administration, but to almost put together a model.

How do you repatriate jobs back? I would sense that if you are an American company, you would certainly rather have your location, your plant manufacturing in a rural area in the United States, perhaps to look to see how you can bring some companies back from China that are American companies, giving them a significant tax break, perhaps relocate in an area, for instance, in south side Virginia, in Martinsville, where there is an unemployment rate at 20 percent.

So clearly you would not have to pay the people as high of a wage as you pay them if they were going to be relocated to Gaithersburg, where you have high property taxes in Montgomery County, for example. You would not have the commute, the transportation.

But would it not make sense to put together kind of a model? I think the research and the development is very important. And when I was on this Committee before, we always funded NIST at a very high rate. So I am not questioning what NIST does.

I know NIST standards, building standards perhaps have been involved in Haiti with regard to the earthquake and if you read today's paper of the number of earthquake zones. So I think everything you do is good, but to really put together kind of a comprehensive way and, therefore, make an effort.

Now, my sense is I do not see this Administration doing it. I did not see the previous Administration doing it. And there are probably more lawyers on K Street working for the Chinese than there are working for other people.

Would that not make sense to kind of do, to look at a model and see—

Mr. GALLAGHER. I—

Mr. WOLF [continuing]. Some of those companies, to bring them back home?

Mr. GALLAGHER. I would love to work with you on this. I think that the only way we are going to tackle the manufacturing problem is to look at it very holistically and look at the systematics and make sure that it is not going to be one technology or just a tax issue or just—it is going to have to be a whole package because we are seeing companies making these decisions for reasons other than the simple ones that we thought we understood.

Mr. WOLF. Well, maybe, at an appropriate time, working with the Chairman, we could put together a model, particularly with regard to this Committee having Commerce and NIST and NSF, together and do it on a kind of a “forced march” whereby you could promote this to come back in 180 days as to what is the model to repatriate.

If every American company were to return to the United States, what would that mean in terms of jobs? How many jobs would there be and what would we have to do? So if you could come on by and we could sit down and pick your brains and see—

Mr. GALLAGHER. I would love to.

Mr. WOLF [continuing]. If we could offer something.

Mr. GALLAGHER. I would love to.

CYBER SECURITY

Mr. WOLF. On the cyber security issue, what country is the most aggressive with regard to cyber attacks?

Mr. GALLAGHER. Well, I do not have access to the detailed data, but it is—

Mr. MOLLOHAN. Access to the details.

Mr. GALLAGHER. I was going to say what I read would put China and former Soviet Union, those countries sort of near the top of the list, but that is from my reading of the papers.

Mr. WOLF. Well, I would think you would know, though. Do you work with the FBI and talk to their people? I mean, but is it not China from what you know as well as what you read—

Mr. GALLAGHER. That is correct.

Mr. WOLF [continuing]. In the paper? Okay. I just wanted to get that out. Can you describe for the Committee the economic impact that results from cyber crime and the potential for economic loss and the disruption that could come from future attacks? How vulnerable are we and are we becoming more or less vulnerable? I think I know the answers, but I want to hear from an expert.

Mr. GALLAGHER. Well, you know, the risk we face in cyber security is based on the utility of cyber. So as we become more dependent on it for e-commerce, which has had great benefits, as we become more dependent on it for delivering public goods and services, as we become more sensitive to failures of the same infrastructure, so the increased risk we face is also a byproduct of the increased benefits we incur from information technology.

The magnitude of the risk is enormous. The estimates I have seen are billions of dollars lost in cyber crime.

Mr. WOLF. Three billion or seven—
 Mr. GALLAGHER. Billions. I do not—
 Mr. WOLF. But I am asking three billion or seventy-five billion?
 Mr. GALLAGHER. I do not know.
 Mr. WOLF. Could you see what you could—
 Mr. GALLAGHER. Yes, we could look into it.
 [The information follows:]

CYBERSECURITY

There have been many estimates of the economic impact of cyber attacks to U.S. businesses and citizens. However, estimates are largely based on anecdotal evidence, so there is no consensus in estimates of impact. A 2007 GAO report, GAO-07-705, "Cybercrime: Public and Private Entities Face Challenges in Addressing Cyber Threats," confirmed the lack of consensus and explained the difficulties in precisely determining impact. The GAO report did cite a 2005 FBI survey that estimated U.S. organizations' loss from computer crime at over \$67 billion. Other, more recent surveys have estimated the U.S. impact in the hundreds of billions of dollars a year.

Mr. WOLF. Go ahead and finish there.

Mr. GALLAGHER. Well, what I was going to say is I think that what makes this a real challenge is that this is a new and rapidly evolving technology and you cannot think about the solutions as static patch the holes.

These systems are evolving and they are sitting in a threat environment that is extremely dynamic. And so I think the solution to this is not can we just worry about the border security, if you will, in computer systems, but how do you have real robust defense in depth?

The problem we really face right now is that the bad guys can have lots of failures and just have one success and they are done and they win. We can have lots of successes and one failure and we lose. And so it is very asymmetric.

I think what you really want to do is have a lot of defense in depth. You also want to make security usable. If we turn computer systems into Fort Knox, we lose all of the benefit that these technologies have for us. We want to try to automate as much as possible how these systems respond to environments so that the security is sort of built in.

One of the things at NIST that we are really focused on is how do you measure the security performance of a system. And the reality is today what we do is we propose controls and you really assess by an audit how many controls you have in place. It is a very primitive form of measurement.

The question is, can we actually look at IT system behavior and actually do what we are supposed to do at NIST which is to get some very meaningful measurement tools so that system operators can say this is how well my system is performing? And if the threat environment changes, this is what I have to do to adjust.

Mr. WOLF. Well, thank you very much.

Thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Wolf.

Mr. Bonner.

JOB CREATION AT NIST

Mr. BONNER. Thank you, Mr. Chairman.

Dr. Gallagher, listening to you, to your opening testimony and listening to you respond to the Chairman and Ranking Member, I told you when you introduced yourself that I do not think you are going to get grilled today and there was a lot of hard questions, but just listening to your response to Chairman Mollohan that the 115 new jobs that have been created, are those in your estimation all federal government jobs or are any of those in the private sector?

Mr. GALLAGHER. No. At NIST, the 115 jobs that we count are all private sector jobs that are being created. At NIST, the only jobs that are the federal sector in our tally are these two-year term appointments for the postdocs. That is really the only—

Mr. BONNER. That would be the 53 positions?

Mr. GALLAGHER. That is correct.

MANUFACTURING BASE AND NIST'S ROLE IN RE-ENERGIZING

Mr. BONNER. And then you also mentioned in answering Mr. Wolf's questions about the importance of re-energizing the manufacturing base in this country.

Could you tell us a little bit more specifically about what NIST's role could be in that?

And the reason, I am not trying to lay a trap for you, I have got a county that has got 20 percent unemployment. I would venture a guess with no disrespect to the people in that county that if I went home this weekend and said NIST has received \$500 million last year in the stimulus and got the President asking for a 7.3 percent increase, most of the Social Security recipients this year will not get any increase in their gold and most state legislators are struggling just to keep level funding or will see significant cuts.

So my question is really based on how can I convey to one of my constituents or any of our constituents that are here that an investment in NIST is an investment in a better life for them individually or for the life of our country?

Mr. GALLAGHER. Well, I think the short answer to that is that, and it goes to the heart of the whole innovation discussion, that if we are making these justifications for these public investments in R&D, we have to translate this into economic activity for the country. So the proof is really do we generate meaningful jobs and economic activity.

In terms of what NIST can do to support that, as I said, there are a couple of aspects to that. One thing we know is that our research intensive manufacturers do much better than low intensity R&D. So if you look at just how well certain manufacturing sectors have done, those that are R&D intensive have really done fairly well in the United States. It is the ones that are not.

And so it is a plan forward in terms of how we identify sectors. And that is why this R&D investment is very important.

The other aspect in terms of an approach and maybe one with Ranking Member Wolf we can talk about is the federal government does not alone work with manufacturers. The states and local governments play an enormous role and we see that in every siting decision that is made.

One of the approaches I would like to explore is whether we can use the federal involvement as a mechanism for tying together what is happening in different regions and states across the coun-

try. If we can quickly disseminate best practices and identify those areas that really do it well and can shed those things that are not effective, we might be able to help everybody by sort of leveraging these precious resources and making sure they are maximally beneficial.

And that is a little bit what the MEP Program tried to do 20 years ago which was to take the various extension partnership programs, identify those practices that worked really well, and use the federal part to basically act as a network.

MANUFACTURERS AND STATES' ROLES

Mr. BONNER. Do you have a breakdown or could you get us a breakdown of what the individual 50 states do in terms of their own contribution because I think that is an interesting point here today? You have got New York, Maryland, Pennsylvania, West Virginia, Virginia, and Alabama, and my colleague from Alabama might know what we invest. It is probably not near as much as it should be, but I would like to know what other states are doing as well so that when our state legislators and governors come up to us asking for help at the federal level, we can turn around and ask for help from investment from the state?

Mr. GALLAGHER. Okay. I would be happy to share what we do know. What I am afraid of is that we will be impartial as well. And I think that really does point to a problem that we should be looking at this broad spectrum of programs, what happens in universities, what is happening in the technical colleges and community colleges, what is happening in technology parks, what is happening with the manufacturing extension centers, and what mixes appear to be proper. What sort of conditions have to be in place so that you do start to bring jobs back in and create an attractive environment for manufacturers.

[The information follows:]

MEP State Contributions

The information below provides a breakdown of state investment in MEP centers for the period of July 1, 2009 to June 30, 2010

State Funding in MEP Centers (July 1, 2009 - June 30, 2010)

Center	State	State Funding
Alabama	AL	2,500,000
Alaska	AK	806,401
Arizona	AZ	346,250
Arkansas	AR	857,957
Catalyst Connection	PA	1,214,000
Chicago	IL	0
CMTC	CA	0
Colorado	CO	385,000
CONNSTEP	CT	950,000
Delaware MEP	DE	302,400
DVIRC	PA	2,353,386
Florida	FL	0
Georgia	GA	3,374,160
Hawaii	HI	592,445
Idaho TechHelp	ID	162,588
Illinois MEC	IL	1,000,000
Indiana	IN	250,000
IMC	PA	1,073,696
Iowa	IA	2,870,977
Kansas	KS	1,543,350
Kentucky	KY	0
Louisiana	LA	506,839
Maine	ME	528,950
MANEX	CA	0
MANTEC	PA	1,570,842
Maryland	MD	801,942
Massachusetts	MA	912,500
Michigan	MI	3,500,000
Minnesota	MN	916,523
Mississippi	MS	1,683,737
Missouri	MO	2,221,500
Montana	MT	552,057

MRC	PA	1,196,700
Nebraska	NE	424,960
NEPIRC	PA	1,148,842
Nevada	NV	523,400
New Hampshire	NH	0
New Jersey	NJ	0
New Mexico	NM	0
New York	NY	3,527,000
North Carolina	NC	1,968,147
North Dakota	ND	475,000
NW Wisconsin	WI	429,843
NWIRC	PA	1,372,904
Ohio	OH	4,545,417
Oklahoma	OK	1,762,028
Oregon	OR	175,000
Puerto Rico	PR	520,000
Rhode Island	RI	50,000
South Carolina	SC	1,726,006
South Dakota	SD	250,000
Tennessee	TN	1,252,228
Texas	TX	4,579,189
Utah	UT	900,000
Vermont	VT	381,580
Virginia	VA	805,177
Washington	WA	200,000
West Virginia	WV	161,650
Wisconsin	WI	1,000,000
Wyoming	WY	676,503

Note: Data represent planned state investments in MEP centers as outlined in the Centers' July 1, 2009 - June 30, 2010 operating plans. All PA Centers along with the center in MO are submitting revised budgets due to state funding cuts.

OVERSEAS COUNTERPARTS OF NIST

Mr. BONNER. And then the last question that I have got is, I always like to look at the map of the world behind the Chairman because if you think about the investment of \$918 million in our country this year, assuming this goes through, what would China—what is the Chinese counterpart to NIST? What is the European counterpart to NIST or the Japanese? And what are their countries investing in this?

Mr. GALLAGHER. I do not have those numbers off the top of my head. We tend to have to aggregate those because there tends to be no exact counterpart to each agency in the other countries.

But we do know that in some of the technology areas, it is not uncommon in other countries for the federal government, if you will, in those countries to play a very direct role in industrial policy and conditions. And so you are going to see very large and significant investments in China and Europe in setting the conditions for their manufacturers.

And I do not think our diversity is a disadvantage. I just think we have to harness it better. So, you know, the trick is let us not disadvantage ourselves by the fact that we do not have a central planning, but we can certainly pull what we know about those numbers and be happy to share that with you.

NATIONAL MEASUREMENT INSTITUTE (NMI) INTERNATIONAL COUNTERPARTS

Arguably, NIST is the predominant National Metrology Institute (NMI) in the world. Most U.S. trading partners have a National Metrology Institute (NMI) of their own, which provide services to their economies analogous to those that NIST provides to the U.S. economy. These foreign NMIs range in size/scope from the Physikalisch-Technische Bundesanstalt (PTB, Germany), which is the second largest NMI in the world, to very small NMIs, with a handful of employees, who just provide limited traceability to the international unit of measurements (the SI) via a few calibration services. Among the principal counterparts of NIST are: NRC-CNRC (Canada), NIM (China), CENAM (Mexico), NMIJ (Japan), PTB (Germany), NPL (UK), KRISS (South Korea), LNE (France), VSL (The Netherlands), CMS/ITRI (Taiwan) and INMETRO (Brazil).

Mr. BONNER. Thank you, Dr. Gallagher.

Thank you, Chairman.

Mr. MOLLOHAN. Thank you, Mr. Bonner.

Mr. Aderholt.

MANUFACTURING OF TEXTILES

Mr. ADERHOLT. Thank you, Dr. Gallagher, for being here today.

One thing that NIST has been helpful in the past as with, of course, a lot regarding the manufacturing we have already talked here today, one of the areas that has been hit hard by not only the recession but also through overseas competition has been the textile aspect of manufacturing.

And just if you could tell us a little bit about what NIST is doing to ensure that the textile industry that remains in America does stay strong and tries to make sure that what we have now does not leave. So if you could share some of those thoughts with us.

Mr. GALLAGHER. Yes. I hate to tell you that the NIST intramural efforts in textile manufacturing were largely terminated years ago. So there is actually very little that NIST is doing to support textile manufacturing right now, unless it is of a general manufacturing

technology like sensors and various materials, calibration processes that textile manufacturers would have to have access to.

So we support their basic measurement needs, but we do not have a focused sector-based program anymore in textile. We used to, but not anymore in textile manufacturing.

One interesting note, one area where that seems poised to change is in nano manufacturing. It appears that some of the high through-put manufacturing technologies that are being looked at have a lot of similarities with textile manufacturing. And it may very well be that we will be looking at nano materials in textiles as an approach in a very advanced manufacturing sector.

Mr. ADERHOLT. What about as far as the National Textile Center? What relation do you have with that?

Mr. GALLAGHER. I do not know. I am not aware of a specific relationship with that program.

Mr. ADERHOLT. If you could check on that and—

Mr. GALLAGHER. I would be happy to.

[The information follows:]

NATIONAL TEXTILE CENTER

At this time, NIST does not have a direct relationship with the National Textile Center (NTC). However, NIST does have scientific collaborations with researchers at Cornell who are affiliated with NTC as well as others at the University of Delaware and Purdue, who are studying body armor and conducting research on high-strength fibers.

Mr. ADERHOLT [continuing]. Get back with us. That is all I have.

Mr. MOLLOHAN. Thank you, Mr. Aderholt.

Mr. Ruppertsberger.

CYBER SECURITY INCREASE

Mr. RUPPERSBERGER. Yeah. Dr. Gallagher, thank you for being here.

I know we had some conversations about cyber security in your role. This is an appropriations hearing, so the first thing I want to ask you about is the issue of cyber security in the role that you play. And I know you work very closely with NSA, but we also have challenges with the Homeland Security also.

And I think in your budget that you have asked for a \$10 million increase considering the cyber security threat. Because of the role I have on Intelligence, you know, we see that it is a very serious issue. It is one of the most serious issues involving our national security and not only national security but in the commercial area and the threats that are happening.

Where do you see this ten million going and do you feel that that is significant based on what your role is going to be coordinating with NSA and also the Department of Homeland Security?

Mr. GALLAGHER. Great. Thank you very much.

Yes. The \$10 million increase has two very distinct components for NIST. One of them is to strengthen certain research activities needed to develop stronger cyber security standards for federal systems and that does include advanced automation of configuration management of computer systems. It includes multi-factor authentications so we know that the authorized user is the person doing the work. And there is a set of very specific test beds that are need-

ed to look at how to test security performance in financial systems, for example. There are a number of very specific research programs.

The one new component to this program is that approximately \$4 million of this we envision as a grants program to U.S. universities to develop core competency in cryptography. And that is very important because cryptography, of course, is the mathematical science that tells us how to encrypt and protect information.

A lot of cryptography work in the United States is not supported by the open science agencies. And, therefore, when we have an international competition in developing new encryption standards, we find that the participation is predominantly foreign.

Mr. RUPPERSBERGER. And what open agencies do not really participate?

Mr. GALLAGHER. Well, it is just that branch of mathematics is just not covered to any large extent by National Science Foundation or DOE or NSF. So because NIST has a core competency and we have strong ties with the academic community, we feel we have a stewardship role to make sure that there is a strong core competency in open cryptography work in U.S. universities.

Mr. RUPPERSBERGER. You also have a role in working with small business; is that correct?

Mr. GALLAGHER. Yes, we do.

CYBER SECURITY AND NIST'S ROLE IN PRIVATE SECTOR

Mr. RUPPERSBERGER. And, unfortunately, from what we know, you could have a senior citizen in North Dakota who has a computer and communicates with her community bank. And that community bank then communicates with, say, Bank of America. And the bad guys could really get in through that one weak link and go through the community bank and probably be in a position if they knew what they were doing to maybe shut down some ATM systems for Bank of America.

This is a threat that I do not think the public even understands where we are.

And, again, in dealing, why cyber security is so difficult and, yet, it is so important because we are constantly getting attacked on a regular basis, what would you see your role? What would you recommend we do to involve so many—I mean, small businesses are about 80 percent of what we really do in this country, working with small business. What would your role be and what would you recommend?

Mr. GALLAGHER. Well, I think it is an outstanding question because, you know, we tend to focus on the federal systems because it is the information we are charged to protect and, yet, 80 percent of the infrastructure is in the private sector. And vulnerability in the private sector can affect all of us.

I know that I can barely configure my computer. They are highly flexible. And I know my mom and dad certainly cannot. So one of the questions is that how do you provide support to individuals and the small businesses to provide these sort of security enhancements?

One of them is that we have to extend the standards framework. In other words, the description of how to provide meaningful cyber

security in depth that we have done for the federal sector and promulgate that effectively to the private sector internationally, how we configure machines and how they are set up and how they operate.

But the other one was a particular focus of this initiative which is to increase the automation of these systems. What we want to be able to do is have software and operating systems that can be dynamically configured so that we can adjust the way they are set up to minimize risk and, frankly, not have a single point of failure in the system where once you are inside, you are inside and you can do anything, that there is really a defense.

Mr. RUPPERSBERGER. Well, you know that is really a massive undertaking because the weakest link of any individual and whether the bad guys are other countries, whether they are al-Qaeda, whether they are hackers just who want to do a lot of mischief, whatever, and you cannot start over, though, the internet. I mean, we have it and we are going to be moving forward.

CYBER SECURITY AND OTHER AGENCIES

Let me ask you this. You might not want to answer this question because it might be too advanced at this point or it might be better to talk about this from a—they are classified or whatever. But we know that NSA does an outstanding job. Some of what they do, they are the best in the world in what they do. And thank goodness for the United States' national security they do that, whether it is helping in cyber security, whether it is helping with war fighter, whether it is identifying, you know, terrorists throughout the world.

But they have developed a lot of software in dealing with the issue of cyber security. And, you know, their responsibility is in the military and intelligence area where Homeland Security has the rest of the internet basically and including the .gov.

And it seems to me that we really need to focus on one system because so much research and development has been done. And I would hope that we would be in a position to recommend to Homeland Security that they need to learn and to work with, you know, NSA as far as developing their system to protect our homeland, basically, from the cyber security issue. They are way far behind NSA, there have not been investments. And I think it is important that maybe, and this is very well respected, and you will have input in this issue about making sure that we have some type of compatibility where NSA is, and we can grow from NSA. Unfortunately in this country in law enforcement and a lot of places we have turf battles and we cannot afford turf battles here. Do you have any opinion or any comments you might like to make on what I just said?

Mr. GALLAGHER. Yes, I think there are a couple of quick comments. One is, you know, in the cyber security space there are going to be multiple agencies participating. And it is important that they are all playing effectively, and we are not needlessly duplicating effort. And as I shared with you before we are working very hard on doing that.

There is one area in particular where NIST and NSA have a particularly close relationship because they actually were charged with

the same thing. NIST is responsible for developing the security standards to protect federal information technology systems with the exception of Title 50 agencies, or the intelligence community. And NSA was given that responsibility over the intelligence community. So NIST and NSA together are responsible for developing basically the standards and protocols that are needed to protect IT systems. What we have done very effectively is work closely so that those two approaches are completely harmonized. And so there really is no daylight between the way we are approaching this. And at the technical level there is a very strong collaborative relationship between the two.

NIST will be able to interact in a way with industry and with private sector in a way that NSA probably will not, and so it is very important to have both of those capabilities there.

HOMELAND SECURITY AND NSA

Mr. RUPPERSBERGER. But my question goes further about Homeland Security, because that concerns me where they are at this point. And that they work closely with NSA, work closely with NIST to make sure that we have a standard approach and that we do not not use the research and development monies, millions of dollars that have been used to develop our cybersecurity system.

Mr. GALLAGHER. Yes. We believe that it is imperative to have an effective DHS to partner with because they carry out roles that nobody else can. And there is very intense discussion internally about hammering out a very specific understanding between NIST, NSA, and DHS so we have a very clear roadmap of how to work effectively together.

Mr. RUPPERSBERGER. You know, an example of where this has not occurred, and because this Committee does the funding for FBI, is their communications system. To this day it is still not working, when in fact you have communications systems like CINSAs that have a communications system that works well. And why we had to go out and develop other contractors and systems when it is right there in front of us? We need to learn from those mistakes when it comes to the issue of cybersecurity. Cybersecurity is going to cost this country and other countries throughout the world billions of dollars. And there is a lot out there that we have to deal with.

So I think you all are doing a good job. I think you keep working with NSA, and I think we can do a lot more in the collaboration and working with Homeland Security.

Mr. GALLAGHER. Thank you, and I look forward to working with you on this.

Mr. RUPPERSBERGER. Sure.

Mr. MOLLOHAN. Thank you, Mr. Ruppertsberger. Mr. Serrano.

9/11 REPORT UPDATES

Mr. SERRANO. Thank you, Mr. Chairman. Is there anything that you can update us on in terms of your report, the agency's report after 9/11? I know that there were recommendations made, and findings about the structural setup in those buildings. Now we are rebuilding. And so how much of what you said has been included in any new plans? And lastly, that tragedy, and sight of that plane

coming into that building, those planes, almost makes you feel that there was nothing that could have been done to prevent that tragedy. Am I correct in saying that? Not prevent the tragedy, you know, the attack, but what happened afterwards? Or was this now in the study suggesting that in fact the damage could have been less?

Mr. GALLAGHER. I want to thank you for the question. Our job was to take this enormous national tragedy and try to learn from it. Specifically, to try to prevent a similar reoccurrence from ever occurring. And so the technical study that was underdone, which was the most advanced study of a building failure ever attempted, ever done, has actually led to some very important conclusions about how we can strengthen our codes and our approach to building structures to improve them in a number of ways. One is to make them resilient to the type of fire that actually caused the failure and the collapse. And so the adhesion of the fire protectant to the steel was something that was a weakness in that building and led to the ultimate structural failure of the buildings. And so some of the new codes that have now been adopted address improved fireproofing technologies and bonding to the steel. The other lessons we have learned—

Mr. SERRANO. Adopting locally or nationally, now?

Mr. GALLAGHER. These are international.

Mr. SERRANO. International?

Mr. GALLAGHER. International. So the International Building Code has adopted twenty-three specific recommendations already from that study. And these now become the basis, these are model regulations that all local and state communities adopt as the basis for construction. So it includes improvements in sort of fire performance, that we talked about. It also includes performance in the ability to evacuate. We learned a lot about how important it was to be able to rapidly evacuate large skyscrapers. That includes new standards for the width of firewalls. It includes something that we were all taught as kids. You never get into an elevator when there is a fire. But in fact, one of the lessons we learned is that we can build fireproof elevators. And in fact, now they will be part of new construction and you will be told to evacuate using the elevator because it decreases the time to evacuate. And also improvements on how the buildings perform for the first responders. So making sure that the infrastructure in that building is resistant, and functions, and is in places that are hardened so that first responders can assume command and control over a damaged building and get people out safely.

I hope we never see a tragedy like that again. But we will have learned some lessons that will make new buildings constructed under these codes much more resilient against tragedies.

9/11 AND BUILDING DESIGN FAILURE

Mr. SERRANO. Thank you. Now, my understanding, if I recall that day, the buildings sort of crumbled. And it was the tragedy that it was. My understanding also was that even though that was so tragic, had they fallen this way the surrounding area and many more people involved than what indeed happened. First of all, is that true? And second of all, were those buildings built for unfortu-

nately a situation like that to kind of collapse rather than tilt over? Or is that uncontrollable?

Mr. GALLAGHER. Yes, I do not want to hesitate to guess whether that was a design failure mode for that building. I do not think that the designers were designing in the progressive failure mode. What happened was a progressive failure when the structural steel weakened to a point.

Mr. SERRANO. Right.

Mr. GALLAGHER. And the weight simply caused a progressive failure that in this case led to a very vertical pancaking motion.

Mr. SERRANO. Right.

Mr. GALLAGHER. My impression has always been that if it had occurred differently it would have been more catastrophic because it would have affected nearby buildings more.

Mr. SERRANO. Right. My understanding was that at any given time in those days in that area there was, like, 50,000 people, I heard was the figure. Which seems large, but not if you know New York. It seems there are that many people in a subway car at times, you know. So, it was from your study, from this study, that these international regulations were adapted?

Mr. GALLAGHER. Correct. Yes, by both the International Building Codes and also by the National Fire Protection Agency. So the code organizations are adopting key findings that were a result of this study.

Mr. SERRANO. Did any countries, anybody resist that? Or is that just accepted?

Mr. GALLAGHER. I am not aware of any—

Mr. SERRANO. Yes.

Mr. GALLAGHER [continuing]. Resistance.

9/11 AND NIST'S ROLE IN REBUILDING

Mr. SERRANO. Now, what further role does your agency play in supervising, overseeing, consulting once we start to rebuild, or once the rebuilding has started in Lower Manhattan?

Mr. GALLAGHER. Well I think in fact we have worked very closely with the Port Authority, and with other organizations in New York. The predominant mode that NIST comes into is as a technical agency offering assistance. So when we are looking at improving codes, eventually localities have to take these model codes and adopt them to their own circumstances. And if we can provide assistance we do so. I know there has been ongoing discussion with those authorities in New York. We do similar work in other areas. I want to point out as well, the fiscal year 2011 request, it does include this initiative in resilient buildings and structures. It is a generic version of this, which is that we want to make sure that we collect failure information about buildings, no matter what caused the failure. If it was an attack, if it was fire, if it was an earthquake, if it was wind. Because it is in studying those failures, in some ways the world is your laboratory. We want to understand what went wrong so we can learn from that and figure out how to make sure it does not happen again. And so part of that FY 2011 initiative is to create a national failures database system where we will start to collect systematically this information from across the country. So we can look at that, decide which ones we need to go

investigate further because we think there are important lessons to learn.

COMMAND CENTERS IN BUILDINGS

Mr. SERRANO. All right, one further part. You said something about a command center, setting up a command center. What did you mean? What is it that you are after? To accomplish what?

Mr. GALLAGHER. As I understand it, fire in large structures, the World Trade Center would be an example, that part of the building design is to create command centers, or basically hardened centers where first responders can assess the condition to a building. It basically is access to the fire alarm, fire suppression systems. Can communicate with different floors, can access emergency operation of elevators, things of that type. And you want to make sure that those capabilities are not lost easily when the building is harmed. So this had to do with looking at redundancy, improving redundancy of these systems against what happens if the power fails, or what happens if a particular part of the building is affected. Do we lose all of these capabilities or not? Can we still talk to other parts of the building? Can we still control key systems in the building?

9/11 RECOMMENDATIONS AND IMPLEMENTATION IN NEW YORK

Mr. SERRANO. Okay. And my last point is, and so now what you recommended and what has been accepted is true for any new construction, for instance, in New York City? Not just the replacement of what is happening in Lower Manhattan. Any new building going up in New York, and there are a lot going up all of a sudden, have to meet these new standards?

Mr. GALLAGHER. Well what happens is these ideas have been adopted by the international code organizations. Those are in essence, they have no regulatory authority. Those are what are called model codes.

Mr. SERRANO. Right.

Mr. GALLAGHER. What happens is, the City of New York and various others would basically, through their permitting process, adopt certain codes as being the ones in force for that area. So as these codes are basically adopted locally they tend to point to these model codes.

Mr. SERRANO. So it is a guide, it is a guide, and I imagine New York has been pretty good at following that guide?

Mr. GALLAGHER. They have been leaders in this.

Mr. SERRANO. Okay. Thank you so much. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Serrano. Mr. Fattah.

AMERICAN RECOVERY AND REINVESTMENT ACT

Mr. FATTAH. Thank you, Mr. Chairman. Let me dispose of the obvious, but it needs to be said. One is that our Chairman has really led the effort to secure a great deal of additional funding for NIST in the Stimulus and Recovery Act, that is some \$500-plus million in a whole range of activity areas. In disaster preparedness, as you were just discussing, and a number of other areas that you have made significant progress. So I want to publicly thank the Chair-

man for his leadership in that regard. And I want to say that it is obvious that in terms of your leadership, now you were formerly the Deputy Director?

Mr. GALLAGHER. That is correct.

Mr. FATTAH. And now you are in charge?

Mr. GALLAGHER. That is correct.

Mr. FATTAH. So, and that is obvious because you got educated in the greatest State in the Union, Pennsylvania, and got your doctorate at University of Pittsburgh. Thank you, Mr. Chairman.

Mr. GALLAGHER. It is worse than that. Both of my parents are from Pennsylvania.

Mr. SERRANO. That makes you a Phillies fan?

Mr. FATTAH. No.

Mr. GALLAGHER. My father is from Philadelphia and my mother is from Pittsburgh.

Mr. FATTAH. Yeah, he has got the whole state in balance, right? But so I want to thank you for your leadership of the agency, and congratulate you on your appointment. We have in the Philadelphia area some 1,300 manufacturers who against significant odds are doing well, working hard, and involving all manner of activity. Penn Fish and Tackle, Mr. Chairman, is making salt water fishing reels in the heart of my district. They make a world class fishing reel, sells for over \$1,000 a pop. And they have only one competitor in the world, and they are over in the Pacific Rim.

SCIENCE EDUCATION

But we have a lot of challenges in manufacturing, I know that. And at the heart of it is, I think, the dearth of educational attainment in the hard sciences by unfortunately Americans of every stripe are doing less and less and less. If you talk about, you know, our doctoral programs, you know, at Carnegie Mellon, I mean, anywhere you want to go in the hard sciences, I mean, you would be hard pressed to find, particularly to find American citizens who are pursuing terminal degrees in the disciplines that we, you know, whether nanotechnology, computer information science, so on, and so on.

So I am very interested in the world of the agency. And I know you are doing a lot of work in the STEM area. You have got some postdoctoral students involved. I would like to learn more about that.

PHARMACEUTICAL INDUSTRY AND NIST

On a different point, in the Philadelphia area we have a significant attachment to pharmaceutical related, because we have about 42 percent of the pharmaceutical manufacturers in the country headquartered right there in the Philadelphia area. So I know you are doing work on biologic drugs. And these are very promising drugs. And the work that you are doing is going to both increase the effectiveness but also the efficiency of moving these drugs to the market. And so I am also interested in my staff learning more about your request in that area, and to make sure that we can align our priorities in ways to be beneficial.

So I want to thank you for your presentation. And I look forward to finding ways in which we can partner to make sure that not-

withstanding the other forty-nine states, that Pennsylvania gets more than its fair share whatever resources in technology and assistance that you can provide. And since you have this home state connection I know you will not have a problem being biased in your application of the resources of the agency. Thank you.

Mr. WOLF. They are the number one manufacturer of cheese steaks and hoagies.

Mr. MOLLOHAN. Yes, they are also to be envied the way they finance technology development. Their Ben Franklin Program is outstanding, so really. Much like Virginia is to be commended for their investment.

Mr. FATTAH. Mr. Chairman, as a state legislator I created the Ben Franklin Technology Program.

Mr. MOLLOHAN. Did you?

Mr. FATTAH. Yes, thank you.

Mr. MOLLOHAN. Well, I would like to talk with you about how you did that.

Mr. SERRANO. I had nothing to do with any of this. Just for the record.

COMPETITIVE CONSTRUCTION GRANT PROGRAM

Mr. MOLLOHAN. Thank you. Dr. Gallagher, in the stimulus package there was \$180 million to address backlog of maintenance and renovation projects, and for the construction of new facilities and laboratories. And \$180 million for the Competitive Construction Grant Program for science research. Would you first explain the purposes behind the, how NIST has implemented the Competitive Construction Grant Program, and how it relates to how to value science and how you might advocate for it based on that?

Mr. GALLAGHER. Yes, I would be happy to. I think one of the striking things about the Competitive Grants Program is this is meeting an unmet need in the research community. The proposal pressure has been very high. The interest has been extraordinary and the caliber of proposals has been very, very high. I think that reflects both the fact that facilities play a key enabling role for research, and the fact that there has not been a dedicated federal program looking at this type of funding since the late nineties. I believe the NSF had a program that was terminated at that time.

We are very pleased with what we are seeing evaluating proposals. The way we established the program beginning in 2008 with the much smaller program that we had at first, was that this was to look at research facilities in areas of interest to the Commerce agencies. So it really gave wide latitude to the proposers to propose research facilities as long as they could address an alignment with the mission focus of one of the Commerce agencies. That is why you, when you look at the programs you will see NIST-type measurement programs, nanotechnology, materials. You also see oceanography, ocean sensors, and NOAA-type programs, and that reflects that change.

I believe you and I had a brief discussion about this a while ago, one of the things that I would like to explore, and we have initiated some internal discussions, is whether, if it is not a specifically authorized program at NIST, but if we could tie it more closely to the NIST mission, the NIST focus, then I think we could explore

whether this makes sense to make part of the request. I think there are a lot of different ways we could do that. The need, the unmet need is so high that looking at the construction related activities, for example, we talked about as a bridge to what is happening, let us say, in technology or research in a given region or university or cluster, I think there is a chance to bring this program into stronger synergy with what we are trying to accomplish, either in a technology promotion agenda, or developing certain research capabilities where we have a key interest. We have talked about cyber security in the case of manufacturing.

So I think it is not much of a limitation, but I think it can be brought in as part of a portfolio where not only does it build a building, but it builds a building that addresses and fits into a broader context. I would actually enjoy working with you to discuss that further.

Mr. MOLLOHAN. Well, let us do that. We want to make it as relevant as possible, and as competitive as possible as far as that is concerned. How many applications were received in the 2009 competition?

Mr. GALLAGHER. Which 2009?

Mr. MOLLOHAN. Fiscal year 2009.

Mr. GALLAGHER. So in—

Mr. MOLLOHAN. Is there more than one?

Mr. GALLAGHER. Well, what happened in 2009 is we had the—

Mr. MOLLOHAN. Oh, you had the ARRA.

Mr. GALLAGHER. ARRA, and then we had the \$180 million.

Mr. MOLLOHAN. Yes.

Mr. GALLAGHER. So if I recall we had something like 170 proposals that came in and—167—and we were able to fund four.

Mr. MOLLOHAN. And so this year you are really folding a lot of the 2009 money into the 2010 competition?

Mr. GALLAGHER. Well, what happened, that is, so what happened when the Recovery Act came is we had had all of these proposals received, and only funding—

Mr. MOLLOHAN. From 2008.

Mr. GALLAGHER. From 2008.

Mr. MOLLOHAN. So you put a lot of money—

Mr. GALLAGHER. So there was a decision made about what would be a responsible amount to make available to look at unfunded but highly meritorious proposals and then compete the balance.

Mr. MOLLOHAN. Good.

Mr. GALLAGHER. We have another competition with the 2010 that will be announced imminently. So—

Mr. MOLLOHAN. And then that will include some 2009 funding as I understand?

Mr. GALLAGHER. That is correct.

[The information follows:]

- NIST has received 384 applications for the competitive construction grant program since the inception of the program and has awarded 19 grants. The breakdown of applications and grants per competition are:

Competition	Number of Applications	Number of Grants
FY 2008 (FY 2008 funds)	93	3
FY 2009 (ARRA funds)	167	16*

Competition	Number of Applications	Number of Grants
FY 2010 (FY 2009 & FY 2010 funds)	124	None yet**

*4 grants @\$55.537 M) awarded July 2009 using unfunded meritorious FY 2009 applications and 12 grants (\$123.517 M) awarded January 2010 using new FY 2009 ARRA applications.

**Application deadline was April 26, 2010; applications currently under review and grants are expected to be awarded in September 2010.

- The American Recovery and Reinvestment Act of 2009 (ARRA) (Public Law 111–5) appropriated \$180 million to NIST “for a competitive construction grant program for research science buildings. Additional information on the program was provided on page 418 of the Conference Report to accompany House Report 111–16 (Feb. 12, 2009): “. . . \$180,000,000 shall be for the competitive construction grant program for research science buildings, including fiscal year 2008 and 2009 competitions. Consistent with the Conference Report language NIST announced an ARRA competition in FY 2009 with available funding of \$180 million with up to \$60 million available for unfunded FY 2008 meritorious applications and approximately \$120 million available for new applications under a new FY 2009 ARRA competition.

- The FY 2009 ARRA Construction Grant Program Competition was a top priority. Therefore, the decision was made to defer holding a separate competition for the Omnibus Appropriations Act, 2009 (Public Law 111–8) appropriated funds of \$30 million until FY 2010. When NIST received an additional \$20 million in appropriated funds under the Consolidated Appropriations Act, 2010 (Public Law 111–117), the decision was made to combine the funding and hold a single competition with available funding of \$50 million.

Mr. MOLLOHAN. Give us an example of an award winner in that contest.

Mr. GALLAGHER. Well, the University of Pittsburgh, actually, was one award winner where they are looking at developing——

Mr. MOLLOHAN. Wait a minute, Dr. Gallagher.

Mr. GALLAGHER. Yes?

Mr. MOLLOHAN. Pitt won one of these?

Mr. GALLAGHER. They did.

Mr. MOLLOHAN. Pitt, that is——

Mr. GALLAGHER. Pitt won one, yes they did.

Mr. MOLLOHAN. Oh my God.

Mr. GALLAGHER. That is why I stay out of the decisions. I have nothing to do with them until——

Mr. MOLLOHAN. Well, that is because it is a great university. What else about that one?

Mr. GALLAGHER. Well it is interesting, it is a proposal to develop state of the art nanoscience centers.

Mr. MOLLOHAN. By the way, Pitt beat West Virginia University in double overtime in basketball. This is about two weeks ago, I would say. We are not forgetting that, yet. So go ahead.

Mr. GALLAGHER. Yes, it has been fun to watch that because they were not that good when I was there. The University of Pittsburgh grant is a \$15 million grant. Interestingly, there was an article in Science middle of last month that highlighted some of the projects that have been funded through the NIST Construction Grant Program. As I said, since there was no other federal program like this that provided, construction funding like this, what you often had were situations where very thoughtful designs and approaches have been put together, cost sharing had been started to be assembled, and yet they simply could not get it over to the point where it became a viable project. A number of these really have that characteristic and the Pitt program is certainly one of those.

A counterexample is in Maine, I believe, there is a facility to look at nanocomposites and energy technology. So for example, ad-

vanced windmills, and looking at advanced materials laboratory and advanced composites to basically generate new composites, looking at ocean sensor technology. So it is really quite diverse in both energy, environment, oceanography, and advanced materials.

Mr. MOLLOHAN. So it turns out the program you think works? It has a—

Mr. GALLAGHER. Yes.

Mr. MOLLOHAN. So you basically support it. Did you make that a part of your request to OMB?

Mr. GALLAGHER. It was not part of our request to OMB.

Mr. MOLLOHAN. You did not push it up to OMB?

Mr. GALLAGHER. That is correct partly because we were still in the middle of the Recovery Act. We had so much that we were managing. What I have done is raise to OMB the prospect of whether this becomes part of our request in the next cycle. So it just, it was just a phasing.

Mr. MOLLOHAN. So your—

Mr. GALLAGHER. But we have raised the question.

Mr. MOLLOHAN. So you are asking for permission to make it a part of your request in the next cycle?

Mr. GALLAGHER. Yes, that is correct. So, and one of the questions is, does it mean that we look at the attributes of that program and, as I said, tighten it to bring it into alignment? There was not really time to have those discussions as we were starting the new administration.

STEM EDUCATION

Mr. MOLLOHAN. We had several I consider really good hearings with regard to education, science and math education, STEM education, here earlier in the year before we had the big snow. I would just like to hear you talk a little bit about STEM education. The budget requests an additional \$3.4 million for strengthening STEM education through the NIST NRC postdoctoral research associates program. Talk about that, and how you think that contributes to STEM education, if you will, for the Committee, and justify the request?

Mr. GALLAGHER. Okay. So the efforts at NIST in STEM are interesting to me because it is not generally thought of as a primary mission focus of NIST in terms of education. But in fact it does play an important role. I tend to think of the NIST role in STEM as having two distinct characteristics. One is, we are a national laboratory and I believe have an obligation, as do all national laboratories, to provide this unique experience and make it available to the country as part of developing meaningful STEM programs. And so that includes postdoctoral programs, of which the FY 2011 request includes an increase to bring the numbers back up, actually, to numbers we had a number of years ago. This is almost a correction for inflation type of request.

Mr. MOLLOHAN. How close does that get you to where they were?

Mr. GALLAGHER. Well, we are authorized to carry 120 positions. We are currently only, if you exclude Recovery Act, we really only have about forty that we can hire each year. So this increase that we requested adds another twenty-three, I believe. So it is still only between sixty and sixty-five total new positions each year.

Mr. MOLLOHAN. What was the high water? That was your authorization. What was the most you had on board?

Mr. GALLAGHER. Well the highest will be under the Recovery Act, where we actually took advantage of that cap. So we funded everything under the Recovery Act, so.

Mr. MOLLOHAN. Okay.

Mr. GALLAGHER. But we also have undergraduate programs that bring undergraduates, particularly in the summer, for an in depth research experience. We bring high school students at NIST. We have a weekend program that my own son participates in, which works with middle and elementary school kids to give them an experience in science. Those are programs that are designed basically to bring students to NIST. By the way, we also have a program for teachers, where we bring middle school teachers in the summer to work with NIST scientists to develop materials they can use in the classroom.

But those programs are bound to have a more local effect. In other words, they are going to preferentially leverage what is nearby. There are also programs where you have to look what can we do at a national level to support STEM. And there are two distinct areas. One is in the Baldrige Program. The Baldrige is really no longer just a manufacturing program. It really is an organizational excellence program. It disseminates criteria that represent achieving organizational excellence. The two most rapidly growing areas, or sectors, that are using Baldrige criteria, and we see this in the awards program, are healthcare systems and school systems. And in fact, you know, some of the outcomes that some of these school systems have been able to achieve by focusing on their organizational performance are remarkable. And I think that is something we should continue to look at to see whether that program can be made more effective, or whether in fact, and this is under discussion, we can add a specific STEM component that really focuses on—

Mr. MOLLOHAN. Let me ask you, just hearing your testimony, not knowing a lot about this program, which I will follow up, and want to know a lot about this program, that you are, that NIST is involved in with regard to STEM. It sounds like it is a program that is local, it is limited in terms of scope. And it has no scaling potential or even intent. And so I ask if what I am saying is true, how does that help the nation better advance, systemically, STEM education across the country?

Mr. GALLAGHER. Well I think, as I said, I think our STEM program has these two distinct components. One which is experiential, where it is about having a research experience at one of our labs. And those are very local. And I—

Mr. MOLLOHAN. Right, and that, in and of itself that is great. And the second?

Mr. GALLAGHER. And the second one is really one where you can have a national impact, and that would be things like Baldrige which really is a national program.

Mr. MOLLOHAN. How would that have an impact on promoting STEM education in the country?

Mr. GALLAGHER. Well what it does is, the idea that is being looked at in coordination with OSTP, with the Education Depart-

ment, with NSF, is to develop the equivalent excellence criteria in STEM that we disseminate as best practices that are used by school systems as they develop their——

Mr. MOLLOHAN. So that you would actually look at all of the aspects of education?

Mr. GALLAGHER. That is correct.

Mr. MOLLOHAN. Teacher preparation, materials, local boards of education, local superintendents, state education authorizations. Do you have such a plan developed and on paper? Or——

Mr. GALLAGHER. Well, no. what we have right now developed is the current Baldrige program which does look holistically at school systems, but not specifically in STEM.

Mr. MOLLOHAN. Uh-huh.

Mr. GALLAGHER. So the Baldrige criteria have brought in educational experts in terms of how we——

Mr. MOLLOHAN. There are so many people coming at this from so many different directions.

Mr. GALLAGHER. Right.

Mr. MOLLOHAN. I mean, we are going to be looking at NSF and our funding in NSF. And now based on your testimony here we are going to look and see how NIST fits into all of that. And try to be helpful. So any direction you might have for us, or any of the collaboration you are conducting with NSF, or Education, or anybody else in regard to this, please make us the beneficiary of that before we mark up our bill.

Mr. GALLAGHER. Will do.

[The information follows:]

STEM Activities

In addition to our primary contribution to the Nation's STEM education, the prestigious NIST NRC Postdoctoral Research Associateships program, NIST provides programs and events that support and enhance educational opportunities for students from grade school and beyond. Younger children can learn about science directly from NIST researchers through a weekend enrichment program, Adventures in Science. Students also benefit from NIST staff involvement and awards for local science fair projects, as well as mentoring and other direct involvement of volunteer NIST staff through the Adopt-A-School program. There are special events through the year aimed at encouraging interest in science, technology, engineering and mathematics, including the Science: Get Psyched event and events around Take Our Daughters and Sons to Work Day. For high school students, there are a number of volunteer and temporary employment programs (STEP and SCEP), as well as the Summer High School Intern Program (SHIP), where students contribute to on-going research projects under the guidance of a NIST supervisor. There is the 12-week Summer Undergraduate Research Fellowship (SURF) program, which brings in about 130 -150 students each summer to work with NIST researchers. The NIST Summer Institute for Middle School Science Teachers is a collaboration between NIST and local school districts, and is an innovative combination of hands-on activities, lectures, tours, and visits with scientists in their laboratories. The teacher participants draw on these experiences to add to their curricula, with the end goal of assisting students in acquiring STEM skills and inspiring students to explore opportunities in STEM fields.

Since 2001, education organizations have been eligible to participate in the Malcolm Baldrige National Quality Award process. In that period there have been 8 education Baldrige Award Recipients – 5 were K-12 school systems and 3 were higher education institutions. Long before they were eligible for the Award, however, educational systems had been using the Baldrige framework to conduct self-assessments and guide continuous improvement efforts. That engagement continues today as more than 400,000 copies of the Baldrige Education Criteria for Performance Excellence were downloaded in the last 12 months.

Evidence of the impact that the Baldrige Criteria can have on a school system in general comes from our most recent Education recipient, Iredell-Statesville Schools (I-SS) in North Carolina. This diverse district of over 22,000 students went from a rank of 55th out of North Carolina's 107 school districts in 2002 to 9th in 2008. In addition, they reduced the performance gaps for African-American students and Students with Disabilities by half for the same period. STEM pertinent results included SAT score increases of 65 points to 1056, 40 points above the national average, and 29% of high school graduates completing an AP course with a score of 3 or better, almost twice the national rate. All of these performance improvements were accomplished with per pupil expenditures that placed I-SS in the bottom 10 districts in the state.

In addition, use of the Baldrige framework and its emphasis on responsiveness to stakeholder requirements has driven numerous STEM related innovations. One excellent example is Richland College's (2005 Baldrige Award Recipient) development of an early college high school, one of 23 programs cited in a recent American Youth Policy Forum research report as demonstrating effectiveness in preparing youth for college and careers. Richland's Collegiate High School's graduation requirements more than double the number of credits that must be

earned in laboratory sciences (to 8) compared to the standard Texas graduation requirements. Another example is work undertaken by 2003 Recipient Community Consolidated School District 15 (D15) of Palatine, IL. D15 has developed a number of unique programs to increase the science and technology achievement of students including: converting a school bus into a “space shuttle”, mission control simulations, and involvement in actual space shuttle missions with 7 astronauts visiting D15 to enhance student learning. D15 students also participate in competitions at NASA Space Camp in Huntsville, AL where they have won 4 events.

Within the last year, the Baldrige Program has begun work on a strategic objective to explore development of a Baldrige-like award devoted solely to STEM education. The program would build on all the best practices of the Baldrige model: performance criteria that any school or school system could use to assess and enhance their STEM-based curricula and student outcomes, utilization of an expert panel of volunteer examiners who become knowledgeable ambassadors for good STEM education practices, the identification of award recipients who are U.S. role models in STEM education, the sharing of best practices by the recipients, and the power to convene experts to explore and further the leading edge of STEM education practices. Currently discussions are underway with recognized thought leaders in STEM education to explore the desirability and feasibility of such a program.

Mr. MOLLOHAN. Because we want to help you actually do this, maybe get some prototypes out there in the country this year.

Mr. GALLAGHER. Well let me, to that end let me mention one other area that we are exploring as well, which is technology in education. Where we have been asked to work with the Education Department in, how do you develop this as standards? How do you develop standards so that educational technology is meaningful when it is deployed, and covered by federal funding? So we are working with OSTP and the Department of Education to address the question of how does the Department of Education incorporate effective technology standards in their EdTech Program?

NATIONAL INNOVATION MARKETPLACE

Mr. MOLLOHAN. Yes. Thank you for that testimony. The National Innovation Marketplace, talk to us about that initiative. What is it? What role do you play in it? And what role are the other components of Commerce going to play in it, or other agencies?

Mr. GALLAGHER. The National Innovation Marketplace is actually a specific service that is offered under this class of services that I call Next Generation MEP. This is basically, at the current level, a pilot program. It is being developed and offered through MEP. And basically what it does is it provides to small- and mid-size manufacturers a capability that large manufacturers already have, which is to allow them to look effectively at the range of technologies that are in the marketplace that might either be adopted by them to manufacture, in other words opening up new products and services, or that they can adopt in their manufacturing process. So you have heard about large companies that have gone into this market base model where they really go out and put ideas and needs that they have and look very broadly at where they can find these types of technology solutions. This is an approach that a small- and mid-size manufacturer simply cannot replicate. The idea is to give them access through this service to this marketplace of technology that they can explore.

It is predominantly an effort through the MEP program as a service. It does not, as far as I know, have any distinct impact on other Commerce programs except through ITA and if there are some trade related aspects to the Innovation Marketplace.

Mr. MOLLOHAN. Was this an initiative stood up by MEP?

Mr. GALLAGHER. Yes, it was. It is something that MEP had been exploring. You will see that it had some Vice Presidential involvement where they were looking and promoting this program as well.

Mr. MOLLOHAN. Yes, he was suggesting \$45 million needed to expand it to the fifty states, and I think the request is for \$5 million.

Mr. GALLAGHER. Well, the question really becomes one of how rapidly you deploy this across the full network. Our approach through the increased profile we had for MEP was to start with this as a pilot program and to ramp it more gradually. I think what was being talked about at that time, which is not reflected in the request, was a more dramatic—

Mr. MOLLOHAN. But my question is, and I am not clear yet, was this a program stood up by MEP or adopted out there, stood up by somebody else? Or—

Mr. GALLAGHER. Oh, this was by MEP.

Mr. MOLLOHAN. In what year did you do that?

Mr. GALLAGHER. I do not recall. It is a fairly young program, but I do not recall exactly when it was started. We can certainly give you the information on that.

[The information follows:]

NATIONAL INNOVATION MARKETPLACE

The National Innovation Marketplace (NIM) was launched as a pilot effort in April 2009. The NIM connects innovation sellers, buyers, investors and distributors in all industries through an on-line web-based tool that enables open innovation and connects manufacturers with sources of new technologies. The NIM involves the translation of emerging technologies into business applications, market opportunities, and the adoption of new products.

Mr. MOLLOHAN. We will be interested in learning more about that. Mr. Wolf.

Mr. WOLF. Thank you, Mr. Chairman. I had seen figures before that I, were triggered when you said STEM, that the funding for STEM higher education grants is roughly about \$700 million and only \$350 million was used in 2007.

Mr. GALLAGHER. At NIST? No, I am sorry, I am not—

Mr. WOLF. Government wide.

Mr. GALLAGHER. Oh, government wide? Thank you.

Mr. WOLF. And therefore, the execution takes place at 4:00 tomorrow, I mean, what does that mean?

Mr. GALLAGHER. I am not familiar with the numbers. I cannot even hazard a guess what that might mean.

Mr. WOLF. Okay. Would you check and let the Committee know?

Mr. GALLAGHER. Sure.

Mr. WOLF. And by the time things, could you also just give my office a call and let me know?

Mr. GALLAGHER. Sure.

Mr. WOLF. Is anybody looking at that? One, do you agree with that number, or you just do not know if that number is accurate?

Mr. GALLAGHER. I just do not know that number, I am sorry.

Mr. WOLF. The staff person who gave it to me was wrong?

Mr. GALLAGHER. I do not want to suggest that, it is probably right. But we will look into it.

[The information follows:]

STEM EDUCATION

NIST cannot speak to the experience of other Federal agencies. However, of the \$11 million allocated to NIST specifically for STEM activities in FY 2009 (for the NRC postdoctoral programs and Middle School Science Teachers program), \$11 million was spent on these programs. For the long run, the participation of science mission agencies, including NIST, in the NSTC Education Subcommittee, which meets monthly to exchange information and ideas, can do much to coordinate and complement Federal STEM education programs. The Subcommittee is currently addressing education and workforce policy issues and research and development efforts that focus on STEM education issues at the pre-K–12, undergraduate, graduate, postdoctoral and lifelong learning levels, as well as current and projected STEM workforce needs, trends and issues. The Subcommittee supports the President's STEM education goals, with active involvement in the meetings and topics by the Office of Science and Technology Policy.

Mr. WOLF. If you could. And then if you could make an evaluation of why you think that that would be the case?

Mr. GALLAGHER. Okay.

Mr. WOLF. And how you could rectify that? Or if not you, but how we could rectify that? If \$700 million is appropriated in these very difficult times we would hope that \$700 million would be accessed.

Mr. GALLAGHER. Was this in the Recovery Act, or—

Mr. WOLF. No.

Mr. GALLAGHER. No? Okay.

Mr. WOLF. Everything did not begin and end with the Recovery Act.

Mr. GALLAGHER. Right, I was just—

Mr. WOLF. There used to be a Congress, people did things before the Recovery Act.

Mr. GALLAGHER. Okay.

CYBER SECURITY AND INTERAGENCY EFFORTS

Mr. WOLF. Back to cybersecurity, NIST is just one of the players in the interagency efforts. Who are the other players? What is NIST's unique role? And is your budget sufficient for you to play that role effectively? So, what are the other players? Two, what is your unique role? And is your budget sufficient?

Mr. GALLAGHER. So quickly, it will not be an inclusive list, but the main players include NIST, the National Security Agency, Department of Defense, Homeland Security, White House.

Mr. WOLF. Is there a Czar yet?

Mr. GALLAGHER. There is. Howard Schmidt, in fact I am meeting with him right after we are done here.

Mr. WOLF. Is he actually called a Czar? I hope they are not calling him that.

Mr. GALLAGHER. No, they are not calling him a Czar.

Mr. WOLF. And where is he based? In the National Security Council?

Mr. GALLAGHER. It is in the National Security, and I believe it is co-chaired with the National Economic Council so that he is supposed to look at not just the security, but the context.

Mr. WOLF. What is his background? He was with the FBI, was he not?

Mr. GALLAGHER. I believe so. I do not recall his biography off the top of my head. So there is a number of players. The unique NIST role is the one defined by FISMA, which is that NIST develops the standards. And not just writing the standards but the testing infrastructure to make sure that we know how to protect federal information systems. And so in that context we work closely, that is why NSA and DHS figure very prominently in our relationships, because NSA has a similar responsibility for the information, the same information for the intelligence community agencies as we have for the rest of the federal government.

Mr. WOLF. Do you work closely with them?

Mr. GALLAGHER. Yes, we do. And also with the DHS, because DHS really has the operational responsibility. Once you have these standards in place, the US-CERT system, which was started at NIST and it is not at DHS, in terms of how do you monitor cybersecurity and look at attacks. That whole role is at DHS, and of course that has to inform the standards process. So those are, and the White House because these requirements are actually disseminated

through OMB, through the Chief Information Officer at OMB, to the federal agencies. And so we work very closely, very actively, through the National Security Council and committees, through the CIO Council, through Vivek Kundra's office at OMB, and then strong bilateral ties as well with these key agencies.

CYBER SECURITY INCREASE

Mr. WOLF. Is the \$10 million increase enough to keep pace with—

Mr. GALLAGHER. Well it is always, you know, one of the problems we face when you look at these multiple agencies, the NIST role is actually one of the smallest in terms of funding and effort. And you might argue when you look at this that it should be proportionately bigger so that it can cover that space. The way we do this, though, is we make sure that we define the role that can be done very well with our current funding level. The \$10 million increase, as I said, is a balance between needing to grow this program pretty significantly and not basically doing an irresponsible increase where it is too much at once. And that is why we identified about \$4 million of about \$10 million to be through a grant program to universities. And I think that represents a good balance between expanding to universities some of these research activities that are critically important and expanding NIST efforts because our current funding level is about \$28.9 million for this activity.

Mr. WOLF. What top two universities are doing research in this area?

Mr. GALLAGHER. I would not be able to hazard a guess for you right now.

Mr. WOLF. But you are giving grants?

Mr. GALLAGHER. No, we have not done the grants yet. We would issue a competitive call for grants with this to one or more universities.

CYBER SECURITY OF U.S. SYSTEMS OVERSEAS

Mr. WOLF. Do you think there is a sensitivity to cybersecurity? My computer was stripped by the Chinese a couple of years ago. Seventeen other members of the House, and Foreign Affairs Committee. Members are still taking their blackberries to China and making telephone calls. And do you think there is a sensitivity now to this issue in government that has permeated everywhere?

Mr. GALLAGHER. I think it is hard not to be sensitized to this now, between what we see happening these large scale attacks we read about in the newspapers almost every week.

Mr. WOLF. Do you take your blackberry to China and use it in China?

Mr. GALLAGHER. Well, it is interesting. I have. But what they basically do is they lobotomize it ahead of time so that it does not have anything on it. I take it. And if I come back then they basically lobotomize it again so that there is nothing on it. So I have—

Mr. WOLF. I am told that may not be totally effective.

Mr. GALLAGHER. Well it may not—

Mr. WOLF. Remember Secretary Gutierrez? His laptop computer was compromised in China, Are there guidelines in NIST and in

the Department of Commerce that tell you that if you are going to go to China or certain places——

Mr. GALLAGHER. Yes, there are. Yes, there are. And we work with the NSA in terms of how we look at those systems and test them.

Mr. WOLF. And so if somebody at the Food and Drug Administration is coming over to China they are certainly alerted that they have to be careful? There is a system in the government that lets everyone know that is going to go to these places that——

Mr. GALLAGHER. That is my understanding.

Mr. WOLF. Could you check and tell me what it is?

Mr. GALLAGHER. Sure.

[The information follows:]

INTERNATIONAL TRAVEL SECURITY PROTOCOLS

All Federal employees who travel internationally are required to complete a Department of Commerce-sponsored Foreign Travel Briefing once per year. There is specific information on travel to China within this briefing, including specific sensitivities to information technology security, as well as attention to measures to ensure personal security.

Mr. WOLF. And how it works? I mean, if somebody in the meat inspection, or somebody in the Department of Commerce, how do they tell them? How do they alert them? What do they do?

Mr. GALLAGHER. I can tell you at NIST that it is basically tied into the travel authorization process. So that if you are going to travel, and you submit your request, they can see where you are going and then there is basically a set of procedures that are put in place that you have to meet before you are allowed to go and when you complete your travel, immediately after, before you can use that technology.

CYBER ATTACKS AGAINST NIST

Mr. WOLF. Has there ever been a cyberattack against NIST?

Mr. GALLAGHER. I am sure there has.

Mr. WOLF. Are you guessing, or are you certain?

Mr. GALLAGHER. I would have to check, but I mean there are attacks against systems all the time. So I am certain there.

Mr. WOLF. And most of the attacks come from?

Mr. GALLAGHER. I do not know. I do not have that data?

Mr. WOLF. Would you guess it would be China?

Mr. GALLAGHER. It would not be a bad guess.

Mr. WOLF. It is China and Russia. We all know. Why would you be reluctant just to say that? Could you tell us?

Mr. GALLAGHER. Well I think when we are looking at the firewall data at the agency we are not seeing the country of origin, we are basically seeing the anomalous behavior that is attempting to gain access. So we see the evidence of an attack but at that level we are not seeing origin. Whereas other operational agencies are looking more systematically, US-CERT would be looking at——

Mr. WOLF. But would the FBI not tell you that as you are doing this, “This is what the process is. This is how they do it in China. This is what the Russia organized crime is doing.” So you should be looking. I mean, do you not have to know all of that to be involved in——

Mr. GALLAGHER. I do not know if system administrators need to have that type of information as they are responding to the actual attacks themselves.

Mr. WOLF. But would it not give you a level of sophistication coming from X or Y or Z?

Mr. GALLAGHER. It might, but I think——

Mr. WOLF. Every cyberattack is not the same.

Mr. GALLAGHER. I think the information comes in that way through what the vulnerabilities are. So we understand what different parts of the world do in terms of compromising systems and then the idea is through these vulnerability databases designing appropriate controls and fixes to——

Mr. WOLF. Do you get a list of all the cyberattacks, since you have been giving this job of coming up with the technology and standards?

Mr. GALLAGHER. We maintain a vulnerability database, that is correct.

Mr. WOLF. Of every federal agency that is hit?

Mr. GALLAGHER. I do not know, I do not want to misrepresent what is on that list. But it is the comprehensive vulnerability database that is used.

Mr. WOLF. And who collects that?

Mr. GALLAGHER. It is collected by NIST. But I think we, let me check and give you the details on how that program works.

[The information follows:]

NATIONAL VULNERABILITY DATABASE

The National Vulnerability Database (NVD) is the U.S. government repository of standards-based vulnerability management data for publicly known cyber vulnerabilities. This data, which is freely available to the public, enables automation of vulnerability management, security measurement, and security compliance verification. NVD includes databases of security checklists, security related software flaws, security misconfigurations, product names, and vulnerability impact metrics. NVD is a product of the NIST Computer Security Division and is sponsored by DHS's National Cyber Security Division. All of the software flaw vulnerabilities included in NVD are first identified in the Common Vulnerabilities and Exposures (CVE) dictionary. The CVE dictionary is compiled by cybersecurity analysts at The MITRE Corporation. As soon as the CVE analysts identify a new vulnerability, they document its basic characteristics and publish the information. The public and NIST's NVD get this information at the same time. NIST cybersecurity analysts perform additional analysis that provides a severity rating for each vulnerability, and these ratings are added to NVD to help federal agencies and other organizations understand the relative importance of each vulnerability so they can respond appropriately to prevent attacks.

TIP PROGRAM

Mr. WOLF. The last question, you are requesting a \$10 million increase for the TIP program, that took over from the ATP program which phased out in 2008. How would you assess its performance? And is this one of your top priorities?

Mr. GALLAGHER. The TIP program is young. It was created in 2007. It is different from the ATP program in a couple of key ways, including who can participate. Universities are allowed to take lead roles. It also changed some of the evaluation criteria. Some of the business criteria that were looked at in the ATP program are no longer in the TIP program. My view on the TIP program has been that from the context of an innovation agenda where you are look-

ing at not only R & D performance but how effective we are at turning this into commercial activity, there are a lot of good things to be said about TIP because it does bring together these cross-disciplinary teams of participants from industry, university, national labs, to work on focused problems.

That being said, I do not believe that at this level of funding this is going to have an enormous national impact. And I think, the way I have been viewing this is that you have to consider this as a, as really a pilot and to see whether it is meaningful that we continue. So we are looking very carefully, what is the right way to measure whether this program is going to make the kind of impacts that we think are needed? And then take a hard look at it and decide whether it is worth continuing.

Mr. WOLF. Thank you very much.

Mr. GALLAGHER. Thank you very much.

Mr. WOLF. Thank you, Mr. Chair.

Mr. MOLLOHAN. Thank you, Mr. Wolf. Let me follow up on the TIP program, because that is where I was going to end actually. It has been around a couple of years. If it is a pilot program, can you not assess it at this point?

Mr. GALLAGHER. I do not believe so, The problem with commercialization is that you would like to assess it when you see whether the technology finally reached the market. And this is pre-competitive. These grants are focused on the pre-competitive activity. So we are going to have to look at leading indicators. The first awards really went in early 2008. They are three to five year grants. So we are sort of entering the period now where we are beginning to see from the first award recipients what types of technologies and what types of outcomes they have been able to have in those programs. So I do not, I think we are at, now or the very near future is the time to take a look. I am not trying to push this down the road. I do not want to say that we already have all the information and we know because I do not think that is true.

Mr. MOLLOHAN. At its best, what could the program do as a prototype at this point? What would be the measurement that would say, "Wow, this program is really worthwhile."

Dr. GALLAGHER. Well, I think it is a high risk, high pay off program. So the question is, did you take some big risks but have you got some big wins? Because that is what a program like that is designed to do. So I think we have to look at the technologies that are coming out of these proposals.

Mr. MOLLOHAN. Could you give us an example?

Mr. GALLAGHER. Well in the first call for—

Mr. MOLLOHAN. Of the high risk, high reward?

Mr. GALLAGHER. Well I think in the first call the focus was on developing advanced sensor technology to look at physical infrastructure, our roads and bridges. Clearly a national need. We have an aging infrastructure. And the question was, could you create a game changing technology that would allow you to detect incipient failure or maintenance problems in things like bridge or road surfaces before they failed? And can you do it in a very cost effective way? And some of the proposals were very clever, where you would seed a bridge with sensors and basically the vehicles driving over the bridge would be able to talk to the sensors and pick up the

data or other type of remote sensing technologies that would detect this.

This is not the kind of program where you are going to see a commercial home run in every proposal. But if we were to see something that was clearly identifying the types of technologies that, if it were commercialized, would make a big difference, that is really what this program was designed to do. Big, disruptive, high pay off, technology wins. And as I said, we are not going to be looking at this when it has gotten to the commercialization point. We are going to have to do it from a technology side where we take a look at these technologies that are being developed and then make a decision whether we think it is having that type of impact. And that is what the TIP program folks are looking at now, is how will we take a look at this?

We have also been working with the authorization committees on the same question and I think we will be working with you on the same question, too, as we look at this program.

Mr. MOLLOHAN. Well, we want to follow up on that. Frank, do you have any more questions?

Mr. WOLF. No.

Mr. MOLLOHAN. Thank you. Doctor, thank you very much for your testimony here today.

Mr. GALLAGHER. Thank you.

Mr. MOLLOHAN. I learned a lot and appreciate your service. Thank you.

Mr. GALLAGHER. I appreciate it. Thank you.

Mr. MOLLOHAN. Thank you.

Chairman Alan Mollohan
Questions for the Record

ARRA - Science and Technical Research Funding

In the American Recovery and Reinvestment Act (ARRA), NIST received a total of \$580 million. Of this amount, \$220 million was provided for research, competitive grants, additional research fellowships and advanced research and measurement equipment and supplies.

NIST's ARRA spend plan directs \$119 million for high-value research and measurement equipment to be made through a competitive process.

1. How much of this funding has been obligated to date?

Answer: \$27.2 million of the \$119 million.

2. **How quickly will this equipment be used for NIST research? Is any of it currently in use?**

Answer: The equipment will be put into service as soon as it is procured and installed. Yes, research equipment that has been purchased has already been put into use -- new servers have been purchased and put into use in our Information Technology Laboratory.

3. **How much of the equipment was purchased from US manufacturers?**

Answer: All equipment has been purchased from U.S. businesses with current central contractor registration and current trade partners with trade agreements that restrict the procurement office from discriminating. Additionally, they are companies with significant presence in the U.S.

NIST's spend plan directs \$35 million to focused, competitive research grants in measurement sciences. These grants are intended to support research in US universities and organizations, creating and preserving high-value science and technology jobs while advancing NIST measurements and research that sustain long-term economic growth through innovation.

4. **When were these awards competed?**

Answer: The proposals were awarded on January 8, 2010.

5. **How long will the funding last?**

Answer: All grants were funded up front with spending allowable over three years and based on the spend plans in their proposals.

6. Which universities and organizations won the awards, and what types of research is supported by these grants?

Answer: Twenty seven awards were made to a wide range of universities, companies, and research organizations. The full list includes:

- ASHRAE, Inc. (Atlanta, GA)
- General Electric, GE Global Research (Niskayuna, NY)
- Brigham Young University (Provo, UT)
- Fluke Electronics Corporation (Everett, WA)
- General Motors Electrochemical Energy Research Lab (Honeoye Falls, NY)
- Arizona State University (Tempe, AZ)
- Purdue University (West Lafayette, IN)
- Woods Hole Oceanographic Institution (Woods Hole, MA)
- Michigan Aerospace Corporation (Ann Arbor, MI)
- Scripps Institution of Oceanography, University of California, San Diego (La Jolla, CA)
- Worcester Polytechnic Institute (Worcester, MA)
- Harvard University (Cambridge, MA)
- IBM (Yorktown Heights, NY)
- George Mason University (Fairfax, VA)
- Mayo Clinic College of Medicine (Rochester, MN)
- Institute for Systems Biology (Seattle, WA)
- VaxDesign Corporation (Orlando, FL)
- Johns Hopkins University (Baltimore, MD)
- University of Kentucky (Lexington, KY)
- University of Arizona (Tucson, AZ)
- Colorado State University (Fort Collins, CO)
- Temple University (Philadelphia, PA)
- University of California, San Diego (La Jolla, CA)
- Northwestern University (Evanston, IL)
- Underwriters Laboratories, Inc. (Northbrook, IL)
- University of Delaware (Newark, DE)
- Virginia Polytechnic Institute and State University (Blacksburg, VA)

The research supported by these grants address critical measurement science challenges in Energy, Environment, Manufacturing, Biotechnology, Information Technology, and Physical Infrastructure and includes efforts in applied physics, nanotechnology, computer science, and a number of other areas. For additional information visit the NIST link:

http://www.nist.gov/public_affairs/releases/measurementgrants2010.html

7. How many jobs were created and preserved?

Answer: The research is intended to help overcome barriers to long-term scientific and technical innovation by addressing discrete measurement problems in critical technology areas or areas of national need. As such, the larger impact will be realized over the long term and support the goal of the ARRA to provide for economic recovery based on scientific innovation. The numbers for immediate job creation are not yet available, as the first cycle of ARRA-reporting for these grants has not yet occurred. The first round of reporting will occur in April 2010.

The spend plan calls for \$22 million to expand the NIST Postdoctoral Fellowship program, creating additional fellowships and preserving existing fellowships in high-value science and technology.

8. How many new fellowships were created?

Answer: The ARRA spend plan included several distinct sub-programs to support the NIST Postdoctoral Research Associateships program. During the early stages of the ARRA period (FY 2009), there were 12 postdoc "Early Starts" supported with the funds -- these are "traditional" NRC Postdocs who were allowed to begin tenure early with ARRA funds, as well as 42 NIST NRC postdocs hired through the use of the ARRA funds. NIST has also allocated \$9 million of the funds to the NRC for the purpose of administering a program to select up to 45 additional fellows over a 5-year contract period. This new program is in addition to the regular NRC Postdoctoral program. The first 34 of these fellows have been selected, and eight have recently started at NIST. This is a current total of 88 new positions, with up to another 11 expected.

Finally, in addition to these new fellowships, some existing fellowships were converted to "term appointments" using the ARRA funds, enabling those associates to remain at NIST and continue research and contributions to NIST research, and enabling them to have additional time to find more permanent positions.

9. How many existing fellowships were extended?

Answer: The ARRA funding enabled 39 postdocs who were already working at NIST, but nearing the end of their fellowships, to have their positions converted to "term appointments" lasting for up to an additional 17 months. Up to 30 additional postdocs whose fellowships are scheduled to end later in FY 2010 are expected to benefit from these extra-term appointments, for a potential total of 69.

10. How long do these fellowships last?

Answer: Two years.

11. Which national priority areas do these fellowships advance?

Answer: The postdocs work in all the laboratories across NIST on topics ranging from green-house gas measurements to advanced biomanufacturing techniques.

12. Once these fellowships are completed, where do these highly trained scientists and engineers work?

Answer: After completing their postdoctoral associateship tenure, the former NIST National Research Council (NRC) postdocs work in many different areas. A significant number remain at NIST, further contributing to NIST research efforts. Some go on to obtain positions in other government institutes, national laboratories or in the private sector, and others pursue academic careers in science and engineering.

Another \$20 million is intended to create a consolidated NIST fellowship program. A component of that program promotes Science, Technology, Engineering, and Mathematics (STEM) education by placing undergraduate and graduate students and postdoctoral fellows at NIST for direct research experience and training, helping build the future STEM workforce needed for sustained growth.

13. Please tell us a little about this program and how it differs from the NIST Postdoctoral Fellowship.

Answer: This program provides opportunities for scientists and engineers to work with NIST scientists at NIST facilities on a number of areas. The main difference is that this program allows a broad range of fellows to come to NIST including undergraduate students, graduate students, postdocs, and senior scientists from industry and academia.

14. How many fellows are supported by this program?

Answer: 50 fellows at Gaithersburg, MD and Charleston, SC and 20 in Boulder, Colorado.

15. What type of effort is made to ensure participation by women and underrepresented minorities?

Answer: Each of the grant recipients has an outreach programs to increase the pool of qualified candidates from traditionally unrepresented groups. Within the pool of qualified applicants, each application is considered on its merits.

The spend plan calls for \$15 million for competitive research contracts to small businesses to develop new technologies that support NIST's mission and have commercialization potential; to accelerate the development and implementation of Smart Grid interoperability standards; and for cybersecurity.

16. When were these contracts competed, and have they been awarded?

Answer: 32 awards were made on Small Business Innovation Research Program in June 2009. A Security Content Automation Protocol – SCAP – contract was awarded in December 2009 for the analysis of vulnerabilities, development of configurations, development and maintenance of SCAP Content, the development of protocols and specifications, and maintenance of National Vulnerability Database (NVD) Portal at NIST. The contract for the development of an Interim Smart Grid Interoperability Roadmap was awarded in July 2009. The largest remaining portion of the research in support of Smart Grid relates to Cyber Security and Electrical Power. The remaining smaller components of this research include Building and Industrial interfaces to the grid, and external grants to the Massachusetts Institute of Technology and the National Fire Protection Association.

17. Is there any progress on the research involved that you can share with us now?

Answer: A kickoff meeting was held in January on the Security Content Automation Protocol (only in its second month) and work is progressing. For the Interim Smart Grid Interoperability Roadmap, the following is an update:

- 1) June 2009: release of *Report to NIST on the Smart Grid Interoperability Standards Roadmap*, prepared by the Electric Power Research Institute (EPRI), June 17, 2009, which provided the basis for the January 2010 release of the *NIST Framework and Roadmap for Smart Grid Interoperability Standards, Release 1.0*.
- 2) April – August 2009: a series of stakeholder workshops, resulting in 15 priority action plans to harmonize and accelerate Smart Grid standards, and stakeholder-based working groups formed to address these plans.
- 3) November 2009: creation of the Smart Grid Interoperability Panel (SGIP), a new stakeholder forum to provide technical support to the Commerce Department's National Institute of Standards and Technology (NIST) as it coordinates standards for a modernized electric power system. (For more information, please go to www.nist.gov/smartgrid and the collaborative wiki site at <http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/WebHome>.)

There is also \$9 million provided for competitive NIST information technology infrastructure contracts, to increase the efficiency and effectiveness of NIST measurements and research by improving data exchange and analysis capabilities.

18. When were these contracts competed, and have they been awarded?

Answer: In terms of dollars, \$6.5 million has been awarded to date based on contracts competed in FY 2009. We expect to fully award the remaining \$2.5 million before fiscal year-end as three procurements scheduled for FY 2010 are underway and proceeding according to plan.

19. Are these products already in use at NIST, and how are they improving efficiency and effectiveness?

Answer: Detailed plans for the deployment of the equipment have been developed and are being monitored closely by the Chief Information Officer. Deployment of the equipment is scheduled to take place throughout the next year and a half, with an estimated completion of August 2011. As equipment is deployed, it is put into service, so NIST will increasingly benefit from higher speed and more secure networking infrastructure long before full deployment is complete.

NIST is already benefiting from improved intrusion detection, faster response to threats and a safer information technology environment.

ARRA - Construction Funding

ARRA provided \$180 million to address NIST's backlog of maintenance and renovation projects and for construction of new facilities and laboratories, and \$180 million for the competitive construction grant program for research science buildings.

Of the funds provided for internal NIST maintenance, repair and construction:

20. How much has been obligated to date?

Answer: As of March 29, 2010, \$14.8 million has been obligated for internal NIST construction projects and \$179.8 million has been obligated for competitive construction grants.

21. How much was intended for NIST's safety, capacity, maintenance, and major repairs (SCMMR), and why are these funds important?

Answer: The ARRA-funded SCMMR projects total \$31 million. These funds are important because they are targeted toward energy efficiency and alternative energy projects which will help NIST in meeting critical Federal mandates in these areas. Additionally, these funds will reduce the risk for major equipment failure and improve safety and performance by replacing 45 year-old air handling units and fume hoods.

22. What construction projects were targeted?

Answer: The list of projects, as well as the status, is provided in the next question and answer below.

23. What is the status of each project?

Answer:

[The table follows:]

ARRA CRF Project	Status of Each Project
NCNR Infrastructure and Pumps	Design has been completed and expect award of the construction contract mid-summer 2010
Complete the Precision Measurement Laboratory (PML)	Pending award April 2010
Enhance Performance of the PML	Pending award April 2010
National Structural Fire Resistance Lab	Design has been completed and expect award of the construction contract early summer 2010
Liquid Helium Recovery System – Boulder	Pending award April 2010
Liquid Helium Recovery System– Gaithersburg	Design has been completed and expect award of the construction contract mid-summer 2010
Net Zero Energy Residential Test Facility	Design has been completed and expect award of the construction contract early summer 2010
Consolidated Emergency Services Facility	Design has been completed and expect award of the construction contract early summer 2010
Broadcast Station	Due to technical issues with potential sites, the project is being reevaluated by NIST Management
Robotics Facility	Design has been completed and expect award of the construction contract early summer 2010
Logistics Facility	Design has been completed and expect award of the construction contract early summer 2010

24. Why are these construction funds important?

Answer: These projects can be characterized in one of three ways:

1. New facilities to support NIST's measurement and research programs
2. New infrastructure
3. Replacement facilities.

The Completion and Enhancement of the Precision Measurement Laboratory, the National Structural Fire Resistance Laboratory, and the Net-Zero Energy Residential Test Facility will all enable NIST to move forward in cutting-edge measurement science and research addressing critical national priorities.

The NCNR Infrastructure and Pumps project will greatly improve the infrastructure supporting the NIST Center for Neutron Research (NCNR) and will significantly reduce energy and water consumption as well as improve the performance and capacity of this unique science facility. The NCNR is regarded as the most scientifically productive and cost-effective neutron facility in the United States. The Liquid Helium Recovery Systems, at both Gaithersburg and Boulder, are also important infrastructure upgrades as they will enable NIST to capture the helium used in research before it evaporates to the atmosphere and reliquify it for reuse in the labs. Helium is becoming an increasingly scarce natural resource, making it more expensive and difficult to procure.

The Consolidated Emergency Services Facility, the Robotics Facility, and the Logistics Facility all constitute replacements for aged and inadequate facilities that no longer support their intended use and mission. The Robotics Facility will enable this important scientific program to relocate from a building with deteriorating conditions while the Emergency Services and Logistics Facilities will enable these operations to better support the NIST Gaithersburg site's needs and mission.

25. How will each project support NIST's mission?

Answer: Please see the answer to the previous question as it also discusses how each project supports the NIST mission.

26. Did this funding complement construction funds provided in the fiscal year 2009 and 2010 bills?

Answer: The FY 2009 appropriation provided \$22.5 million to partner with the University of Colorado to expand JILA and \$7.2 million to build a new Child Care Center on the NIST Gaithersburg site.

In FY 2010, \$12 million was provided to begin the long-term effort to renovate the wings of Boulder's Building 1 by completing the renovation design and construction documents. In addition, NIST will utilize \$2 million to contract for an in-depth space utilization study of the Gaithersburg facilities; this effort is part of the long-term plan to renovate the General Purpose Laboratories on the Gaithersburg site. The NCNR expansion will be completed with \$8 million.

NIST received \$68.5 million in ARRA funding to complete the Precision Measurement Laboratory -- Extension to Building 1 -- which had received prior year funds of \$33.7 million for construction of the first phase of the facility.

Industrial Technology Services - TIP

The Technology Innovation Program (TIP) funds high-risk, high-reward research. The budget proposes \$79.9 million, an increase of \$10 million.

27. Why is this program important in the current economy?

Answer: Stimulating scientific and technological innovation is critical to the long term competitiveness of the U.S. A key challenge is bridging the gap between university and industry by facilitating the transition from basic research to feasible devices that could become products. TIP helps to address this gap.

28. The previous program was considered by some to be corporate welfare. How does TIP differ?

Answer: TIP, unlike the Advanced Technology Program (ATP), is not focused on the economic competitiveness of a given technology, but rather is focused on addressing technology development challenges in areas of critical national need.

29. How long do these grants last?

Answer: Depending on the structure of the agreement, 3 years for an individual award and 5 years for an award to a consortium.

30. At this level of funding, how much in new awards can be made in fiscal year 2011?

Answer: The requested funding level would enable TIP to allocate \$5.8 million to new FY 2011 awards and \$25.6 million for FY 2010 competition awards that will not be awarded until FY 2011. The majority of the remaining funding would go toward mortgages from previous year's competitions.

31. The relatively small amount of new funding makes TIP seem like more of a pilot program. Do you agree?

Answer: The President has committed to significantly increase the size of the TIP program to \$100 million by 2015.

32. What would you consider to be a reasonable number of new TIP grants each year, and what level of funding would that number require?

Answer: While I do not have specific numbers, the proposal to increase TIP funding to \$100 million by 2015 will allow more new awards in future years.

MEP

The Manufacturing Extension Partnerships (MEP) consists of a network of centers that provide business support and technical assistance services, and help improve the productivity and competitiveness of small manufacturers. The centers are funded from matching Federal and State or local resources and fees are charged for services, and the funding leverages private resources in the creation and retention of jobs. The budget proposes \$129 million, an increase of \$4.6 million.

33. Does MEP belong in NIST? Why or why not?

Answer: Yes, the MEP program belongs at NIST because of its mission to deploy advanced manufacturing technology to manufacturers to create innovative solutions to manufacturing processes and new globally competitive products.

34. How will the increased funding be used?

Answer: In FY 2011, MEP intends to use the proposed \$4.6M increase to continue investments focused on Next-Generation MEP activities in the area of business growth services, specifically technology acceleration, sustainability and enabling a manufacturing workforce. Areas of focus include expanding sustainable manufacturing practices and development of sustainable or "green" products and development of new markets through exporting or market

diversification supporting the Secretary's High Priority Performance Goals. In addition, MEP will build upon the competitions run in FY 2010 focused on developing new and integrated tools, training, methodologies and business models for manufacturers.

35. Is the National Innovation Marketplace an ongoing component of MEP currently?

Answer: Yes, as a pilot initiative to develop and test an on-line tool for MEP center staff and manufacturers to identify and assess the market potential of technology and innovations for their manufacturing processes and products.

36. Please explain how the Marketplace pilot works.

Answer: The National Innovation Marketplace (NIM) connects innovation sellers, buyers, investors and distributors in all industries through an on-line web-based tool that enables open innovation and connects manufacturers with sources of new technologies. The NIM involves the translation of emerging technologies first into business applications, second into market opportunities, and third into the adoption of new products.

37. What states are currently involved?

Answer: In addition to the NIST MEP pilot Marketplace, there are currently four state-based versions – Arkansas, Kansas, Maine and Vermont. These state-based Marketplaces are funded by the states.

38. What states will be added with the increased funding?

Answer: The state-based Marketplaces are state-specific initiatives. NIST MEP does not invest directly into the state Marketplaces. NIST MEP funding will be used to expand the functionality of the primary Marketplace and continue to add new technology offerings.

39. Will the funding be competitively awarded?

Answer: Yes, as additional capability is identified for the NIM, awards will be made through a competitive process.

40. How will the Marketplace's effectiveness be evaluated?

Answer: The pilot NIM effort is measured, in part, by the number of connections between manufacturer needs and technology solutions. For MEP center clients, impact measures of cost savings, sales and jobs will be assessed. As development of the NIM continues, additional measures will be developed.

41. Should the National Innovation Marketplace be increased over time?

Answer: In FY 2011, MEP plans to invest approximately \$1.5 million of the total proposed FY 2011 funding level in continuing the NIM pilot effort.

42. Should the classic MEP program be increased over time?

Answer: The Administration has proposed increasing the MEP budget to a level of \$180 million by FY 2015.

Construction of Research Facilities

The budget request provides \$124.8 million for internal NIST construction. Of this amount, an increase of \$37.9 is included for the Boulder Building 1 Renovation.

43. How much base funding is provided for Building 1?

Answer: There is no base funding for the renovation of Building 1.

44. What is the total amount of funding requested to date?

Answer: In FY 2010, of the \$26 million requested, \$12 million was enacted. The FY 2011 request for Building 1 Renovation is \$37.9 million. In FY 2010, NIST will use \$12 million to complete the renovation design and construction documents and perform the limited renovation of Building 3 for the relocation of the Instrument Shops.

The FY 2011 initiative request of \$37.9 million enables NIST to complete exterior renovations in Building 1, Wings 3, 5, 6, and the Center Spine as well as the interior renovations at Building 1, Wing 3 and a portion of Wing 5. The remaining interior wing renovations will be completed with future funding requests.

45. Why is this level of funding important in the current fiscal year?

Answer: The nearly 60-year-old facilities cause a productivity loss of at least 20 percent, according to the NIST Boulder Facilities Review Team Report of 2006, and prevent NIST from performing the most demanding research and measurement needed by industry and the scientific community.

46. Since this is an ongoing construction project, is it feasible to provide less this year?

Answer: Major construction projects are requested as one time funding each budget year to achieve a useable segment. The request funds a useable segment. The only base funding in CRF is SCMMR funding.

47. How many years will this renovation take?

Answer: The project at the requested level will be completed in FY 2012.

48. How much will this renovation cost in total on the proposed timeline?

Answer: \$54.4 million will renovate approximately 46,400 Net Assignable Square Feet of L3¹ performance laboratory space, to include the selected renovation of Building 1, including the interior renovations of Wings 3 and 5. The remaining wings will be renovated in the outyears.

¹ L3 space has significant performance requirements for control of temperature, vibration, humidity and air cleanliness, but the requirements are not as stringent as L4 requirements. L4 space requirements will be met through the new construction of the Precision Measurement Laboratory, while L3 will be achieved through renovations.

49. How much will the renovation cost if the timeline is extended?

Answer: The costs will increase by an inflation factor for each year that the project is extended. We currently use an inflation factor of 2.6 percent annually.

The budget request includes an increase of \$13.8 million for the Safety, Capacity, Maintenance, and Major Repairs (SCMMR) program, for a total of \$72.5 million.

50. Why is this level of funding required annually?

Answer: Most of NIST's buildings were constructed in the 1950s and 1960s, and are no longer adequate for the research needed to support U.S. innovation and industrial competitiveness in key areas such as nanotechnology, biotechnology, new energy sources, telecommunications, manufacturing, and many other key technology areas.

Independent analysis recommends an annual investment of SCMMR funding equal to three to four percent of the value of the facilities -- \$70 to \$80 million.

51. Didn't the ARRA and fiscal year 2009 and 2010 funding, a total of \$166M, reduce the backlog of projects?

Answer: The ARRA funding provided \$31 million for energy efficiency SCMMR projects, which will reduce the backlog in these areas and improve the condition of the NIST facilities. The non-ARRA appropriations for FY 2009 and FY 2010 CRF funding are addressing numerous repair, replacement, upgrades, and maintenance issues. More than 80 percent of the NIST buildings were rated as "poor" in the facility condition assessments performed for each site. The

requested funding level will assist NIST in its long-term effort to bring the majority of the buildings to a "fair" or better level.

52. What are the consequences of providing less funding than requested on an annual basis?

Answer: The current state of NIST facilities limits NIST's ability to meet the measurement and standards challenges. Reduction of annual funding will likely increase the risk of building failures impacting critical 21st century research and measurement work. In the past few years on the Gaithersburg site, there have been several examples of significant failures to critical site-wide utility systems (electric, water, steam/condensate). For example, in January 2009, a 500-yard length of underground steam/condensate piping had to be completely replaced ahead of its planned repair phase. Along the entire length, a wide swath of grass above the pipe had died and the ground and sidewalk overtop were very warm to the touch, clear indications that the pipe's insulating outer jacket had failed. By replacing the failing section of pipe when we did, we avoided the possibility of steam service being interrupted for an extended period of time to two complete lab buildings and the site's main service support buildings. Without steam, temperature and humidity control in the laboratories' conditioned spaces are significantly affected, as well as the buildings' hot water supply. Failures such as this also take precedence over planned SCMMR projects, thus increasing the backlog

The budget also requests \$14.4 million for the planning and design of the Gaithersburg General Purpose Laboratories.

53. Why is this funding considered necessary?

Answer: The NIST Gaithersburg General Purpose Laboratories (GPLs) comprise seven research and measurement laboratory buildings and a total of about 1.2 million square feet. The more than 40-year-old buildings are unable to provide the control of temperature, vibration, and air quality that is needed for 21st century research and measurement. The major infrastructure systems in the GPLs, such as the mechanical, electrical and plumbing, are well beyond their life expectancies, resulting in systems that are increasingly difficult to maintain and more prone to potentially catastrophic failures. A comprehensive planning and design effort is needed to best determine the appropriate path for revitalization of these facilities.

54. Is it critical to begin this process now?

Answer: Yes. The technologies and measurement research that will define the first half of the 21st century—nanotechnology, bioscience, and information technology among them—rely to an unprecedented degree on measurement capabilities that push the limits of science. The requested funding will allow NIST

to begin the process of updating the GPLs to support this cutting-edge research and measurement.

55. There is a significant amount of construction ongoing at NIST. While all of it may be necessary in the long run, isn't there a level of construction that simply becomes overwhelming? Similar to the amount of snow we've gotten in the Washington metro area lately – too much at once prevents forward progress in sometimes unexpected ways.

Answer: The NIST Gaithersburg site is very large with 578 acres. While it is true that there are, and will be, several projects under construction at the same time, most are of fairly modest sizes ranging from 4,200 square feet to 22,000 square feet and are dispersed around the site. NIST is actively planning for the construction and will have coordination procedures in place for construction related activities such as site staging, truck deliveries, and coordination of construction personnel security checks and parking. The current projects will be largely completed before significant work on the General Purpose Laboratories would start.

Likewise, the current major construction project at the Boulder site, the Precision Measurement Laboratory, will be largely completed before significant work on Building 1 would begin.

Scientific and Technical Research Services

The US Department of Commerce put out a press release on February 1, 2010, that says the President's budget "reflects the President's commitment to double the NIST laboratory budget by 2017, to support and enhance our world leadership in the physical sciences and technology."

56. Why is doubling the NIST laboratory budget by 2017 important?

Answer: The President's commitment to a doubling of the NIST laboratory budget by 2017 is important because it will provide NIST with the necessary resources to address significant economic challenges facing the nation today and in the years to come. Investments in science and technology are the foundation for the innovations and technological breakthroughs that will be key to our nation's long-term economic growth and prosperity. Today, the NIST Laboratories address increasingly complex measurement challenges. For example, NIST develops measurements focusing on the very small—nanotechnology devices—and the very large—skyscrapers, and develops methods for characterizing everything from strands of DNA for forensic testing, to the performance of walk-through metal detectors. Working closely with U.S. industry and academia, NIST plays a central role in advancing and maintaining this technology support system which helps enable innovations and future technologies that lead to the jobs of the future.

Several recent trends have highlighted the urgent need for expanded investment in this technology support system, and for increased investment in NIST programs:

In the area of manufacturing, U.S. industry faces relentless competition that has trimmed the nation's share of global manufacturing output. To reap the economic benefits of our ability to innovate, our nation's manufacturing sector must be able to renew itself by adopting new technology and growing into new markets.

Newly emerging technologies such as an electric-power Smart Grid and national health care information systems also promise to transform our society and revitalize the U.S. economy. To be effective the many interconnected components in these systems must be fully interoperable, to allow information to be exchanged and used seamlessly across the system. NIST has deep experience and technical expertise in this field, and is helping to establish a framework of standards and related test protocols, and conformity assessment requirements to ensure seamless, end-to-end interoperability for both of these technologies.

Another major challenge facing the nation is in the area of cybersecurity. Cybersecurity is vital to the economic 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 life-critical functions such as air traffic control and electric power distribution. Our nation's computers face ever-increasing threats from malicious individuals, organizations, and nation states. Effective computer security tools are often too complex for most administrators to understand and use. This allows many attacks to succeed, causing significant damage and undermining confidence in vital commercial and public information systems. 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.

By focusing on these challenges and others, NIST will continue to provide the Nation with unmatched measurement capabilities, tools, and facilities that provide key support at every level of the Nation's innovation system from ground-breaking basic research to the development of standards that promote fairness in the marketplace.

57. Why should the initiatives included in the fiscal year 2011 budget be funded in the current economy?

Answer: The FY2011 request funds initiatives that address critical national needs. A major focus of the NIST FY2011 budget request is manufacturing, with initiatives targeting sustainable manufacturing, advanced manufacturing capabilities (including nanomanufacturing), biomanufacturing, and the measurement science barriers to the manufacture of advanced 3rd generation photovoltaics. Additionally, the request funds immediate needs for interoperability standards for enabling the Smart Grid and Healthcare Information Technology, both of which impact the current and future economy. The request also funds Cybersecurity efforts vital to the economic and national security of the U.S., as well as additional postdocs for NIST to gain access to outstanding scientific talent from the Nation's universities whose skills will contribute to addressing these critical national priorities

58. How does the fiscal year 2011 request complement the funding provided through ARRA and in fiscal year 2010?

Answer: The FY 2011 request builds upon work initiated in the FY 2010 request, continuing and expanding priority work in the area of Smart Grid, Healthcare Information Technology, and cybersecurity. NIST's ARRA funding was by and large focused on promoting efforts outside of NIST (e.g., through research grants and contracts), and is not retained in NIST's core programs except for new facilities or equipment that augment NIST's measurement capabilities. There is also a \$3.4 million requested increase for the NIST NRC Postdoctoral Research Associateships Program to maintain some of the momentum provided by the ARRA funding for the program.

The budget requests an additional \$3.4 million for strengthening STEM education through the NIST National Research Council Postdoctoral Research Associates Program.

59. How much base funding is already provided for this program?

Answer: Of the \$11.4 million of its regular base funding in FY 2011 for its ongoing STEM activities, \$10.6 million is for the NIST NRC Postdoctoral Research Associateships Program.

60. How many new postdoctoral positions will this fund annually?

Answer: The proposal will fund up to 23 new positions.

61. When was the last time the funding level for this program was increased and why should it be increased now?

Answer: In the last 15 years the funding for the NIST Postdoctoral Associateships Program has only been increased slightly by Adjustments to Base (ATBs). In recent years, NIST has been maintaining the program at approximately 30-35 new postdoctoral associates per year, down from previous hiring levels of 40-45 associates per year. The requested increase of \$3.4 million will enable the program to return to a more appropriate level of awardee/applicant ratio, which had dropped to less than 15 percent, from a previous level of 30-40 percent. NIST anticipates that raising the awardee/applicant ratio above the current level will encourage more highly-qualified candidates to apply, thereby increasing the pool of highly-qualified applicants from which to award.

In addition to the 23 new positions, the initiative will support continued salary increases for incoming postdoctoral associates, which follow the cost of living guidelines, and for other associated program cost increases. This will allow the program to remain competitive with similar postdoctoral programs, and maintain the consistent highly qualified level of applicants and subsequent awardees.

62. How does this program advance NIST's mission and the Nation's priorities?

Answer: The NIST NRC postdoctoral associates, skilled in the latest university research, participate in measurement research that advances NIST's mission, exposes permanent NIST staff to new ideas and skills developed at U.S. universities, and help NIST respond more quickly and effectively to new industry measurement and technology needs. In turn, the postdoctoral appointments allow the Nation's best young scientists and engineers to participate in state-of-the-art mission-oriented research in association with senior NIST technical staff and using the advanced research facilities at NIST. These opportunities support and encourage these well-qualified postdoctoral associates to remain in science and engineering careers. The program enables NIST to have access to top-notch talent in emerging areas and is a key source of new research personnel for NIST. The initiative also supports the President's Science, Technology, Engineering, and Mathematics (STEM) education goals.

63. Why is STEM education important?

Answer: The Administration believes that reaffirming and strengthening America's role as the world's engine of scientific discovery and technological innovation is essential to meeting the challenges of this century.

Multiple documents and studies from the National Academy of Sciences' 2007 report "Rising Above The Gathering Storm" to the America COMPETES Act, 2007 to studies from the American Physical Society, the American Chemical Society, the Council on Competitiveness, the National Association of Manufacturers, and a host of organizations document the importance of strong scientific and technological education as a cornerstone of a vibrant and capable hi-tech workforce that is necessary to generate the jobs that produce the standard of living to which we are all accustomed.

64. How does this increase complement the ARRA funding provided for the same or similar programs?

Answer: This increase provides NIST the funds necessary to deal with the rising operational costs of the NIST NRC Postdoctoral Asssociateships program and help to restore the program to its previous hiring levels. The cost of support for the centrally-funded postdoctoral associates has increased much faster than the small increases in base funding over the last ten years. These operational costs include administrative, as well as essential salary increases for incoming postdoctoral associates to remain competitive with similar programs, and the accompanying increase in overhead. By increasing the program funding and enabling these additional new positions, NIST will have greater flexibility to more rapidly respond to new industry measurement needs. The initiative will provide the additional base funding for the program to maintain the postdoctoral program awards at least at those of previous hiring levels, once the effects of the one-time ARRA funding expires.

Ranking Member Frank R. Wolf

Questions for the Record

NIST & Competitiveness

1. **The FY11 request continues the commitment to double the NIST budget, but defers that goal, pushing it from a ten-year path to an eleven year path. When the doubling initiative began the primary objective was basic research in the physical sciences on areas with a potential for transformational change, such as nanotechnology and quantum physics and computing. The FY11 request, however, seems focused on specific applications to the energy, environment and healthcare sectors. What are NIST's core activities and competencies, and how are those strengthened by, and featured in, your program initiatives?**

Answer: The priority focus of NIST under the COMPETES Act and in the President's FY 2011 request is still the NIST Laboratories. NIST provides the U.S. with unmatched measurement capabilities, tools, and facilities for measurement. The NIST Laboratories work at the frontiers of measurement science to ensure that the U.S. system of measurements is firmly grounded on a sound scientific and technical foundation. The measurement science research at NIST is useful to all science and engineering disciplines. The NIST Laboratories directly support U.S. innovation and industrial competitiveness by developing new measurement instruments and facilities to address critical measurement barriers to innovation; disseminating validated measurement methods and protocols; providing reference data, reference materials, and calibration services to ensure that industry-performed measurements are traceable to NIST standards; and developing testing protocols and supporting laboratory accreditation programs. The basic research in the areas mentioned in quantum physics, nanotechnology, and computing, as well as others is still the core foundation and driver of NIST's efforts today. The FY 2011 requests strengthens NIST's capabilities and ability to deliver the critical services and tools described above in areas that will address today's major challenges and issues.

2. **In previous years the Committee has been told that NIST formulates its budget request initiatives by identifying scientific "barriers to innovation", then figures out which ones are amenable to physical science solutions. Is that the approach you used in coming up with your FY11 initiatives? And if so, can you give us examples?**

Answer: NIST works closely with stakeholders in industry and academia to identify critical measurement and standards challenges. For example in the FY 2011 Request NIST worked with Amgen, other biologic drug manufacturers, and the FDA to determine what were some of the main measurement barriers to a) effective regulation, and b) to the cost effective manufacture of biologic protein

drugs. Their input was critical to focusing planned NIST measurement research activities on problems likely to have the biggest impact.

3. In general, how do you identify which specific research activities will have the greatest payoff in terms of innovation?

Answer: The breadth of technology in the U.S. economy results in a broad technical portfolio for NIST. The NIST programs must maintain technical leadership in measurement science, while also responding effectively to the rapid pace of technological innovation. To meet this challenge, NIST has developed a multi-year planning process to support program and budget development. The intent of the planning process is to develop programs that:

- Focus our mission, authorities, and programs for maximum impact
- Apply technology to address critical national needs
- Maximize impact through excellence, leverage, and efficiency.

The planning process involves creating and maintaining program plans with discrete goals, objectives, and performance measures. The program plans address critical topics within a set of Investment Priority Areas (IPAs), which were established by NIST specifically to guide the development of new programs and budget initiatives. These were Buildings and Physical Infrastructure, Energy, Environment, Healthcare, Information Technology, and Manufacturing.

To be prepared for tomorrow's needs, NIST is looking to obtain earlier and broader involvement of customers and other stakeholders. In FY 2010, NIST is initiating an external needs assessment workshop series to provide an opportunity for stakeholders to lay out external drivers and/or opportunities for specific technology focus areas. The focus areas of NIST's workshops in FY 2010 will be advanced solar technologies and greenhouse gas measurements.

NIST's planning also is augmented through interactions with a wide range of external stakeholders including Federal advisory committees, industrial consortia, and joint road mapping activities.

4. The portion of NIST funding that is targeted for doubling also includes your funding for the construction of NIST labs. You are requesting \$125 million in FY11 for renovations and maintenance at the NIST labs in Boulder and Gaithersburg. How are these investments linked to achieving the research efforts you have just described? In a climate of limited resources, how should the Committee view the relative priority of your requested increases for research and construction?

Answer: The NIST Boulder facilities (Building 1) are nearly 60 years old and the NIST Gaithersburg facilities are over 40 years old. The initiative funding requested for the NIST Construction and Research Facilities is integral to the

entire NIST operations, not only to the work proposed in the FY 2011 initiatives. The infrastructure renovations will reduce research delays caused by unstable environmental conditions (e.g. temperature or humidity), enable better quality of measurement products, and ensure the health and safety of the entire NIST staff. Therefore, we view these "Renovations" initiatives as having an equal level of priority to the research initiatives as they are essential to the timely and proper execution of all the NIST technical work.

- 5. The largest item in your Construction request is \$38 million for the renovation of Building 1 in Boulder. Can you tell us what the full multi-year cost of this renovation will be, how long it will take, and why it is important?**

Answer: The nearly 60-year-old facilities cause a productivity loss of at least 20 percent, according to the NIST Boulder Facilities Review Team Report of 2006, and prevent NIST from performing the most demanding research and measurement needed by industry and the scientific community.

The project as requested will take a total of \$54.4 million to renovate the space needs required by Boulder measurement research scientists. This allows the renovation of approximately 46,400 Net Assignable Square Feet of L3² performance laboratory space. With the \$12.0 million provided in FY 2010, NIST will complete the renovation design and perform limited renovation of Building 3 for the relocation of the Instrument Shops. The FY 2011 initiative request of \$37.9 million enables NIST to complete exterior renovations in Building 1, Wings 3, 5, 6, and the Center Spine as well as the interior renovations at Building 1, Wing 3 and a portion of Wing 5. The remaining wings will be renovated in the outyears, with future funding requests.

¹ L3 space has significant performance requirements for control of temperature, vibration, humidity and air cleanliness, but the requirements are not as stringent as L4 requirements. L4 space requirements will be met through the new construction of the Precision Measurement Laboratory, while L3 will be achieved through renovations.

Stimulus Programs

- 6. In addition to your regular appropriations for FY09 and FY10, you have received Stimulus funding of \$580 million, equaling almost three quarters of your regular FY09 annual funding level. At the end of FY09 you had obligated 21% and spent only 1% of that Stimulus funding. Can you bring us up to date on how those funds are being used and how they relate to economic recovery?**
-

Answer: At the end of FY 2009, we successfully procured 17 advanced scientific equipments, provided construction grants funding to four universities to help support the construction of new or expanded research science buildings, granted awards for Small Business Innovation Research, expanded the NIST Postdoctoral Fellowship program, created additional Postdoctoral fellowships and retained existing fellowships. In addition, design contracts for the internal construction facilities and maintenance projects were awarded.

7. Can you provide, now or for the record, the remaining unobligated and unexpended balances of your Stimulus appropriations, as of the end of January?

Answer: As of January 29, 2010, the unobligated balance of the Stimulus appropriations is \$310.1 million and the unexpended balance is \$560.6 million.

8. Your two largest stimulus programs are a grant program for lab equipment purchases and competitive research grants. Are you seeking funding in FY11 to continue any of these, or any other programs begun under the Stimulus bill? If so, how much and for which programs?

Answer: NIST is treating the Stimulus funding as one-year funding and we are focused on obligating it as soon as possible. NIST plans to spend the following allocations of Stimulus funding:

Equipment.....	\$108,000
ResearchGrants.....	\$34,125
PostDoc Fellowships.....	\$21,775
Fellowships Program.....	\$19,500
Research Contracts.....	\$16,600
IT Infrastructure.....	\$9,000
Internal Construction.....	\$172,000
Construction Grants.....	\$177,900
Administrative Support.....	\$21,100
Total.....	\$580,000

From those, we have currently obligated \$292.5 thousand (50 %). With the exception of the postdocs program, NIST does not plan on extending these programs post full expenditure of the Stimulus allocation, and thus, we are not seeking further funding for them in FY 2011. We are requesting a \$3.4 million increase for the postdocs program in FY 2011.

9. **Since NIST is not primarily a grant-making agency, I understand you planned to spend \$11 million of your Stimulus funding for management and oversight staffs at NIST, including grant, contract, and internal control specialists. Are these staffs now in place? Is there funding in the FY11 request to continue these positions (how much?), or will they be disbanded when the Stimulus funding expires at the end of this year?**

Answer: Yes, there are contractor staffs in place to support ARRA related contracts, grants, and internal control activities. Functions of the ARRA Program Management Office are paid by ARRA funds. These costs are not built into the FY 2011 request since we are treating ARRA as a one-time infusion of funding to NIST. An internal controls office has been established but is paid by non-ARRA appropriations since the majority of the work for this office, currently and in the future, will extend beyond ARRA related efforts.

Cybersecurity Initiative

10. **You are requesting an increase of \$10 million to develop stronger cybersecurity technologies to protect U.S. computer networks from attacks and crime. How much is currently in your base budget for cybersecurity activities?**

Answer: Our current base budget for cybersecurity activities is \$28.9 million.

11. **NIST is just one of the players in the interagency effort on cybersecurity. Who are the other players, what is NIST's unique role, and is your budget adequate for you to play that role effectively?**

Answer: The other main players are the National Security Agency (NSA), the Department of Homeland Security (DHS), the Department of Defense (DoD), and the White House. NIST's unique role is to develop standards and guidelines to protect all federal information technology systems with the exception of national security systems. Our cybersecurity budget has been growing at a reasonable pace so that we can help meet the Nation's ever-increasing cybersecurity needs while ensuring that the level of growth is manageable.

12. **Is a \$10 million increase proportional for NIST to keep pace with the other agencies that are active on this issue?**

Answer: Yes, the increase is proportional for NIST to keep pace. A \$10 million increase helps address the need to grow NIST's cybersecurity efforts significantly while not growing them too quickly—striking a balance that ensures we can fulfill our roles well.

13. What are the primary impediments to our ability to detect and thwart cyber attacks?

Answer: There are several serious impediments to preventing attacks and detecting the ones that occur. First, there is the sheer complexity of securing systems and keeping them secure; there are so many pieces of software to secure and a lack of standardized, automated technologies for securing them, not to mention the poor usability of many security controls, especially for home users and small businesses that have not gained the necessary cybersecurity expertise from awareness, training, and education efforts. Another major impediment is the increasingly dynamic nature of attacks, particularly with malware; the attacks change so quickly, are so numerous, and are transmitted through so many means that security software often lags far behind in the ability to detect and stop them. Computers are also exposed to a wider range of threats today because of the increasingly mobile nature of computing, and these mobile devices aren't protected by the enterprise security systems that protect their desktop computer counterparts at the office. Another major impediment is that attackers can easily masquerade as legitimate users, such as by stealing their passwords; this can make it very difficult to differentiate between benign and malicious activity. Finally, with so many attacks occurring, it is challenging to find the truly insidious attacks amongst all the "noise" generated by the other attacks.

14. One of the activities mentioned in your testimony is competitive grants to strengthen U.S. capabilities in cryptography. How would you describe the status of our current capabilities versus where they need to be?

Answer: Current cryptographic capabilities are adequate for today; our concern is being able to handle future threats. Cryptanalysts find new vulnerabilities in existing cryptographic solutions; ever-quickening computing capabilities further erode their strength; and new computing techniques such as quantum-based computing threaten to make whole classes of cryptographic solutions obsolete. It takes many years to develop stronger, faster, high-performance cryptographic algorithms, thoroughly evaluate them to identify weaknesses, develop and finalize standards, and get the algorithms widely adopted in commercial products and verified for correct cryptographic operation. Also, other countries have cryptographic research efforts focused at finding weaknesses in existing cryptographic algorithms that the U.S. relies on today. Thus, the U.S. needs to be more proactive in developing new cryptographic solutions, including cryptographic solutions to provide privacy-related functions, such as developing robust zero-knowledge authentication protocols that provide security while protecting consumer privacy. The FY 2011 request includes funds for competitive grants in this area of research.

15. Could you please submit for the record a description of the specific activities you would support with your proposed \$10 million increase, and also describe what additional activities you could fund should additional funds be available?

Answer: The activities to be performed with the proposed increase are:

- Developing a framework and plan for multifactor authentication that uses interoperable biometric or cryptographic credentials (in addition to passwords) to increase assurance of a user's claimed identity;
- Collaborating with academic and government organizations to strengthen U.S. standards for managing "cryptographic keys," secret numbers absolutely vital to protecting the confidentiality and integrity of sensitive information;
- Determining how to make security mechanisms more usable, so that it is easy for users to do the right thing and hard for them to do the wrong thing;
- Developing new security automation standards and creating sets of minimum requirements to more easily and effectively secure widely used software;
- Improving measurement of the fundamental properties of networked computers that make them either resistant or vulnerable to attacks;
- Conducting research on technologies to securely isolate information within a computer shared by multiple users; and
- Partnering with the financial services sector and several federal agencies to develop a critical infrastructure testbed for testing game-changing strategies for improving cybersecurity.

WEDNESDAY, MARCH 10, 2010.

ECONOMIC DEVELOPMENT ADMINISTRATION

WITNESS

JOHN FERNANDEZ, ASSISTANT SECRETARY OF COMMERCE FOR ECONOMIC DEVELOPMENT

OPENING REMARKS

Mr. MOLLOHAN. Good morning. Welcome, Mr. Fernandez. The hearing is called to order. We will hear testimony from Assistant Secretary of Commerce for Economic Development, John Fernandez, for the first time since his appointment in September, 2009. We look forward to working with you, John.

The fiscal year 2011 request for the Economic Development Administration is \$286.2 million, a 2.3 percent decrease from fiscal year 2010. This includes a \$2.1 million increase in salaries and expenses, and a \$9 million decrease in economic development assistance programs. The budget proposes significant changes within EDA programs, including an increase of \$86 million in the Economic Adjustment Assistance Program, a corresponding decrease of \$90.5 million in Public Works, and a decrease of \$8.5 million in the global climate change mitigation initiative fund.

EDA's mission is to create sustainable jobs. There is no other agency in the federal government with quite the same focus. From fiscal year 2004 to fiscal year 2008, EDA helped American communities create 350,000 higher skill, higher wage jobs at an average cost of \$2,500 per job. EDA is very good at its mission, even with a reduced staffing level.

In fiscal year 2008 Congress appropriated \$500 million in disaster funding for EDA. In fiscal year 2009 Congress appropriated \$150 million in American Recovery and Reinvestment Act funding for EDA, 98 percent of which is obligated. While there are some concerns with respect to the disaster funding, which we will discuss today, clearly EDA is filling a significant need in very short time frames with funding provided above the annual appropriation of close to \$300 million. That makes it all the more puzzling that the administration has proposed a reduction for EDA in fiscal year 2011.

In fact, instead of adding critical funding the administration wants to move funding from the Public Works program to the Economic Adjustment Assistance program. The rationale appears to be one of flexibility, but the net effect is a reduction in Public Works infrastructure project grants. Given the critical role these projects play in communities, and the fact that the demand for these projects remains constant, EDA should be at least maintaining, if not increasing, the Public Works funding level.

This is not to value Public Works projects over EAA projects. According to EDA grantees that testified before this Subcommittee in February the two programs should not be in competition with each other for funding; both are vital to the success of regional economies. Indeed, rather than debating the relative merits of each program the administration and Congress can agree that helping communities overcome the recent economic downturn is exactly what EDA is designed to do and together should provide the funding level needed to do it.

Mr. MOLLOHAN. Thank you for coming, Mr. Fernandez. And following Mr. Wolf's opening statement we will ask you to submit your written statement for the record and proceed with your oral testimony. Mr. Wolf.

OPENING REMARKS

Mr. WOLF. Thank you, Mr. Chairman. I want to welcome you to the Committee and look forward to hearing your testimony. I yield back, thanks.

Mr. MOLLOHAN. Thank you, Mr. Wolf. Mr. Fernandez.

OPENING STATEMENT BY ASSISTANT SECRETARY FERNANDEZ

Mr. FERNANDEZ. All right, thank you very much Mr. Chairman, and Ranking Member Wolf, members of the Committee. I have a very brief opening statement, and then I will really look forward to the exchange this morning.

As you know, I have been involved in economic development for probably twenty years now at the street level. As a mayor, as a private investor, really working at that grass roots level to try and translate economic strategies into meaningful investments to grow, in my case, Bloomington's economy. Having that street level experience I can tell you that I have seen the good and the bad of the impacts of a changing, very competitive global economy. And there is a lot of things I do not know. But one thing I think I can say with absolutely certainty is that the world has changed. And as the only federal agency with economic development as our sole mission, EDA is poised to provide leadership with forward looking job creation strategies built around collaboration and innovation.

EDA is a central part of the Obama administration's national strategy to build a stronger foundation for long term job creation and prosperity for American families. Our budget proposal for fiscal year 2011 reflects the importance of creating competitive, high performing, regional economies as the building blocks for that sustainable growth. As you noted, the President's budget proposal includes \$246 million for our economic development investment programs. A key component of that long term strategy is to build these regional innovation clusters. This is part of the administration's place-based initiatives. In our budget we target \$75 million towards planning and matching grants within our EDA system to help create these regional innovation clusters that can leverage the competitive strengths of various communities.

And while it is not a specific budgetary program, the regional innovation clusters represents a really important framework, strategic framework, for how we target our overall programmatic in-

vestments. Consistent with our fiscal year 2010 budget, EDA plans to continue to fully fund its network of economic development districts, university centers, and our research agenda. As you noted, we are proposing \$16.5 million for our global climate change mitigation fund that will help EDA enhance our contribution to the expanding green economy.

As I stated earlier, the world really has changed. And it is critically important, in my view, that EDA's limited resources are allocated within our programs in a way that align our investments with the emerging needs of the communities we serve. This is why in fiscal year 2011 our proposal shifts the majority of our program resources to the economic adjustment assistance program. We know that Public Works investments play a very important role in leveraging private investment and job creation. Yet we also know that in today's economic development challenges we need more flexibility, and the requirements of our communities go beyond just Public Works. Communities need more flexibility to develop strategic responses to the changing economy. These strategies include a broad mix of investments that address access to capital issues, work force training, retraining, systems for accelerating the commercialization of research and development, and establishing a strong entrepreneurial network. Together all of these elements, along with Public Works, help build the kind of ecosystem that is necessary today to support an innovation oriented, sustainable economic development strategy.

So Mr. Chairman, and Ranking Member Wolf, members of the Committee, I certainly appreciate the opportunity to have a discussion today about our budget proposal. I firmly believe that EDA can continue to be a driver for growth in distressed areas across the country. And we certainly look forward to continuing our work with the Subcommittee and the Congress to ensure that these important programs and initiatives are resourced appropriately and implemented properly. So I thank you for your time today and I look forward to answering your questions.

[The written statement of Assistant Secretary for Economic Development, John Fernandez, follows:]



Statement by
JOHN R. FERNANDEZ
ASSISTANT SECRETARY OF COMMERCE FOR ECONOMIC DEVELOPMENT
U.S. HOUSE OF REPRESENTATIVES, COMMITTEE ON APPROPRIATIONS
COMMERCE, JUSTICE AND STATE SUBCOMMITTEE
March 10, 2010 – 10:00 AM

Introduction

Chairman Mollohan, Ranking Member Wolf and members of the subcommittee, thank you for having me here today to testify on behalf of the Administration and the Economic Development Administration on the Fiscal Year 2011 budget.

When I got the call from Secretary Locke to lead this agency I was humbled by the chance to serve. I knew that President Obama and Secretary Locke were determined to renew American innovation and redefine economic development. As a former mayor, I have seen first-hand the impacts - good and bad - of our ever changing economy.

The EDA was an important partner with me and my community in Bloomington, Indiana when we faced the closing of a major consumer electronics company. EDA helped make it possible for us to collaborate with public and private sector partners to develop our strategy and implement it.

And now, as the leader of EDA, I am proud of the agency's reputation of fostering sustainable economic growth, cultivating job creation and encouraging innovative solutions that improve local and regional economic development outcomes. EDA's success is due in no small part to its focus on job creation and its flexibility of programs.

We are the only federal agency with economic development as our exclusive mission and I believe we are poised to provide leadership on the federal economic development agenda with our forward-looking approach to economic development.

The Administration is committed to moving the nation from recovery to rebuilding our economy by building a new foundation for the long-term job creation and prosperity for all American families. EDA is an integral part of President Obama's economic recovery team and is committed to sustained economic growth through its efforts to create jobs, harness innovation and increase capital investments in economically distressed areas.

EDA's 2011 budget reflects the importance of competitive, high-performing regional economies as the building blocks of sustainable growth, consistent with the FY 2010 budget request, which was an increase of 6% over the FY 2009 budget. We deeply appreciate the strong support from the Congress for our FY 2010 budget proposal.

EDA's FY 2010 budget also reversed a trend of reduced salary and expense money that had been prevalent for many years. Looking back at past budgets, EDA had 265 full time employees in 2000. By FY 2009, EDA's staff was down to 175. Last year's increase

will allow us to properly support the agency's capacity to provide the strong policy development and program implementation that are critically needed in these tough economic times

EDA Successes- FY 2009 Highlights

EDA focuses on economic development by providing unique planning and investment programs to help communities succeed in our global economy.

EDA works directly with local economic development officials through a bottom-up approach that both supports and relies upon a well-established network of local and regional economic development professionals. This collaborative approach results in grant investments that are well-defined, timely, and linked to a longer term sustainable economic development strategy. Linking EDA's investments to a community's strategic economic development plan enables the federal government to better leverage public and private sector investments.

EDA advances regional approaches through both its planning program and its funding priorities for implementation grants. EDA's flexible program portfolio and organizational structure allows the agency to customize federal assistance in ways that offer the most effective investment to help communities succeed in our global economy.

Rather than a one-size-fits-all approach, EDA can fund customized solutions developed by our local partners ranging from traditional infrastructure investments, revolving loan

funds, planning grants and other resources. By quickly responding to the often changing economic needs of communities, EDA is able to help speed the transition to a more entrepreneurial, innovation driven society.

In total, EDA received 1,338 grant applications in FY 2009. We funded 70 percent of the total application requests. The following table breaks this down by program. In addition, by the second quarter of FY 2010, we have already received 924 applications, totaling \$1.1B.

EDA FY 2009 Activity by Program				
Program	EDA \$ Approved	# Approved	EDA Application \$	# EDA Applications
Public Works	\$145,074,306	91	\$530,535,742	222
Planning	\$30,880,885	463	\$32,829,383	479
GCCMIF	\$7,636,885	9	\$7,636,885	9
Econ Adjustment	\$38,879,918	71	\$422,763,149	133
Disaster Supplemental	\$184,640,688	137	\$485,545,901	249
Disaster	\$948,035	3	\$948,035	3
ARRA	\$147,000,000	68	\$211,484,318	91
Trade Adjustment Assistance	\$13,904,051	11	\$13,904,051	11
Technical Assistance	\$9,676,027	82	\$24,919,829	140
Research	\$30,000	1	\$30,000	1
Totals	\$578,670,795	936	\$1,730,597,293	1,338
Notes:				
(1) Amounts do not include Reimbursable Funds				
(2) GCCMIF Funding also is included in some PW and EA projects in FY 2009				
(3) Some pending applications that were or will be considered in a later year are not included				

EDA's 2009 investments supported the President's strategic focus on job creation while building a strong foundation for sustainable economic growth. For example, EDA provided a \$2.1 million Economic Adjustment Assistance investment to Philippi-Barbour

County Regional Airport Authority for construction of infrastructure, two airplane hangars, and office space for an aviation industry incubator for aircraft manufacturing and repair at the airport. The jobs saved and created and the new businesses developed will help the region recover from the decline of coal industry employment and severe floods. This investment is expected to leverage \$3.2M in private investments.

EDA also invested \$925,000 to the Institute for Advanced Learning and Research (IALR) in Danville, Virginia to support the establishment and operation of a Technology Commercialization Team for Southside Virginia. The Team connects IALR research programs with entrepreneurs, small businesses, capital sources, and business assistance programs to promote the commercialization of technology for the start-up and growth of high-tech, global businesses in the region. EDA's assistance to IALR aided the start-up or expansion of 30 companies through successful technology commercialization, which is promoting greater economic diversification for the region.

Fiscal year 2009 was also notable of course for the agency's response to the passage of the American Recovery and Reinvestment Act, for which I am very proud even if most of the accomplishments occurred before my tenure began. EDA effectively responded to the challenges of obligating funds quickly while balancing a need for immediate impact that did not sacrifice long-term, sustainable economic development. EDA received \$150 million of Recovery Act funding and by the end of last September—a full year ahead of schedule—we obligated 100% of our allocation, funding 68 projects in 37 states. Overall, we invested \$50 million to promote the development of regional innovation

clusters, \$37 million to promote business incubation, \$27 million to promote green jobs, and \$11 million to promote trade, connecting regional economies to the global marketplace. These projects are estimated to produce \$981 million in private investment over the next nine years, a return on taxpayer investment of \$6.67 in private capital for every EDA grant dollar invested.

EDA 2011 Budget

EDA's investment strategy is designed to build upon these key goals and initiatives to establish a foundation for sustainable job growth and the building of durable regional economies throughout the United States.

To achieve these goals, EDA requests \$246 million for Economic Development Assistance Programs (EDAP) and \$40.2 million for Salaries and Expenses (S&E) in this FY 2011 budget Request.

As part of the Administration's place-based initiative, the budget targets at least \$75 million toward planning and matching grants within EDA to support the creation of Regional Innovation Clusters that leverage regions' competitive strengths to boost job creation and economic growth. While not a specific budget program, the Regional Innovation Clusters initiative represents an important strategic framework to guide our overall programmatic investments. Actual investments supporting Regional Innovation Clusters cut across several EDA programs.

Consistent with our FY 2010 budget request, EDA will continue to fully fund its network of Economic Development Districts and Indian tribes, University Centers, and the Research Program. With a budget request of \$16.5M, EDA will continue to address Global Climate Change, enhancing this program's proven contribution to the definition, development and growth of the "green economy," environmental sustainability, and energy efficiency. A majority of EDA's remaining funds, \$167.8M, will be allocated between the Economic Adjustment Assistance program, \$125M, and the Public Works program, \$42.8M.

EDA's request of a \$2.2 million increase in our S&E budget reflects only an adjustment to our base appropriations after last year's significant increase in funding to rebuild the agency's capabilities.

Closing

Mr. Chairman, Ranking Member Wolf and members of the subcommittee, thank you for your time today, and for inviting me to address the FY 2011 Budget Request. EDA is proud of its reputation as an agency that can achieve positive results and one that does not shy away from innovative solutions or rigorous evaluation of its programs in the interests of improving local and regional economic development outcomes. I believe that EDA will continue to be a driver for growth in distressed areas of our country. I look forward to working closely with Congress and to answering any questions you may have.

REORGANIZATION

Mr. MOLLOHAN. Thank you, Mr. Fernandez. Mr. Fernandez, last week the Committee was notified of a reorganization of EDA, and you spoke to it in your testimony. Elaborate on the purpose of this reorganization for the Committee?

Mr. FERNANDEZ. Yes. The reorg is designed, essentially, to streamline our programs, make it clear in terms of some of the responsibilities within EDA. And most importantly, to put a focus on particularly the Office of Innovation and Entrepreneurship as a way to focus EDA's investments around this critically important agency item for the Obama administration and the Department of Commerce. It is a budget neutral proposal, and we think it really helps align our organization properly for the challenges we face today.

Mr. MOLLOHAN. Elaborate on it. Streamline your programs? How does it do that?

Mr. FERNANDEZ. Well, as part of my work, Mr. Chairman, when I first came on board, I reached out to the EDA staff. Not just in Washington, but across the regional agency offices. And I asked them, what are some of the things we need to do to better serve their needs as well as headquarters' needs? And one of the top responses we got was the need to rebuild capacity within our Office of Regional Affairs, particularly around the subject matter expertise for our programs. So we have proposed within our reorg adding positions that are programs experts that can help serve in policy development but also guidance and implementation through, the programs we administer out in our regional offices.

We have also cleaned up some of the minor organizational structure in regard to our external affairs. The way the organization is currently structured that office was referred to as the External Affairs and Executive Secretariat. And for most of our stakeholders they have no idea what that means. But when you refer to that division, which includes our legislative affairs, public affairs, congressional relations, External Affairs just is a cleaner structure for that.

We also modified some of the structure within our Finance and Administration Office that I think makes it much clearer in terms of their programmatic focus.

Mr. MOLLOHAN. What does this reorganization mean to regional offices versus the home office?

Mr. FERNANDEZ. Most importantly, as I noted, it means that we are going to have better capacity to help them do their jobs.

Mr. MOLLOHAN. Well, by that I mean what is the flow of personnel? Is there any dramatic flow of personnel from headquarters out to the field, from the field to headquarters, an expansion of the field versus the headquarters?

Mr. FERNANDEZ. A good clarification is that, if you looked at the staffing levels of EDA since, really, the year 2000 we went, in total, from 255 employees to 175. And those reductions were felt within the headquarters offices as well as our regional offices. With the support that we received with the 2010 budget, for which we are very grateful, we have additional resources now to try and rebuild the capacity of the agency. And as we are deploying those re-

sources, we are doing a mix of investments in staffing in the Washington office to build that programmatic expertise that our regional offices have asked for. But also adding staff in the field offices as well. So I think the split is essentially twenty/eighteen, twenty here and eighteen in our regional offices.

ECONOMIC DEVELOPMENT REPRESENTATIVES

Mr. MOLLOHAN. The trend toward cutting the regional staff had dramatic impact in my state. As a matter of fact, we lost a state EDA representative. In the bill last year we spoke to that. Where are you in addressing additional personnel at the state level across the country?

Mr. FERNANDEZ. What we have done is we went to the regional directors and said, "Here is the additional resources we believe are available. Here is what we think it means in terms of total full time equivalents. You tell us how you think you can best deploy them, and what you need the most." So most of those positions will be in what we call economic development representatives, or economic development specialists. It is really focused on the outreach that we provide within the regions and the states that each office serves.

I might note that an important body of work that is going on right now within the agency is centered around how we do our business in terms of the process improvements. And that is being led by the leadership in our regional offices. And as part of that process we hope we can streamline, add efficiency, and hopefully be able to deploy even more resources towards that outreach function, which is critically important.

In the budget there was language about exploring adding EDRs, if you will, to each state. We have analyzed what that would mean budgetarily. It would add approximately \$4.4 million, maybe \$4.1 million, annually to our staff requirements. The up front costs would include a couple more millions dollars in terms of office set up, etcetera. But the way we are structured now is, we think, appropriate in terms of rather than trying to create an office in all fifty states, having these regional teams that can provide a broader range of services than one individual might be able to do in a particular state. And it is that team approach that we think provides a broader, better service.

Mr. MOLLOHAN. What kind of feedback are you getting, if any yet, on your team approach versus having a representative in, at least one in every state?

Mr. FERNANDEZ. Well, most of what I hear from stakeholders has to do with resources. I think we have received good feedback in terms of level of service. One of the challenges I think would occur, if you deployed a system where you would have representatives in every single state, or an office in every single state, that structure would not really align well with the resources we have. You would, I think, create a lot of expectation management issues. It is hard to justify having one person in one state that might get a grant one year, they may not the next year. So by having these teams we can really deploy a broader system, I think, to elevate the services that we are able to provide.

Mr. MOLLOHAN. I really did not understand what you just said. It would create an expectation, one person in one state getting a grant, and with the team—

Mr. FERNANDEZ. Well—

Mr. MOLLOHAN. What were you saying?

Mr. FERNANDEZ. Let me say it a different way. The costs associated with having a stand alone office with a person serving an entire state, the programmatic resources behind that just are not there. I mean, if we were in 1975 and EDA's budget was \$6 billion, then that kind of system might make more sense. So I think aligning the organization structure to fit with the programmatic resources we have requires us to think about how we serve regions not individual states.

Mr. MOLLOHAN. Well, you are operating within the realities of a budget and I appreciate that. On the other hand, not having access to an EDR can be really difficult in getting advice and counsel to a state. States are very large entities. Mr. Wolf.

JOB REPATRIATION

Mr. WOLF. Thank you, Mr. Chairman. Let me try to see if we can get you to agree to do something here. Maybe we could do it in Virginia and in West Virginia, and Pennsylvania, and Texas, if that were the case. Although Mr. Schiff, his district is very affluent and I do not think you really operate too much there, nor do you in my district, actually, too much. So I am thinking more in terms of the country than I am about my district. And I think, the other day I asked the Secretary about a repatriation program whereby we would repatriate jobs from other countries. Right now there is competition, and you are from Indiana; Elkhart, Indiana has an unemployment rate of what?

Mr. FERNANDEZ. Too high.

Mr. WOLF. Too high. I even saw an article the other day that that program Feed the Children, which I have been, I have seen in African villages, was in Elkhart, Indiana giving out food. And so if we could repatriate jobs from other countries of American companies, and I asked the Secretary about it the other day. He had someone call, and I am not going to say who, and basically the answer was that the Department is not doing anything with regard to this. And I would like to see if we could get the administration to put together a team and contact and look at the top twenty-five companies, U.S. companies, not foreign companies but American companies, that are doing business in China, in India, in, such as call centers, in Bangladesh and Mexico, and put together a team, or maybe work with my Governor, and none of the jobs would come to my district, I understand that. But work with two Democratic governors and two Republican governors, because if you do it the whole country wide it gets dissipated. And see if we can try to repatriate. Ask some of these CEOs to bring back jobs that have left this country. American companies, because of whatever reason, have relocated.

For instance, there was a company in Virginia, I spoke to them. They have repatriated a call center back from India. They wanted to be, the people were willing to work at a lower salary living down in the Blacksburg area. Perhaps their family is from Blacksburg,

perhaps they went to Virginia Tech, perhaps they like hunting and fishing and do not want to live in a metropolitan area. But they were very pleased to be able to take what they had in India, move it back to the United States, pay a good salary. Maybe not as high as it would be if they were in downtown New York City, or downtown Washington.

And so what I would like to ask you to do, if you could maybe take the Chairman's state of West Virginia. What is the unemployment rate in West Virginia?

Mr. MOLLOHAN. In northern West Virginia we are doing better than the nation.

Mr. WOLF. Well, wherever it be.

Mr. FATTAH. We still need jobs, though.

Mr. WOLF. It is jobs. Well I go back, I went back to my old neighborhood, and Mr. Fattah will know it. It is in southwest Philadelphia. When you take the train from Washington to New York you go right by my high school. We had the largest General Electric factory in the country, I believe it was, called the switch gear division. It is gone. It is at 70th and Elmwood, went to 67th. It is gone. It is over. It is an empty field now, and the tumbleweeds just blow. Nothing is there. And the old neighborhood is boarded up.

And if you have ever been to Trenton, New Jersey, it is the capital of New Jersey. There is a bridge that goes from Trenton over to Pennsylvania that has a sign that says, "Trenton makes, the world takes." Trenton is not making anything anymore. So what I would like to see us, rather than us just having a general question about, you know, you are going to go and look, I would like to ask you, John R. Fernandez, on behalf of this administration, to work with this Committee and perhaps, Mr. Rendell is a Democrat, the Democratic Governor, and find two Republican governors, Bob McDonnell from Virginia one of them, to see about repatriating jobs, bringing them back from other countries. I mean, that is low hanging fruit.

In Martinsville, Virginia, which is not in my congressional district, the unemployment rate is 20 percent, 20 percent. There are many people there who would love to be in a call center, who would love to do these things. And so could I ask you officially if you could head up, and I know I am pushing a little bit, but to head up a program whereby working with some members up here you will contact the top twenty-five companies, so it will take a little bit of research. You are going to have to find companies. Intel is in India, Intel is in China. So Intel would be one, and twenty-four other companies that are American companies, that want to do business, love America, but for some reason have put their business outside as they have expanded. To give them an opportunity to do something to repatriate, to do a patriotic thing. And I think now American companies would like to return home. And to do it on an incentive basis rather than to say, "If you do not do this we are going to attack you, condemn, and we are going to rip you apart." But put some incentives out and see if we could pick maybe four states that are in deep need and see if we could encourage, put together a team. And I think you would have to literally go around and meet with the twenty-five CEOs once we found out where their lo-

cations were. But to bring those jobs back to the United States, what do you think?

And when I spoke to one of the people, and I am not going to say who, the other day, the Secretary had the person call me. Frankly, the administration is not doing anything in this area. And the previous administration did not do anything in this area. It is kind of a new concept, a new idea. Now, there may be ways that the Congress could give, later on give tax credits, or benefits, or something, or maybe the state could pass a law whereby there would be no taxation for five years, or something, to give an incentive. Or maybe a locality would, say Bloomington would say, "We are going to give you free space." Or, "We are going to give you some land that the EDA has that you can develop a call center." But could we actually do this to see if we could create some fundamental jobs so that Americans could have jobs, but yet not do it in a retaliatory method but in a positive, and incentive method? Does that make sense to you? Or—

Mr. FERNANDEZ. I can say a couple of things about that. First of all, we are working with some of the staff on the Senate side as well as within our Oversight Committee for reauthorization. And specifically there is a lot of discussion going on around the notion of onshoring, and looking at how we may incorporate an initiative within EDA's reauthorization to address the very issues you are raising. The proposal that was made by Senator Warner, and I believe it is—

Mr. WOLF. Mark? Mark Warner from my state?

Mr. FERNANDEZ. Yes. Some of the language from his onshoring bill has been included in the reauthorization legislation that is working its way through the Senate. And in that legislation it creates an opportunity for the EDA to be a real partner with states and localities as they try and repatriate or recreate those technology jobs, manufacturing jobs in the very areas that you are discussing.

Mr. WOLF. Well I think Senator Warner was responsible—

Mr. FERNANDEZ. He was.

Mr. WOLF [continuing]. For bringing this company back to the State of Virginia from I believe it was India, if my memory is correct.

Mr. FERNANDEZ. And I can also make the point—

Mr. WOLF. But could we do it, could you do a pilot now? Before we wait, I mean when is the reauthorization, and God bless it, and I think it is good, and I will talk to the Senator's office about this. But could we not, since Mark Warner has taken the leadership, could we not do something that you all go back to the Secretary and say, "Here is an opportunity to create some jobs." You know, "The Committee asked, I would like this responsibility." You were a mayor, you were a political official. You put together a team and maybe pick not the top twenty-five, the top five companies to do an inventory, American companies that are abroad, that are doing jobs that could be repatriated. So while we are waiting for the authorization, do you expect that to pass by the end of this year?

Mr. FERNANDEZ. I can only express my hope that it will.

Mr. WOLF. Yeah but see, I notice that, that is good, but we cannot wait.

Mr. FERNANDEZ. And just to be clear—

Mr. WOLF. I mean if you are out of a job, I mean, the country needs to create jobs. We need to create real jobs, where people get up in the morning, and go to work, and do things that make a difference for the country. And you all should be excited about it because the unemployment rate is increasing, it is not decreasing. And we are in record debt. Anne Applebaum did a piece the other day for the Washington Post saying we are going to be Greece. We are, if you want to see the future, it is Greece. And so if we could get you to commit today, this is a friendly question, that you are going to do this, or you will go back and talk to Secretary Locke to see, and maybe we could pick the states here, West Virginia, and Pennsylvania, and Virginia, and Texas. But poor areas of, I mean, we are not going to bring this to Houston because Houston is big, and glittery, and vibrant.

But areas where, there are some communities, when I drive up to go to a football game at Penn State I go through little towns that are empty, they are boarded up. The steel mills have gone. The factories have closed down. Have you ever taken the train from Washington to New York?

Mr. FERNANDEZ. No.

Mr. WOLF. If you ever do, get on the train and do not read your book. Just look to the right and the left. The factories are closed. The windows are broken. The graffiti is all over the walls. The trash is all, weeds are growing out of the buildings. This is the infrastructure. This would go through, I think, Mr. Fattah's district. And I think we have an opportunity in something that is not a partisan thing to see if we could refurbish, because those people that live in those areas, they want jobs. They want to get up in the morning. They want to go out and do something.

So if we could get you to commit that you will see if you can get the Secretary to designate you as the person that will do this, to see if we could begin to repatriate now, and then in anticipation of the reauthorization. Could we get you? Or could you look at that and tell us if you—

Mr. FERNANDEZ. We are always interested in working on good ideas.

Mr. WOLF. It is a good idea.

Mr. FERNANDEZ. And we are certainly willing to continue the dialogue and look for opportunities—

Mr. WOLF. I do not want a dialogue. I—

Mr. FERNANDEZ. No, I understand. But I—

Mr. WOLF [continuing]. Bad word. I just want to create jobs.

Mr. FERNANDEZ. We all do.

Mr. WOLF. This country is sinking. We are sinking. We are sinking. We have \$37 trillion of debt. We owe money to the Chinese. The Chinese are, are you Catholic? The Chinese have thirty-four Catholic bishops in jail. Are you Protestant? The Chinese have hundreds of Protestant pastors in jail. Are you Buddhist? The Chinese have plundered Tibet. Are you Muslim? They are persecuting the Uighurs. They are compromising this nation. So I do not want a dialogue. If it is a dialogue I withdraw the question. I just want to know, yes or no, will you take this back to the Secretary to ask

to do this? Or if it is a discussion, forget it. I just want to know, will you go back and talk to him?

Mr. FERNANDEZ. I can put it on the table. I think there are many ways to address these issues, and we are working very hard on a daily basis to create jobs.

Mr. WOLF. The jobs—

Mr. FERNANDEZ. I was in Martinsville two weeks ago. I understand. I may not have taken a train to New York, but I have been in many parts of the country, my own backyard and elsewhere, where I see the devastation, and I share that.

Mr. WOLF. And therefore, and therefore what will we do? I mean, I, this is, I wanted to, will you then to go back to the Secretary and work with the governors?

Mr. FERNANDEZ. I can certainly talk to him about this proposal, absolutely.

Mr. WOLF. Okay. And if you could let us know. And maybe fit the Governor of West Virginia, and the Governor of Pennsylvania, and the Governor of Virginia, I do not know, the Governor of Texas. But I know my State would like to participate and frankly these jobs are not going to go to my area. But I am tired of just seeing us lose all these jobs, and where Americans could do the jobs. And we could have a renaissance in this nation. And quite frankly, with all due respect, the previous administration did not do it, but you guys are not creating new jobs. A lot of that stuff went out, and it is just spend, spend. I am talking about low hanging fruit that we could get these jobs, bring them back. They could go to a Martinsville, they could go to West Virginia, they could go to parts of Pennsylvania, or they could go, and we could do something. Or at least we would know that these companies are not going to come back, or they will, and then see if there is an incentive package that you all would be able to give, or maybe we could do something in the tax code, to kind of give these companies an opportunity. So if you could do that and let the Committee know I would appreciate it.

Mr. FERNANDEZ. Sure.

Mr. WOLF. Thank you.

Mr. MOLLOHAN. Thank you, Mr. Fattah.

Mr. FATAH. Thank you, Mr. Chairman. And Mr. Mayor, it is good to see you.

Mr. FERNANDEZ. Thank you, I am glad to be here.

Mr. FATAH. And in a new role, and I want to welcome you. I think you are doing an extraordinary job. And I share the passion of my colleague from Virginia in that, and, obviously the administration does. Because when you all took office, we were losing 700,000, 800,000 jobs a month. We have seen a major turnaround in the economy. Yesterday a year ago the stock market was at its lowest, 6,000. We have seen a major increase. But there is more work to be done, and I was happy to see the Senate act yesterday on a jobs initiative, but we have a lot of work to do. I think that the passion you hear from my colleague is shared. That as long as we have a significant number of Americans unemployed, as the President said, we have to keep working. It is good to see that the unemployment rate is stabilized, and starting this month we are going to be in the plus side of jobs, close to 100,000 each month

for the rest of the year. But it is going to take us a while to turn this economy around from where we were. And the almost doubling of the national debt, when the President took office, when he was sworn in, the national debt was at around \$11 trillion and growing, with a \$1.2 trillion deficit.

The country was headed off a cliff. So your team and this administration has done a good job. And I do not think this is a partisan issue that has been raised by my colleague. I think that there is room for us to work to try to bring jobs that have left the country back to America. Americans do create jobs. Every time we buy a car, you know, that is putting people to work. The question is, if we are going to buy cars that are made somewhere else, if we are going to buy a TV, or a washer and dryer, and it is made somewhere else then it creates a dynamic in which we are shifting our wealth other places. And in Indiana you built a great reputation for building these RVs that I love. And in my home city we have some 1,300 manufacturers today who are doing an extraordinary job. We have Penn Fish and Tackle, they make saltwater fishing reels. They have no competitor in the U.S. They have one competitor overseas. We have CARDONE Industries with 3,000 employees making auto parts. And they have only one other competitor and they are in Mexico. But there are a lot of pressures on manufacturing jobs.

So first of all I want to join with my colleague. I would be glad and interested, no matter what states are selected, to see whether somewhere in the Commerce Department, whether it is in EDA or somewhere else, if there is some effort to encourage American companies to have these jobs, all other things being equal, here. I think that American businesses have a lot of challenges. I mean, if they have a market in some other place, they have a responsibility to be a good corporate citizen there. But if they are selling 99 percent of their products in America, but yet making them somewhere else to improve their profit line, then I think that there is something off base about their calculation about where their long term interests are. So, I mean, I think we have to kind of walk through this and work on it.

PLANNING GRANTS

But I want to ask you about EDA. Now so you had about a 1.7 in applications. You did almost, close to \$600 million in awards if you look at the whole package. But it seems as though the best place where you have almost funded everything that came in the door were the planning grants, well over some 400 planning grants. And I would be interested if you could make some comment about the range of diversity, and give us some examples, of the kinds of planning awards that the Department made to help communities kind of figure out what their niches are and how they can exploit them to retain and create new jobs.

Mr. FERNANDEZ. Yes, absolutely. It is a good question because it blends into a broader discussion we are going to have today. The planning program within EDA's budget, the vast majority of those resources fund our network of economic development districts. Currently we have 383 districts that we fund throughout the country. We have pending, I think, three more applications for additional

districts. These serve as regional, on the ground, economic development partners for our agency. That is one of the reasons why EDA works so well, we work through and with, as partners, a broad national network of economic development organizations.

When you look at the requests for planning beyond the ongoing operational support for the economic development districts, it is not a large amount of money.

Mr. FATTAH. Mm-hmm.

Mr. FERNANDEZ. Many of our strategic economic development strategies are developed through our economic adjustment program. So for example, a very good example, is in Lorain County, Ohio where it has been in the news, a documentary about the last truck, that was related to that community.

Mr. WOLF. The last what?

Mr. FERNANDEZ. Last truck. They had the plant closing. There were the changes at the Wright-Patterson Air Force Base.

Mr. FATTAH. Mm-hmm.

Mr. FERNANDEZ. And consequently, there was a very broad regional impact of the changes in the economy. EDA funded a strategic planning effort that is very regional. They just rolled out the results of that planning. And what they did is they took that step backwards, looked at the assets they have in the region in terms of workforce, in terms of kinds of businesses, and thought carefully about the commonalities there that we can position the region to go after in terms of new industries. And they identified aviation and a couple of other sectors that I do not recall off the top of my head. But that is a very good example of, I think, the unique role that EDA plays in working with communities; thinking through these strategic changes that they need to make to be competitive in a global economy.

Mr. FATTAH. Now you funded, outside of the planning area, you funded a \$900,000 project in Danville, Virginia to look at—

Mr. FERNANDEZ. Yes.

Mr. FATTAH [continuing]. Is it technology-based enterprises?

Mr. FERNANDEZ. Yes, there is a commercialization center that we helped initiate, invest in, in that region that helps commercialize technology and ideas, and spin those out into new businesses to create jobs. And truly, the source of almost all of the net new growth in employment in our country are in these small and medium sized companies. And I think Kauffman did a study not too long ago, the Kauffman Foundation, and they found that almost all net new jobs were being created by companies that were five years old or less.

Mr. FATTAH. Right.

Mr. FERNANDEZ. And the point of that is that we work with communities to think about how they can strategically position themselves for sustainable economic growth—

Mr. FATTAH. Right.

Mr. FERNANDEZ [continuing]. Having a holistic approach here that looks at how are you supporting entrepreneurship and small business creation. Accelerating commercialization of research and technology. Those are all critically important to helping communities get on a glide path that is sustainable.

Mr. FATTAH. Well, you know, there was this debate that I recall about the fundamentals of our economy. It is great that we are making that investment and—

Mr. FERNANDEZ. Yes.

HUMAN CAPITAL DEVELOPMENT

Mr. FATTAH [continuing]. We have been working in Philadelphia focused on the same issue about the commercialization of nanotechnology and the like. And up in the other end of our State with Carnegie Mellon on robotics and biotech. But the fundamentals which you, it is not in your portfolio, but it concerns me and I just want to put it on the record. I mean, for the first time now we have crossed a rubicon in which the majority of the patents requested are now not by Americans or American companies. The underlying point of the new growth is on these cutting edge technologies and new products. And when we see, much smaller countries like South Korea out-producing us in terms of the numbers of engineers graduated, and we see much larger countries like China out-producing us in the number of engineers, if you look down the road here, one of the real deficits in the country is in our human capital development. One of the things that the Chairman has been interested in is, we have a number of agencies under the jurisdiction of the Committee that are involved in science and technology and education, is to try to see where we can have an impact. Because, whether it is the manufacturers in Philadelphia or the advanced technology issues in Virginia, if we do not grow the intellectual infrastructure that would be the basis for, the new products, then the ability to grow new companies and put new products in the market, which even in manufacturing when we lost jobs overseas we usually lose them after we have exploited the product for a fairly long time and then move on; we will not even have that opportunity.

So, you know, I just want to put that on the record. I thank you for your testimony and for your work, and I thank the Chairman. Thank you.

Mr. MOLLOHAN. Mr. Culberson.

DEFICIT SPENDING

Mr. CULBERSON. Thank you, Mr. Chairman. Thank you for being with us today, Mr. Fernandez. A day that I am going to do my best to remind everybody of every chance I get is June 1st, because that is the day that the United States starts living on credit and charging everything that we do to our kids, sending them the bill. Because that is the day that, if you take the amount of money, fiscal year 2009 revenues, and just divide it by the amount of money we spend, and multiply that by 365, to obtain the number of days out of 365, you know, that that fraction represents, you can quickly see that we on June 1st have spent all the revenue that has come into the federal government. And from that day forward we as a nation are living on debt. And I, this is, I know, a concern to the members of this Committee. I particularly share Mr. Wolf's passion for making sure that we do not leave this inheritance to our kids. So as a fiscal conservative I am always looking for ways to try to consolidate and save money. And I note that the GAO has identified eight-six federal programs in ten federal agencies and various com-

missions that provide economic development funding. And one of these, of course, is the Economic Development Administration, created of course for a noble purpose. But in looking at your statute I see that you can make grants to economic development districts, Indian tribes, states, cities, or other political subdivisions, universities, public or private nonprofit organizations. And really the principal purpose of your agency is, you primarily issue grants for planning, in essence, largely, looking at your statute.

Mr. FERNANDEZ. The primary purpose of our agency—

Mr. CULBERSON. Assistance, planning—

Mr. FERNANDEZ [continuing]. Is to create jobs and leverage private investment.

Mr. CULBERSON. But as I read, when you read the statute your guidance is to provide technical assistance, cooperation, planning, promote investment. You may make grants to local governments for public infrastructure, for public works, public service. But the principal job it looks like you do is planning, coordinating, facilitating economic development. Is that right?

Mr. FERNANDEZ. The statute sets out a range of activities for EDA.

Mr. CULBERSON. Right. That are focused and built around planning—

Mr. FERNANDEZ. You are correct, there are numerous divisions within other agencies that have an economic development element to them. But EDA is the sole agency whose sole mission is to help build and lead an economic development strategy for the entire country, across sectorial areas—

Mr. CULBERSON. Sure, I understand. But you are focused on planning and technical assistance. And you do grants to local and state governments to build that infrastructure—

Mr. FERNANDEZ. If you look at our budget the vast majority of what we do is invest in our economic development programs, which tend to be direct investments whether it is in infrastructure, incubators, other kinds of strategic initiatives—

Mr. CULBERSON. Okay.

Mr. FERNANDEZ [continuing]. That leverage private investment and create jobs.

JOB CREATION

Mr. CULBERSON. So what percentage of your total amount of money you are appropriated each year do you estimate are spent on grants like that, that go directly into, that create jobs?

Mr. FERNANDEZ. I cannot tell you the percentage off the top of my head. But essentially it is around \$190 million out of a total of \$246 million.

Mr. CULBERSON. So \$190 million out of \$246 million?

Mr. FERNANDEZ. Mm-hmm.

Mr. CULBERSON. Okay. And those go to grant programs that build infrastructure, public works projects, etcetera, that are going to—

Mr. FERNANDEZ. Incubators, accelerators—

Mr. CULBERSON. Okay.

Mr. FERNANDEZ [continuing]. Organizations that support economic development.

Mr. CULBERSON. I cannot find where, you know the GAO has been unable to verify the numbers that you use for the numbers of jobs you allegedly create. What number of, how many jobs do you, does your agency claim to have created and what do you base that on?

Mr. FERNANDEZ. Well this—

Mr. CULBERSON. I am trying to get a handle on what, if you all can give me an estimate and where the estimate comes from of how many—

Mr. FERNANDEZ. Well there are two different sets of estimates. One is based on what the grantees estimate. And I think that might have been the number that the Chairman alluded to earlier.

Mr. CULBERSON. Which was what? If I could, if you would remind me what the Chairman, I am sorry, over what, 350,000 jobs?

Mr. MOLLOHAN. 350,000 by the grantee estimates.

Mr. CULBERSON. By the grantee estimates over—

Mr. FERNANDEZ. And he is trying to explain that to you.

Mr. CULBERSON. Yes, sir?

Mr. FERNANDEZ. We have had a couple of different in depth looks at this very issue. One was a study that was conducted by Rutgers University. And then there was a follow up a couple of years ago by the private consulting firm Grant Thornton. They essentially verified that the estimates that we are using were pretty good.

Mr. CULBERSON. And 350,000 jobs created over what period of time? period of time?

Mr. FERNANDEZ. I am not sure which period of time the Chairman is referring to.

Mr. CULBERSON. And those are the estimates of the grantees?

Mr. FERNANDEZ. Our average, is approximately \$5,000 per job, sometimes it bumps up. With the stimulus act if you look at the total of jobs that were saved or created, the cost per job was right around \$4,600. We can talk about other agencies. I do not know them as well as I know EDA. But what I can say about EDA is that the strength of this agency has been built on three points. One is that it is built on partnerships with organizations, a national network of economic development organizations that develop bottom up strategies for building capacity in communities to support economic expansion. The second point is that there is no one size fits all solution here. So unlike a lot of agencies EDA has a substantial amount of flexibility within our programmatic investments to respond to creative solutions, unique solutions, that communities identify. And then the third point about EDA's strength is our return on investment. When you look at the cost per jobs that we invest, the leverage we get, when you look at the private investment that is leveraged per federal dollar. The return on investment for communities and for the country is very substantial and I think that is one of the reasons why over the years there has been strong bipartisan support for EDA.

Mr. CULBERSON. I think flexibility is a very good point, and that is certainly true. I am surprised to see in your statute Title 42, Section 3151A that says that if a local project, Mr. Chairman, has actually saved money, if it is less expensive than originally planned, the money saved does not go back to the taxpayer. I am sorry to

see that we do not save the money. It is actually respend somewhere else.

I do see, though, the flexibility is a good point. I see a number of projects here in the State of Texas. Port of Beaumont navigation district, Seabrook, Texas Medical Center branch at Galveston building improvements, etcetera. But, you know, this, and no question I am confident you do good work. But at a time when we are literally approaching a financial cliff, the scale of the debt and the deficit are so tremendous and so terrifying that we need to look at places to save money, Mr. Chairman. I do think this is an agency where, as in any private business gets in trouble with debt they re-trench and get back to their core mission. I bet we could probably save some money here, and maybe look at this, and we appreciate the work that you do, sir, but I am confident this is an agency where we could probably save some money and see it better, a little better targeted perhaps—

Mr. FERNANDEZ. We can agree to disagree.

Mr. CULBERSON [continuing]. Elsewhere, and maybe in the form of tax cuts. Texans always prefer tax cuts to create jobs rather than federal grants, as a general rule. But we appreciate what you do, sir. Thank you very much.

Mr. FERNANDEZ. I appreciate that.

PUBLIC WORKS & EAA FUNDING LEVELS

Mr. MOLLOHAN. Thank you. Secretary Fernandez, I want to explore your request and our attitudes as expressed in previous appropriations. I am looking at your 2011 request and I am looking at our 2010 omnibus. You have flipped, virtually flipped the funding for Public Works and economic development assistance. I want to give you an opportunity here today to justify this request, particularly in light of our expressed attitudes about it in the past. Make your case.

Mr. FERNANDEZ. I will, and I appreciate that, Mr. Chairman. And I sincerely respect the views of the Committee. I mean, clearly this has been a discussion that precedes me and it is one that will probably continue. When we look at the President's proposal for EDA it is in the context of the entire budget. So we are very cognizant of the constraints, the fiscal constraints, concerns about the deficit. So you look at what EDA does in the context of the entire federal budget proposal that has been put forth by President Obama, for economic development, there are multiple agencies that have an impact on how we rebuild the economy. And what the President has made clear and we wholeheartedly support is the notion that while we have taken bold action with the support of the Congress and the administration to keep the country from falling off a cliff, as we move forward we really need to look at how we build a stronger foundation that positions America to be very competitive moving forward in this new economy, or changing economy. It is not really new.

And the real pillars of that include unprecedented commitments to education. The workforce issues are paramount to having the capacity to compete in the global economy. Infrastructure is clearly a huge part of that system that we need to be able to build a strong economy. If you look at the overall budget proposal by the Presi-

dent, there is substantial investment in infrastructure. And then the third area is the area of research and development. And the President's budget includes significant increases in the federal government, investments in the research that is going to be a real driver of new ideas, new products, and commercialization.

So it is in that context that we look at EDA's budget. So what does EDA do that—

Mr. MOLLOHAN. Other agencies having primary responsibilities for the R and D and primary responsibilities for the workforce development?

Mr. FERNANDEZ. Exactly.

Mr. MOLLOHAN. You are not suggesting EDA's, that that—

Mr. FERNANDEZ. No, I am just saying that—

Mr. MOLLOHAN [continuing]. Where their mission—

Mr. FERNANDEZ. Absolutely.

Mr. MOLLOHAN. So you are just putting it in the context—

Mr. FERNANDEZ. So if we put our request in the context of the overall budget, the unique thing that EDA provides that the other agencies do not is this flexibility to go in and address strategically, different needs in the community. If you look at demand for EDA in, year to date, fiscal year 2010 year to date for economic adjustment, we have received applications worth \$222 million. Last year we had substantially more requests in EAA as a percentage of requests than any other program we have. And what we are hearing is that while infrastructure is very important, and that is a key implementation strategy in many communities, is the flexibility of economic adjustment to deal with issues like access to capital, developing the strategic plans that link workforce, innovation, existing employment to the clusters that we are trying to build. And it is that kind of flexibility that is available within the economic adjustment assistance, even though the majority of economic adjustment funds end up being construction projects. That is the area where we see just a significant amount of demand and that is the one area that EDA plays a very unique role that other agencies cannot fulfill.

Mr. MOLLOHAN. Well I mean, obviously that is a compelling case. If you can think about economic development in strategic terms that is very important, particularly if you can bring assets to bear that assist local areas in strategic thinking and strategic development, which equates in my experience to promoting economic diversification, that is a very powerful thing. And I am going to invite myself to have you come and explain where that is happening. I would like to see some real examples of that.

You know, we have gotten EDA on task up in Weirton, West Virginia; when I was elected to Congress, there were 14,000 steel workers working at Weirton Steel. They are definitely in transition. And the industry is definitely transitioned and it is a catastrophic economic event over time. It has been a process of attrition. But it has not taken forever. It has not been sudden, it has not been precipitous, but it has been real. And so they are in a period of rethinking strategically about how they reconstitute their economy.

So I hear you talk about the EAA account in those terms, and the flexibility that it represents in those terms. I invite you to show me where that is happening, where you are really going in and

partnering and engaging a community on those terms and having a result.

You are here to testify and I am not here to preach. But one of the strengths of the Public Works program is that it is understood. It has demonstrably impacted, in a favorable way, all kinds of projects that have, in my district, promoted economic diversification. It has leveraged a tremendous amount of money, including conventional financing, to make deals work. So, the Public Works program has a constituency and it is out there, throughout our communities, but it is also here in Congress. People have experience with it.

So when you talk about an EAA program you have a burden to prove. And I am certainly susceptible to the argument. But when it is put in the context of pitting EAA against Public Works, it is tough sledding for you. It is a heavy lift, I can tell you. Not that you are not convincing about the potential for EAA funding, but that has not been as adequately demonstrated, not to me. Conceptually it really sounds great, but the Public Works program has been demonstrated. So we need to visit on this and continue to talk about it. But just to come forward with a budget request that flips these two accounts year after year, I am not sure you are really going to get there in that way. We want to help you get there, but I am not sure we are going to get there in that way.

GLOBAL CLIMATE CHANGE MITIGATION INCENTIVE FUND

As we evolve the Economic Development Administration and its programs to help promote economic development, leverage economic development, and think about new priorities, I think about incentivizing public works projects, to become more environmentally sound. We initiated a program which we called the Global Climate Change Mitigation Incentive Fund. As originally conceived by the Congress that is exactly what that was, an incentivization fund. The original thinking was to think of it in the context of the Public Works account. And so as grantee applicants came forward they would see this incentive to incorporate environmental elements, maybe LEED certification in their project. And in addition to getting a regular EDA Public Works grant they would get an amount, supplementary amount, on top of that for this purpose. A reward, if you will, for trying to become environmentally friendly.

I think in the first year the agency limited that to LEED criteria. I am actually interested in hearing how successful that was? Or was it, it was a little bit before your administration. But are you familiar with how successful or unsuccessful, and how did you measure that, if you did?

Mr. FERNANDEZ. I can attempt to do that, and I know enough to be dangerous. It is my understanding that as originally conceived the funds that were targeted for that fund were used as leverage to get some of our construction projects to adopt the sustainable development techniques.

Mr. MOLLOHAN. Just as I described.

Mr. FERNANDEZ. Exactly.

Mr. MOLLOHAN. So do you agree with my description of that?

Mr. FERNANDEZ. Yes.

Mr. MOLLOHAN. Okay.

Mr. FERNANDEZ. So often the investment made in 2008 for global climate change money in conjunction with a Public Works investment. I think it was very successful in terms of getting that leverage and adding that incentive.

Mr. MOLLOHAN. Can you cite cases for the record where that is true? I would like to have cases for the record where Public Works applications incorporated environmentally progressive building systems, techniques——

Mr. FERNANDEZ. We would be happy to provide you a complete list of the projects that were funded.

Mr. MOLLOHAN. Well no, no, no. I am not asking that, exactly. I am asking, a list of projects that were incentivized to be increasingly environmentally sensitive because of this account. In other words, an applicant came forward and had an application for a public works project. And said, "Well gee," you know, "if we get another \$1 million we will," I do not know, "put a green roof on." Or, you know, "It will cost a little more, but we will do something with windows, or the positioning of the building." I do not know what. But you provide us with examples where this grant program did from the start incentivize environmentally sensitive projects. That is what I would like to focus on.

Mr. FERNANDEZ. We will work on putting that together for you. [The information follows:]

Examples of Environmentally Progressive Building Systems/Techniques

- Alabama Farmers Market Authority and Gulf Coast Agricultural and Seafood Co-Op, Bayou La Batre, Alabama

This project will construct a shrimp and crab waste processing facility that will divert by-products from landfills and transform them into beneficial material for various uses including fertilizer additives; poultry feed additives, chitosan production and wastewater treatment products. The proposed building is a 12,700 square foot LEED certified facility that will house the equipment needed to process shrimp and crab waste products into valuable commodities.

GREEN BUILDING ENHANCEMENTS: From the beginning of development of this project, applicant was encouraged to incorporate environmentally friendly enhancements to take advantage of the GCCMIF. The applicant took a very comprehensive approach and proposes a wide range of improvements that would support LEED certification of the building including the following: storm water management systems; infiltration zones, storm water control and detention systems, vegetative filters and vegetative swales; crushed demolition debris for building pad; local shell cochina for paving; material made from recycled plastic in the concrete foundation grid and building pad; grey water reuse system; foundry slag in aggregate; passive lighting; solar collector and controls; ground source cooling loop for heat exchanger and biogas control system; Non CFC high efficiency Heating & Cooling System.

- Roane State Community College, Crossville, TN

This project will construct a 10,000 square foot (LEED Certified) small business incubator on a 2 acre site on the Roane State Community College in Crossville, Cumberland County Tennessee.

GREEN BUILDING ENHANCEMENTS: The applicant was aware that LEED certified buildings had lower utility costs that would help lower the operation costs for the business incubator. Working with their architect, the recipient planned environmentally friendly enhancements to meet the LEED certification requirements. The planned LEED enhancements for the incubator building are in the following building components: site utilities, wood structure, Insulation, roofing, windows, floor coverings, painting, compartments & cubicles, heating/ventilating and air-conditioning, plumbing and electrical systems.

- Wind River Development Fund

EDA is assisting the Wind River Development Fund with the design and construction of a 15,000 square foot entrepreneurship development center in Fort Washakie, Wyoming.

The project includes all site work and appurtenances necessary for the completion of the entrepreneurship center, including furnishings and equipment.

GREEN BUILDING ENHANCEMENTS: The facility has been designed to meet LEED Certification requirements and is currently under construction. Green construction elements will incorporate technologies and strategies to reduce energy consumption, reduce harmful emissions and contribute to a sustainable facility.

Mr. MOLLOHAN. Because that is the purpose, you know? And as your grantees look at that, that was, "Okay, we will give you this money if you do something more to your building to be efficient." You know, energy efficiency, for example.

Mr. FERNANDEZ. Yes, and if I could just elaborate?

Mr. MOLLOHAN. I am sure there are examples out there.

Mr. FERNANDEZ. Yes. And if I could talk about it more broadly, too, is that, the goals behind that initiative in terms of encouraging that kind of building practice?

Mr. MOLLOHAN. Mm-hmm.

Mr. FERNANDEZ. Are goals that we have embedded in our new investment priorities across our programs. I have looked at the language from last year's budget that encouraged us to look beyond just LEED buildings at how we support other elements of expanding the green economy. And so we can target these resources, I think, appropriately to help grow the green economy in many communities. But also we can embed in the evaluation criteria that we apply to other Economic Development Administration investments the principles that were squarely behind the creation of the program. And we have done that in criteria that we have articulated for existing programs as well.

Mr. MOLLOHAN. Beyond just incentivizing construction techniques? Or building—

Mr. FERNANDEZ. The notion of "sustainable development" has evolved in the industry over the last few years as well. And as someone who used to develop projects, there was a time where LEED development was viewed as, "Something that is going to be incredibly more expensive."

Mr. MOLLOHAN. It was incredibly more, or it is incredibly more expensive.

Mr. FERNANDEZ. It was. But cost differential between sustainable practices and more traditional practices is shrinking. And the operational savings are shortening the timeline on return on investment. So you see a lot more buildings in the private sector and the public sector are coming forward and saying, "Look, we are going to do this."

Mr. MOLLOHAN. Without an incentive?

Mr. FERNANDEZ. Because the incentive is there in terms of reduced operating costs—

Mr. MOLLOHAN. Mm-hmm.

Mr. FERNANDEZ [continuing]. And broader benefits for the community, for their employees. There is a wealth of evidence that those kind of buildings have direct impacts on productivity and just the quality of the work coming out of these facilities.

Mr. MOLLOHAN. Mm-hmm.

Mr. FERNANDEZ. So that is shrinking. So if I understood the guidance in last year's budget, we were asked to look at how we can leverage these dollars to broaden the impact of the program beyond just LEED buildings, but look at renewable energy initiatives and other projects. And that is what we would like to do moving forward. While we can still continue to incentivize LEED buildings, I think there is a broader application that could have a big impact.

Mr. MOLLOHAN. Well if you are wanting to broaden the purposes, which again we are not unsympathetic to but we look forward to

being convinced, then why are you at the same time reducing the funding request below the 2010 funding level? You came in with your request for 2010, for 2011, even though we increased the funding for \$8 million.

Mr. FERNANDEZ. Well, as we noted earlier, the President has articulated a budget based on the fiscal constraints.

Mr. MOLLOHAN. So it is purely fiscal, a fiscal consideration?

Mr. FERNANDEZ. Yes, so, in light of the freeze on discretionary spending, the request we are making is at the same level for our programs that we made in 2010.

Mr. MOLLOHAN. Okay.

Mr. FERNANDEZ. And of course Congress appropriated additional resources to us in 2010. We are certainly appreciative of that. But our request is the same request we made in 2010.

Mr. MOLLOHAN. Okay, thank you. Mr. Ruppertsberger.

PENN STATION IN BALTIMORE

Mr. RUPPERSBERGER. I come from local government for about eighteen years, a lot of economic development issues. Always you are looking for the federal government for ways to help, and whatever. And there are different grant issues that are out there. When you come to Congress you prioritize on certain major projects. And I am getting personal now, but there is Penn Station in Baltimore. And it is pretty bad, and yet there are people coming there all the time. And I am working with Congressman Cummings to try to revitalize that area, and using the station in Washington, D.C. as an example. We took a station, revitalized it, retrofitted it, put in stores, food banks, restaurants, whatever. And it is my understanding now that that project is making profit for Washington, D.C. because it is a place where people come.

Now there is, when you, in this market a lot of the governments are distressed and they just cannot put money in that needs to be. What I am going to probably ask is someone from your Department contact my office. There is a major issue that has to be done, and maybe some federal grants. But what this does, it not only helps the area but it revitalizes a neighborhood. This is a very poor neighborhood, a lot of crime issues around the area. So I am making a request, basically, if you could get with my staff, Walter Gonzales here, when this hearing is over and talk about that issue.

PROCESS FOR WORKING WITH LOCAL GOVERNMENT

There are a lot of local governments in distress. Do you see that the ones that are successful working with you in getting funding are more aggressive themselves? You know, what is the process? Are you reaching out to different states? Because the key is jobs now, as we know. And the more that we deal and focus on the jobs issue the better. Are you coordinating with the stimulus package? Where are you in that regard?

Mr. FERNANDEZ. That is a good question. EDA operates, through this national network of local economic development organizations. We fund, 383 economic development districts that by the very structure of those organizations, include local representation from local government. They partner with them to develop the strategic and economic development plans for their area. And so, there is

that direct connection between the local government, the districts, and the Economic Development Administration.

In addition, through our economic development representatives, we engage in outreach efforts directly in communities. We would like to be perceived as being accessible. It may not always feel that way, and I certainly can appreciate that having been on the other side of the table not so long ago. There is a need for improvement, I am sure. But I think we do a pretty aggressive job in terms of our outreach and we try to be accessible.

COORDINATION WITH OTHER AGENCIES

Mr. RUPPERSBERGER. Do you coordinate with Small Business Administration, the Community Development Block Grants, those different—

Mr. FERNANDEZ. To some extent, yes. And I can tell you with this administration there is an absolute commitment to blowing up a lot of the silos. We are engaged in collaborative efforts with SBA. I am leaving this hearing to go meet with HUD. There are a number of agencies that are working together to look at how we can address community needs so that we can integrate the various kinds of federal resources we can bring to the table and make it easier, frankly, from the customer side of the table than them having to figure out how to get from agency A to B and C, and try to put all those things together. I think there is an opportunity to do things in a different way that can be very helpful.

AWARD FUNDING FORMULA

Mr. RUPPERSBERGER. My last question, because it is really about end game results. What formula do you think works? And what is your policy or philosophy as an agency to give money? You know, you have a lot of people that want money, they do not know how to get it. What are you looking for? And give me an example of a project where you got involved, where you made a difference?

Mr. FERNANDEZ. It is a good question. First of all the communities we work in by definition have to be distressed. I mean, that is—

Mr. RUPPERSBERGER. But is that point not, I mean it is so broad now, you are dealing with about 80 percent of the whole country?

Mr. FERNANDEZ. It is, that is true. So—

Mr. RUPPERSBERGER. You are probably going to have to relook at that formula, in today's world.

Mr. FERNANDEZ. It is a big part of the country. And hopefully it will shrink. But we look at the investments based on the level of collaboration, the amount of private sector jobs that are created, the leverage of investment from the private sector, how it is tied to the community's strategic thinking about where their growth is going to come from. We look at that entire package. One of the things we are working on, is developing a more quantitative system for evaluating projects to get a more even playing field and making it a lot more transparent.

Mr. RUPPERSBERGER. But what I need is an example now. Give me an example of what you are looking for, what is the quickest, the best way? When I am talking to our mayors, our county executives, or even our governors, from your perspective what works

quickly? Because that is what people want to do, they want to move forward. And we need to work quickly in this market.

Mr. FERNANDEZ. Well, you know, if you are talking about a specific—

Mr. RUPPERSBERGER. A project, a specific project.

Mr. FERNANDEZ. I mean the—

PENN STATION IN BALTIMORE

Mr. RUPPERSBERGER. I will give you an example, the Penn Station thing.

Mr. FERNANDEZ. Yes. Well, that is a very important project and I believe in those kinds of projects. That is probably not a quick project. As we go out and—

Mr. RUPPERSBERGER. Well I know, I do not like to get personal in these hearings but I will. It has to do with removal of a certain pipe underground, to connect the parking lot over the train tracks, and whatever. And nothing is going to happen until that occurs. That would be a focus where I would look from a federal level to get involved. If that opens up the whole project might go.

Mr. FERNANDEZ. I understand. And we will get more information about that specific project. But, you know, what we have seen is that by working through this network—

Mr. RUPPERSBERGER. Give me an example. Answer my question with that. Is that not the type of project that you are looking at? That is not where your money is going to come from? You have to be more involved in certain formulas and rules? I mean, when you are talking jobs and business you have got to move more quickly now.

Mr. FERNANDEZ. Absolutely. And—

Mr. RUPPERSBERGER. So give me an example.

Mr. FERNANDEZ. And there is no shortage of examples.

Mr. RUPPERSBERGER. Okay.

Mr. FERNANDEZ. I was in a very small town in Minnesota where the main issue was expansion of a water plant in Nashwauk. It is a city with a population of nine hundred and some people. Clearly they do not have the resources in a town that size to make the kind of infrastructure investment that was needed, which enabled a \$16 billion private sector investment creating 500 direct jobs in the steel industry. That was part of the strategic planning for that region—

Mr. RUPPERSBERGER. Okay.

Mr. FERNANDEZ [continuing]. In Minnesota they call it the Iron Ridge. And they were leveraging natural resources, leveraging workforce, and we were able to make an investment to meet that local need that they could not make but for us.

Mr. RUPPERSBERGER. Okay.

Mr. FERNANDEZ. And that is leveraging—

Mr. RUPPERSBERGER. And that is what I am looking for.

Mr. FERNANDEZ. And that is going to create immediately 2,000 jobs just to build the facilities. So it is those kinds of projects. And what I was trying to say, not very articulately, is that by working through these local networks of economic development professionals, they have got great projects queued up.

Mr. RUPPERSBERGER. Mm-hmm.

Mr. FERNANDEZ. That is why last year when the Congress approved the Recovery Act, EDA was appropriated \$150 million for Recovery Act projects. We were able to obligate 100 percent of our money within a year, a year ahead of schedule, because this network that we work with has many projects queued up, more than there are resources to fund. So it is that built-in pipeline of investments that are out there that we can fund and accelerate job creation in the near term, but do it in a way that is built on longer term strategies for—

Mr. RUPPERSBERGER. So it is fair to say that when it is the right project, that you can be extremely aggressive to make the project move forward?

Mr. FERNANDEZ. We can. We can. And I do not want to dismiss them, because there were some questions earlier. Sometimes it takes longer than it ought to. And I can tell you that we are very committed to evaluating how we do our review process to make sure that we are doing it as quickly as possible.

Mr. RUPPERSBERGER. We just voted on this budget while you were gone. Thank you for leaving the room.

Mr. MOLLOHAN. What did you do?

Mr. RUPPERSBERGER. Nothing, I am teasing.

Mr. MOLLOHAN. Mr. Wolf.

GAMBLING

Mr. WOLF. Thank you, Mr. Chairman. I have a question, but before I do I want to make a comment. I am very disturbed to see the number of communities and states that are expanding gambling, that are seeking gambling, which brings crime, corruption, break down of the family, etcetera. Does any of EDA money ever, ever, ever, ever go to any community to help them bring about economic development for expansion? Because if it is I am going to offer an amendment to prohibit that. But has it ever—

Mr. FERNANDEZ. I am not aware of any.

Mr. WOLF. And you would never do that, would you?

Mr. FERNANDEZ. Well I personally would not put that on my priorities of economic development strategies, but that is just my personal opinion. I can check it. I do not know if there is a specific exclusion for that kind of investment or not. But I am not aware of any such investments.

Mr. WOLF. I mean, I do not think we should do it. I mean, that does not create a job. That, I mean, the break down of the American values. I just had a letter the other day. I was the author of the National Commission on Gambling, and what it does to communities. I, frankly it has not been the greatest thing for the State of Indiana either, from a lot of people that I hear. Where it comes you get crime, you get corruption. Where we have kept it out of our state. Anyway, if you could let us know if it has been used or can be used I would appreciate it.

[The information follows:]

GAMBLING INSTITUTION INVESTMENTS

EDA's authorizing statute, the Public Works and Economic Development Act of 1965, as amended, does not expressly exclude grant investments to gambling institutions.

The American Recovery and Reinvestment Act (ARRA) included an express prohibition as follows:

LIMIT ON FUNDS

SEC. 1604. None of the funds appropriated or otherwise made available in this Act may be used by any State or local government, or any private entity, for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

In the past 20 years, EDA funded 4,734 construction projects totaling \$5.5 billion. None of these projects funded casinos or gambling facilities. We would note that about a decade ago, EDA funded a community-wide well and water treatment system for a City located on an Indian reservation that included as part of its justification that the water treatment system for the City would also benefit a hotel associated with a casino in addition to other employers. One reason that EDA does not fund such projects is that they do not represent the kind of innovation-led economic development needed to transform the regional economy. EDA intends to establish an explicit prohibition against funding such projects in the Bureau's forthcoming FY 2010 Operational Guidance and in future revisions to its regulations.

BEST PRACTICES FOR COMMUNITIES IN NEED

The other question is, do you have a best practices for all the communities that are in need? Because some communities are so small they do not have the resources. Do you have a best practice to ensure a community that is going through this has a place to go to find out what has the best approach that has been used by others? Do you offer a best practices for communities?

Mr. FERNANDEZ. Not as well as we should. And part of our effort—

Mr. WOLF. That is an honest answer, is it not?

Mr. FERNANDEZ. Well, our regional staff certainly have a wealth of experience that they can share, and they do with community representatives. What I would like to do as part of rebuilding the capacity of the agency is to build that kind of resource center. And it is really more of a virtual best practices system, but, I look at the history of EDA over forty-five years as having a whole host of not just best practices but solutions. So that if I am in Bloomington, Indiana and I have got a particular issue, we have funded solutions for those kinds of issues before. We need to make that more accessible, and not just, "Here is a best practices page of what they did." But, "Here is a contact of the people that were involved," and to try and do some of that direct connection to help people accelerate their thinking about how to address particular issues. So that is something we do need to do better.

Mr. WOLF. What is the unemployment rate in the Bloomington area? I remember, I saw that movie years ago, "Breaking Away?" Is that—

Mr. FERNANDEZ. "Breaking Away" I am embarrassed to say I do not know off the top of my head what it is in Bloomington. I can tell you that as a university community there was a time where people there perceived it to be recession proof. But because of the broader context of the shifting of manufacturing jobs in the region, the tight budget constraints, they are actually seeing layoffs in the universities and the public schools like every other community. So they have very similar challenges.

Mr. WOLF. Yes, okay. I think that is pretty much it. If you could, after you check on that other thing, give us a call—

Mr. FERNANDEZ. Absolutely.

Mr. WOLF [continuing]. A call on whether or not EDA would be willing to, and then what I will do is, I will talk to Senator Warner and see. I think he would join to see if maybe before, the authorization is a great idea and the language, and I think it is good that Mark is doing that. But to see if we can maybe deputize you, or the Secretary could deputize you to sort of have a little bit of a pilot to move ahead and see what we can do. But anyway, thank you for your testimony. I appreciate it.

Mr. FERNANDEZ. Thank you.

Mr. MOLLOHAN. Mr. Culberson.

GAMBLING

Mr. CULBERSON. Thank you. Thank you, Mr. Chairman. The, in answer to Mr. Wolf's question, would you all be sure to check to make sure, so find out if any of the money that you all have sent to local or state government, or to business development, economic development, because the statute is very broad. I am looking at the language of the statute, Mr. Wolf, and there is no real restriction of any kind. The Secretary has got complete discretion to grant money to, for economic development, business development. And that would, what we are looking for is money that has been sent to, for example, infrastructure, to help build out infrastructure, roads into and out of a gambling area. So we are looking for direct or indirect would be very helpful.

AMERICAN RECOVERY AND REINVESTMENT ACT & JOBS

I also wanted to confirm, Mr. Fernandez, did you say your agency had received \$150 million from the stimulus bill?

Mr. FERNANDEZ. That is correct.

Mr. CULBERSON. And what, if I could, also the 350,000 jobs that the grantees tell you they have created with the funding that they have received, what independent outside verification or audits have there been of the 350,000 job claim that the grantees say they have created with the money?

Mr. FERNANDEZ. As I noted earlier, there is not technically an outside audit. We do our own follow up to evaluate whether or not the numbers are being met. We did commission a couple of outside studies to look at the methodology for calculating return on investment.

Mr. CULBERSON. So you really cannot verify that number?

Mr. FERNANDEZ. I cannot verify it from the standpoint that we do not have an outside audit.

NASH, TEXAS ECONOMIC DEVELOPMENT FUNDING

Mr. CULBERSON. Okay. I note, Mr. Chairman, the wonders of Google, I spot one of the grants in Texas, Mr. Chairman, is a \$2 million grant to, \$1.875 million economic development assistance to the city of Nash, Texas to spur economic recovery by making infrastructure improvements to serve the Nash Business Park. And under the wonders of Google Earth, Mr. Chairman, I looked up, because I do not know where Nash, Texas is. This is downtown Nash, Texas. I want you to see this. It is literally a, it is two farm market roads and there is nothing there. So it is a, I just think it is impor-

tant that we do all we can to really be sure that taxpayers are getting the value for their dollars. The Agency undoubtedly performs a lot of worthwhile work. But I am not, looking at this one I for the life of me cannot, \$1.8 million is probably more money than Nash, Texas ever had in its entire existence. And I think this agency just bears some careful scrutiny. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Well I hope that Nash, Texas has some maybe attention paid to it in the economic development, and hopefully the agency's efforts to help facilitate it will be appreciated at the local level.

REVOLVING LOAN FUNDS

Capitalizing RLF funds, revolving loan funds, why are you not doing that?

Mr. FERNANDEZ. Recapitalizing, or making additional investments?

Mr. MOLLOHAN. Mm-hmm.

Mr. FERNANDEZ. I know that, it is my understanding, and I could be wrong with this, it would not be the first time, that the previous administration did not look favorably at that initiative. We certainly look at the role of RLFs as a very valuable tool to help address the critical access to capital issues that many small businesses face today. I think it is a program that can work well and we are not discouraging applications for that very purpose.

Mr. MOLLOHAN. You know, we have some concern expressed that RLFs are not being capitalized because of pulling back funding that might be available for that to fund the Energy Efficiency Building Systems Regional Innovation Cluster Initiative. Can you comment on that?

Mr. FERNANDEZ. Yes, I would be happy to because that is not accurate. The economic adjustment program is the—that is the pool of resources that we have to make investments in revolving loan funds, which, not to beat a dead horse, but that is one of the reasons why we like the idea of increasing support for it because that is a huge need.

Mr. MOLLOHAN. It is a huge need to recap a lot of these funds.

Mr. FERNANDEZ. And to address access to capital.

Mr. MOLLOHAN. Okay.

Mr. FERNANDEZ [continuing]. There was a question about what role does EDA have. I can tell you we did a \$200,000 revolving loan fund investment in St. Louis. It is a little company called World Wide Technologies, which now today is a \$3 billion company that—employs—1,200 employees.

So I think these small investments can have tremendous impact, very direct return on investment, and do the kinds of work that people want.

The Energy-RIC is a very exciting project. It grew out of President Obama's commitment to get interagency cooperation. And so there is a White House interagency team that headed up the effort to build this RIC proposal.

The total package is probably going to be, north of \$120 million over a five-year period.

The EDA's role in this, which goes back to the unique role that EDA plays in our federal system, is to help build, support around

the cluster element of the energy investment. Our commitment was \$5 million over a five-year period. Part of the funding is public works and part of it would be through economic adjustment.

We have been able to identify resources to—through some of the deobligations that have occurred to fund that project without taking away the capacity to fund any of the current budget—

Mr. MOLLOHAN. Okay. Let me go back to the revolving loan funds. Are you recapitalizing them with funding?

Mr. FERNANDEZ. Across the board, no. Are we evaluating applications for those, I would have to look and see if we have had any specific requests. But we are certainly not saying no to the concept. I mean, they are evaluated in the context of other competitive grants.

Mr. MOLLOHAN. But you don't know. Have you recapitalized one or started one new?

Mr. FERNANDEZ. Last time I had I don't know. I mean—

Mr. MOLLOHAN. Well for the record, will you?

Mr. FERNANDEZ. Yes. I would be happy to. I know we did through our Recovery Act funds. But I am not sure about a regular EDA program.

[The information follows:]

REVOLVING LOAN FUNDS

EDA is currently evaluating 6 applications for the Revolving Loan Program totaling \$7.25M. 5 applications have been approved for recapitalization totaling \$11.125M, and 2 applications are new RLFs totaling \$1.8M.

REGIONAL INNOVATION CLUSTERS

Mr. MOLLOHAN. Okay. Well tell us what the Energy Regional Innovation Cluster is. What is that?

Mr. FERNANDEZ. It is a multi-agency investment program. EDA has been involved in the work of clusters for almost 20 years.

Mr. MOLLOHAN. Well let us really start. What is a cluster in the context of this initiative?

Mr. FERNANDEZ. It is a geographically-bound area. There is a regional component to it that integrates businesses, universities, education, all the elements of economic development around a particular industry so that there is complimentary activities, there is synergy, and it leverages—

Mr. MOLLOHAN. And this doesn't exist now? This is a concept. This is a new initiative, correct?

Mr. FERNANDEZ. The Energy-RIC itself is a new initiative. But Regional Innovation Clusters are not new. And we found that they are a—

Mr. MOLLOHAN. We being EDA?

Mr. FERNANDEZ. EDA.

Mr. MOLLOHAN. Where have you found that? I don't mean to interrupt you and if you need to elaborate.

Mr. FERNANDEZ. No, that is okay. There are a number of clusters that have evolved over time.

Mr. MOLLOHAN. Give us an example.

Mr. FERNANDEZ. In Bloomington, Indiana there is a strong life sciences partnership that is a cluster. In Seattle there is a bio-medical cluster.

Mr. MOLLOHAN. But what is it—okay, but what does “cluster” mean? You know, we have a lot of coal mining in West Virginia, so would that be a cluster?

Mr. FERNANDEZ. It could be.

Mr. MOLLOHAN. Okay. Well what is—

Mr. FERNANDEZ. I mean, I am not trying to be facetious.

Mr. MOLLOHAN. What is a cluster? No, no, I know you are not being. What is a cluster?

Mr. FERNANDEZ. It is the combination of similarly focused businesses and institutions that are all linked into a particular industry.

Mr. MOLLOHAN. Okay.

Mr. FERNANDEZ. So you could have a cluster that is life sciences. You could have a cluster that is mineral resources.

Mr. MOLLOHAN. Okay. Well the word link suggests that there is a central facilitating activity. Is there?

Mr. FERNANDEZ. Yes.

Mr. MOLLOHAN. There is. And who supplies that function?

Mr. FERNANDEZ. Typically it is a public/private partnership; economic development organization that is able to align the strategies of the different participants in the cluster. Look for common areas of interest, whether it is workforce development, infrastructure development, broader policies that can help support that particular industry—

Mr. MOLLOHAN. Okay. So it is an identification of a core competency around some activity that is being promoted by a central facilitating group and being strategically managed in that way.

Mr. FERNANDEZ. Absolutely.

Mr. MOLLOHAN. The relationships between those entities that make up the partnership are strategically managed to further the prosperity and growth of the members of the cluster to have economic benefit throughout the defined region.

Mr. FERNANDEZ. Exactly. And it is having that deliberate strategy and coordination that helps accelerate the success of these clusters.

Mr. MOLLOHAN. Okay. So in one of your examples, give us an example. What is the facilitating group?

Mr. FERNANDEZ. In Bloomington it is the Life Sciences Partnership. It is a public/private entity with representations from the city, the university.

Mr. MOLLOHAN. So is that a non-profit?

Mr. FERNANDEZ. It is.

Mr. MOLLOHAN. Created in—

Mr. FERNANDEZ. Public non-profit.

Mr. MOLLOHAN. A public non-profit with the board of directors composed of people who are in the cluster—

Mr. FERNANDEZ. Who are in the industry, who are in the education.

Mr. MOLLOHAN. With an executive director who has been hired to facilitate that.

Mr. FERNANDEZ. Coordinate that, yes.

ENERGY REGIONAL INNOVATION CLUSTER

Mr. MOLLOHAN. So if we are talking about a energy regional innovation cluster, is that proposing one additional focusing on energy, one additional cluster? And it is going to be concentrated on energy. Energy is going to be the core competencies you are going to try to work on out of that cluster and probably innovation.

Mr. FERNANDEZ. In this one, Mr. Chairman, specifically it is to build a cluster around building technologies, efficiencies, and materials and design of actual buildings. So it is narrowly focused on that area of the economy.

And the reason that this is being proposed is that, as I noted earlier, we believe there is a lot of empirical evidence outside of EDA that suggests that where you have this kind of deliberate formation of a cluster, it accelerates the business success of the individual companies and organizations that are aligned within that cluster. It has an impact on wages. It has an impact on the overall economy.

So the goal here is to say, and this is part of what the President is very aggressively speaking about in terms of blowing up silos, we are going to make an investment through the Energy Department to leverage research and development around energy building systems.

If we can bring with that commitment of the Energy Department's funds, additional resources from EDA, from SBA, from Labor, from others to actually form a cluster as part of that energy investment, we have an opportunity to really amplify those dollars in a way that is going to have a broader, regional impact on the economy where that energy investment will be made.

So it is an opportunity to truly leverage multiple federal dollars in a way that amplify each other. And we think we will have even greater success than they might have if it was done individually.

Mr. MOLLOHAN. What economic funding levels? What funding levels is EDA expected to contribute to this initiative?

Mr. FERNANDEZ. We have a commitment of \$5 million or five years.

Mr. MOLLOHAN. Not for each of five years, a total of \$5 million.

Mr. FERNANDEZ. And, again, and this is one of the challenges in talking about something like this is that it is a competitive grant process. We don't know exactly what proposals will look like.

Mr. MOLLOHAN. That is a pretty specific request. I mean, and you are talking about environmental efficiency and building. I mean—

Mr. FERNANDEZ. Yes. But it—

Mr. MOLLOHAN [continuing]. I am sure it narrows it down to several grantees. It almost sounds like a subtle administrative earmark.

Mr. FERNANDEZ. Well it is a competitive grant.

Mr. MOLLOHAN. Well I understand. But how many people can—how many entities are out there that can compete for this?

Mr. FERNANDEZ. I think there has been tremendous interest. I don't know exactly how many. I know we hosted, along with the other partners, sort of a pre-application conference here in Washington and had a webcast of it. And there was a strong interest.

But how the EDA's investments may—we have made a commitment of up to. But we don't know what those individual applications are going to look like.

One applicant may have already a strong public/private partnership entity that can serve that coordinating role. They may not want or need resources to build that kind of organizations, others might. Infrastructure may not be an important part of a particular applicant's investment.

So, the way our commitment has been articulated, it is up to, but we don't know exactly whether we will get a request for the full amount, or half that amount, or what. But we will soon.

Mr. MOLLOHAN. So if your—I'm sorry, your 2011 funding request you would expect a million, million and a half, two million dollars of that request to go to this initiative. You know, it is five million over five years.

Mr. FERNANDEZ. We are looking at using funds that were deobligated to fund this initiative. So it won't come out of the 2010 budget nor the 2011 budget.

Mr. MOLLOHAN. Okay. Will that require reprogramming?

Mr. FERNANDEZ. Probably not. I don't think so.

Mr. MOLLOHAN. Mr. Wolf.

Mr. WOLF. No, I'm fine.

DISASTER FUNDING

Mr. MOLLOHAN. In June of 2008, Congress appropriated \$100 million in disaster supplemental funding for EDA. In September of fiscal year 2009, provided another \$400 million, a total of \$500 million.

Of the \$100 million disaster funding provided in 2008, \$22 million is still unobligated or 22 percent and are only in the Denver and Chicago regions. What is the reason for the delay in obligating disaster funding in Denver and Chicago?

Mr. FERNANDEZ. I don't know if it is technically a reason for delay. I can tell you that doing disaster response work often is very complex. The communities are often devastated, the amount of initial work just in terms of first responder cleanups and relief.

Mr. MOLLOHAN. Are there projects in these regions which are appropriate for disaster funding?

Mr. FERNANDEZ. There certainly are.

Mr. MOLLOHAN. Still at this time?

Mr. FERNANDEZ. Yes. There are projects in the pipeline. I looked at this question ahead of time. In my conversations with our regional directors, in total out of both of those supplemental appropriations, essentially 90 percent, 96 percent of all those funds, are either approved, in final review, or in some stage where they are going to be moving forward.

There is four percent left. And our commitment is to get those funds obligated by the end of the second quarter.

Mr. MOLLOHAN. Of the \$400 million—I am sorry.

Mr. FERNANDEZ. We will meet that commitment.

Mr. MOLLOHAN. Of the \$400 million provided in September of 2008, 100—we were advised, \$143 million or more than 35 percent is still unobligated for projects in Atlanta, Denver, Chicago, and the Austin regions—

Mr. FERNANDEZ. Yes. And again—

Mr. MOLLOHAN [continuing]. And Texas regions.

Mr. FERNANDEZ. Yes. Again, I think we can brief you in more detail. But those are in the pipeline. The funding is in the pipeline.

Mr. MOLLOHAN. Okay. But—

Mr. FERNANDEZ. Let me give you an example if I could, Mr. Chairman. There is a huge project in Cedar Rapids that is probably a \$35 million project. There are a lot of technical things they are working out at a local issue, at a local level to move that project forward.

So it has been identified as a very valuable investment for the community as part of that rebuilding strategy. It is one that we certainly would be receptive to. But it is in those final kind of due diligence and review stage to move it forward to announcement.

Mr. MOLLOHAN. Okay. So you wouldn't even describe the fact that these funds have not been obligated as a delay?

Mr. FERNANDEZ. I wouldn't, because it would be one thing if I were telling you that we have got hundreds of millions of dollars that there is no pipeline for. That is not where we are at.

Mr. MOLLOHAN. Okay.

Mr. FERNANDEZ. We want to move as quickly as we can.

Mr. MOLLOHAN. So there are projects that in these regions—

Mr. FERNANDEZ. Yes, sir.

Mr. MOLLOHAN [continuing] That are appropriate for funding and are moving through the pipeline.

Mr. FERNANDEZ. Yes.

Mr. MOLLOHAN. Are there still appropriate applications for this funding? Would it be appropriate for an applicant to still file for this funding?

Mr. FERNANDEZ. Yes, because there is still the four percent that hasn't been really pushed into the larger pipeline.

Mr. MOLLOHAN. Okay.

Mr. FERNANDEZ. I would have to get back to you on specifically what that amount is though.

[The information follows:]

DISASTER FUNDING ALLOCATION AVAILABILITY

As of today, of the \$500M total disaster supplemental, EDA has approved \$271,629,200 with an additional \$66,907,993 in final review in DC. That leaves \$161,462,807 still being processed at some stage in the regional offices.

AMERICAN RECOVERY AND REINVESTMENT ACT FUNDING

Mr. MOLLOHAN. Okay. You had some questions directed to you about the American Recovery and Reinvestment Act. And we mentioned in our statement that Congress appropriated \$150 million to EDA and directed EDA to give priority to areas of the Nation that had experienced sudden and severe economic dislocation and job loss due to corporate restructuring.

I just would like to make the record as clear as possible on this. How much of the funding has been obligated to date?

Mr. FERNANDEZ. Hundred percent.

Mr. MOLLOHAN. What areas of the country have experienced sudden and severe economic dislocation and job loss due to corporate restructuring?

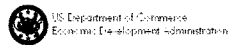
Mr. FERNANDEZ. It is hard to say which parts of the country have not been affected by restructuring and changes in the economy. It is a broad area.

Mr. MOLLOHAN. Can you give a—

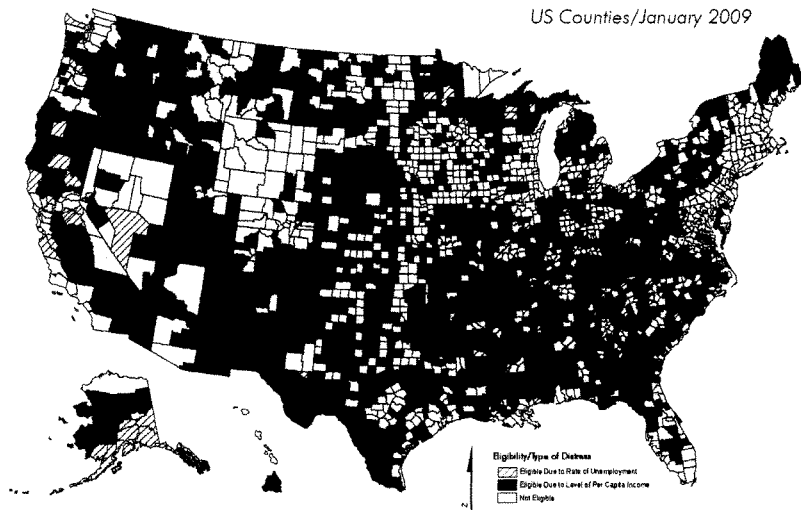
Mr. FERNANDEZ. You know, my staff could give you an actual—

Clarification for the Record

EDA does not geographically track sudden and severe economic dislocation and job loss, nor does it specifically track corporate restructuring. However, EDA generally defines economic distress as 1) an unemployment rate that is, for the most recent twenty-four (24) month period for which data is available, at least one (1) percent greater than the national average unemployment rate; or 2) per capita income that is, for the most recent period for which data is available, eighty (80) percent or less of the national average per capita income; or 3) a ‘special need’ (certain unemployment or economic adjustment problems) as determined by regulation. The map below shows a county-by-county view of EDA’s primary distress criteria (i.e., unemployment and per capita income). The areas shaded in blue and/or hatched in red reflect areas that may have met EDA’s eligibility criteria at the time that Congress was considering the passage of ARRA (January 2009).



Eligible Areas by Type of Distress
US Counties/January 2009



The map reflects Bureau of Labor Statistics and Bureau of Economic Analysis data and does not necessarily indicate eligibility for EDA programs. Eligibility will depend on American Community Survey data, if available, as set forth in EDA regulations.

Mr. MOLLOHAN. Okay.

Mr. FERNANDEZ [continuing]. Breakdown of the counties.

Mr. MOLLOHAN. But why don't—why don't you give us a more detailed answer for the record. How did EDA determine the allocation per region? Would you prefer to do that for the record?

Mr. FERNANDEZ. We can give you the formula. What we used though was our—standard allocation formula that has been developed over the years between the staff and members, I believe of this Committee and others. And so we use essentially, that same formula.

But one of the changes we made is rather than using a 24 month period for calculating unemployment, it was reduced to three months to give more contemporary data of that sudden impact for which the Recovery Act was intended to address.

[The information follows:]

EDA's ARRA allocations per region

The American Recovery and Reinvestment Act called on EDA to "give priority consideration to areas of the Nation that have experienced sudden and severe economic dislocation and job loss due to corporate restructuring." As a result, EDA decided to allocate funding to the regional offices using a hybrid of its traditional allocation formula. EDA's allocation drops lagging economic indicators in favor of a single allocation metric, 3-month unemployment figures. These were the most contemporary data on unemployment that were available and best represented current economic conditions for the purposes of EDA's allocation. As such, the allocation of funds to EDA's regional offices were as follows based on the most recent 3-month unemployment figures available:

EDA Regional Office	Percentage Distribution*	Dollars to Regions
Philadelphia	22.38%	\$32,903,866
Atlanta	20.68%	\$30,392,752
Denver	6.28%	\$9,237,948
Chicago	18.88%	\$27,749,378
Seattle	22.77%	\$33,473,004
Austin	9.01%	\$13,243,052
Total	100.00%	\$147,000,000

* Percent rounded

Mr. MOLLOHAN. I understand that there were 68 projects funded.

Mr. FERNANDEZ. Correct.

Mr. MOLLOHAN. That 64 were for construction coming out of public work investments, two were revolving loan fund recapitalizing or creation, and two were for technical assistance.

Mr. FERNANDEZ. Correct.

Mr. MOLLOHAN. And all the funding is out.

Mr. FERNANDEZ. Yes.

Mr. MOLLOHAN. Well let me congratulate you for getting that funding out. And it looks like they really went to bricks-and-mortar projects, which—

Mr. FERNANDEZ. As you know, I mean there is a wealth of projects in the pipeline.

Mr. MOLLOHAN. I am sorry?

Mr. FERNANDEZ. There is a wealth of projects in the pipeline.

ECONOMIC DEVELOPMENT DISTRICTS

Mr. MOLLOHAN. Okay. In fiscal year 2009, Congress provided \$4 million above the request for a planning program to increase—for the planning program to increase the amount provided to each economic development district and to reduce the backlog of designated but unfunded EDDs. This direction was continued in the fiscal year 2010 bill.

Does the fiscal year 2011 request incorporate the increased levels for the EDDs?

Mr. FERNANDEZ. It does.

Mr. MOLLOHAN. How much does that provide to each EDD?

Mr. FERNANDEZ. Currently it is approximately \$60,000 annually.

Mr. MOLLOHAN. Do you know how many funded EDDs there were in fiscal year 2010?

Mr. FERNANDEZ. Three hundred eighty three.

Mr. MOLLOHAN. How many designated but unfunded EDDs are there?

Mr. FERNANDEZ. As far as I know zero.

Mr. MOLLOHAN. What is the process for designating an economic development district?

Mr. FERNANDEZ. The communities build an application based on the criteria in our statute. And they submit it to the regional offices. They look at an application, evaluate it, and then forward it on. Currently we have three pending applications.

TIMELINESS OF REVIEW PROCESS

Mr. MOLLOHAN. There are always concerns about the lengthy review of these grant applications. It really appears to be an issue affecting particular regions maybe rather than all of them.

Are you aware that EDA applicants have concerns about the length of time for review of their applications—in their particular regions?

Mr. FERNANDEZ. Yes. I am aware. I come to this job with kind of a double-edged sword of having been on the other side of the table.

I understand how effective EDA can be. I also have experience. I share some of the frustrations that our constituents face from time to time. And we have put together an internal interagency

working group being led by our regional offices in partnership with DC to look at how we can refine our process to make it more accessible but also more efficient.

Mr. MOLLOHAN. Are there some regions that have a particular problem with the timeliness of review of grant applications? And I would ask you to identify them.

Mr. FERNANDEZ. In a more specific way than the perceptions of pace, I can't single out a particular region.

Mr. MOLLOHAN. Would you for the record provide the Committee with a review of the—a comparative review of the response times for review of grant applications region by region? So that we can identify regions that are taking longer and kind of do a bell curve.

Mr. FERNANDEZ. I can do that. And I would be happy to do that. But let me just, if I could though, maybe step back and talk about the process.

[The information follows:]

Clarification for the Record

TABLE A			
Grant Processing Times	Atlanta	Chicago	Philadelphia
Receipt of Application to Review by IRC	31 days	60 days	58 days
IRC meets and makes recommendation to RD	2 days	1 day	5 days
RD receives IRC recommendation/RD Decision	3 days	1 day	1 day
If the Investment is to be invited (Merit Further Consideration), the Summary & Evaluation is made available to HQ for "QA" review	1 day	1-5 days	5 days after the IRC Recommendation/RD Decision
Following the HQ QA stop, an invite for Further Consideration is issued by RD	2 days	2 days	2 days
Days from Application Received to Sent to Washington	34+49 days		
Days from Sent to Washington to Final Approval	21 days		
CUMULATIVE Days from Initial Receipt to Final Approval	143 CUMULATIVE days		

The numbers in the Table A represent averages. Since EDA currently accepts applications on a rolling basis, instead of based on deadlines, there is no way to tie these figures back to specific dates. The following additional information is provided to clarify the milestones that were used in the averages provided:

1. Receipt of Application to Review by IRC: This represents the time between when EDA receives a formal application, either through grant.gov or in hard copy, and when it is

- reviewed by the Investment Review Committee (IRC), a body at the regional office that evaluates the merits of a project and makes a recommendation to the regional director.
2. IRC meets and makes recommendation to RD: This represents the time from when the IRC meets to when they actually make a recommendation.
 3. RD receives IRC recommendation/RD decision: This represents the time it takes for the regional director to decide whether or not to move forward with the proposal and invite the application for further consideration.
 4. Summary made available to HQ: This represents the time it takes for the regional office to provide the information required for headquarters to complete its quality assurance review.
 5. Invite for Further Consideration: Once the application passes the quality assurance review the applicant is invited to submit additional supporting information required for EDA to make an investment award.
 6. Days from Application Received to Sent to Washington: This represents the time it takes for the regional office to review the supplemental information and for the regional director to approve the grant.
 7. Days from Sent to Washington to Final Approval: This represents processing in EDA headquarters to prepare the grant and associated press releases, notify Congress of the investment award, and make the announcement.
 8. Cumulative: Total time from the initial application to the final announcement and obligation of funds.

Because, again, from my perspective I think there are areas of opportunities for improvement. When communities come to EDA or they meet with an EDR, one of our economic development representatives, and start talking about their needs and some of the kinds of projects that they think might be helpful for their community—we'll let me step back.

There is even a beginning point. There are some communities that know exactly what they want today. They can fill out an application, hit the send button on grants.gov, and that is in the system.

There are many other communities where an important role of what EDA does is to try and do the consultation at the front end and help move along an application. So it is really hard sometimes to get apples-to-apples comparison.

Mr. MOLLOHAN. Sure. And I understand that. I don't think too much can be drawn initially from such a depiction. On the other hand, it can identify areas where it may not have anything to do with the personnel or the leadership in the region. It may have something to do with the fact that we don't have a representative in a particular geographic area where we should have a representative in that geographical area helping people. So that may be the need, the requirement.

There may be a lot of reasons for the disparity. But, you know, it would be interesting to look at that.

Mr. FERNANDEZ. It would be.

Mr. MOLLOHAN. Where, you know, government interfaces with constituents. We ought to look and see how the constituents are judging the performance. And if there are concerns expressed, then, you know, we need to address them, not in a judgmental way. But look at it—

Mr. FERNANDEZ. I absolutely agree.

Mr. MOLLOHAN [continuing]. From an administrative standpoint and see where we might. And actually that might bring for the Committee an understanding, but also a process that I am sure your folks have gone through, bringing a greater efficiency. We don't want to beef up an area with personnel where they already have the resources to do a really good job and other areas they may need additional resources to do a good job. And I think evening that out across the board would be very helpful.

I know in West Virginia this consultive ability is very, very important. And maybe it is just because we have been used to having it for years and years. But it is something that people have missed for a number of years since the agency has been hobbled by a lack of personnel and expertise, both at the regional and at the national levels. So I think that is a good starting point to begin analyzing them.

Mr. FERNANDEZ. And if I can, Mr. Chairman, my focus on this is not totally unique or new to the agency. A few years ago based on a lot of input, the EDA did modify their process to streamline it. There used to be a pre-application then a formal application. They have condensed that to try and expedite the process. There has been a commitment in trying to improve processes that predate my position here.

We are continuing to work on that. It is something we are very committed to doing in terms of making the system more effective.

I think you have to get to the point where you can tell people yes or no. And you have to do that in a timely manner. In my old world I would do deals where I could get a yes or no in a relatively short amount of time.

And the yes or no might be, okay, here is my commitment letter on financing. Of course there is going to be tons of due diligence, lots of other stuff that I am going to have to check the box on to actually close, right?

But in the context of EDA, I don't understand why we can't have that kind of early process to review the merits of a proposal and get you an answer based on the competitive grants system. And then, of course, there will be some things we may have to do in terms of due diligence, things that are internal, and solely issues of the federal government process.

But at least you will know on whether or not you can move forward with that project or not, at least with the EDA component.

I think there is room for improvement. And I know that staff across the board does not want to be in a system that is perceived or in reality is, you know, too bureaucratic and slow.

NATIONAL INNOVATION MARKETPLACE

Mr. MOLLOHAN. Well we don't want to, you know, hang that label on you or any particular region. This is in the spirit of addressing it positively.

Final inquiry, in our NIST hearing we discussed the National Innovation Marketplace. And I know you have discussed that in a number of different places.

A new initiative in the MEP, the Manufacturing Extension Program out of NIST, we have learned that EDA has a role in this initiative. If you would discuss that role in terms of goals and vision and in the process, you know, we inquired about this at a previous hearing.

And I think we need some elaboration on what is the National Innovation Marketplace. And in the process of telling us that, what is EDA's role in it?

Mr. FERNANDEZ. To be perfectly honest, that was news to us. The marketplace, as I understand it, is—

Mr. MOLLOHAN. You mean it was news to you that you were involved with it?

Mr. FERNANDEZ. Well I don't think—

Mr. MOLLOHAN. Or maybe we are misinformed.

Mr. FERNANDEZ. Well I am trying not to say that.

Mr. MOLLOHAN. No, no, no, please say it. We are misinformed all the time.

Mr. FERNANDEZ. I don't think that is the case. There are certainly opportunities—

Mr. MOLLOHAN. We don't have a corner on knowledge here. Believe me. And that is why you are here testifying.

Mr. FERNANDEZ. Now the marketplace concept is a virtual program that NIST has developed to match technology to business spinoffs, et cetera. We are not engaged in that.

We are broadly engaged though in a discussion with NIST and a whole host of other Department of Commerce bureaus about partnering on commercialization ideas, how we can accelerate com-

mercialization, and we certainly have a role in that in terms of some thought leadership as well as looking at—

Mr. MOLLOHAN. Commercialization of university research for example?

Mr. FERNANDEZ. Federal labs.

Mr. MOLLOHAN. You have a role in that. Elaborate on that for us.

Mr. FERNANDEZ. We can have a role. I mean, we find the university centers, some of which are specifically focused on commercialization, like the University of Kentucky. They are specifically focused on how they accelerate commercialization.

We have accelerators that we invest in, incubators that are regional-serving that are located on campuses. So we do play a role in that commercialization and innovation economy.

We believe there will be opportunities. And that is part of the Office of Innovation and Entrepreneurship's directive is to look at how we can broadly collaborate within DOC as well as other federal agencies.

Mr. MOLLOHAN. You know, I think—

Mr. FERNANDEZ. But the manufacturing—the program you are talking about, that is not something that we have been involved in.

CLOSING REMARKS

Mr. MOLLOHAN. Okay. Well thank you for that clarification.

We will have some questions for the record and other members may as well. We have asked you to submit for the record as we proceed in this hearing. And, you know, we would really like for you to actually respond to all those requests respectfully.

Mr. FERNANDEZ. We certainly will.

Mr. MOLLOHAN. I am sure you will. And thank you for the good job that you have already done and the attitude you are bringing to the Economic Development Administration.

I know your attitude it is not only sympathetic to the core mission, but also brings a rigor to the efficiency of the agency and to the service that it provides to our communities. And also I think brings some imagination to the job, which we look forward to supporting through the funding process.

Thank you for your testimony here today, Assistant Secretary Fernandez.

Mr. FERNANDEZ. Thank you.

Mr. MOLLOHAN. The hearing is adjourned.

Chairman Alan Mollohan
Questions for the Record

Overall Funding Levels – Public Works and EAA

This Subcommittee held a hearing on EDA grant programs in February 2010. Five grantees from around the Nation testified on their experiences with EDA and their ideas for improving the program.

- 1. The grantees were appreciative of the Economic Adjustment Assistance (EAA) program and its flexibility, but they all agreed that Public Works funding should not be reduced to increase EAA funding levels. In fact, applications for Public Works projects remain very high. Why has the Administration repeatedly proposed to reduce Public Works?**

Answer: While the Public Works program remains an extremely useful tool, EAA can provide a wide range of technical, planning, and implementation assistance, including public works and infrastructure projects, which allow the agency to bring to bear its full range of projects to elicit change to an economy. However, as EDA's most flexible program, EAA is critical to the agency maintaining its ability to effectively and efficiently respond in real-time to economic dislocations as they occur.

- 2. It is true that Public Works projects can be funded through the EAA program, but by definition – given the other types of projects that can be funded in EAA and the limited amount of funding proposed – fewer Public Works Projects would, in fact, be funded under EDA's FY11 budget proposal, correct?**

Answer: EDA has a competitive grant evaluation process that is responsive to local requests for assistance. It's conceivable (although unlikely) that EDA could receive only construction EAA grant proposals. It's more likely that EDA will receive a combination of hard and soft infrastructure proposals needed to support contemporary economic development needs. The flexibility to provide either type of assistance will allow us to be most responsive to the economic development practitioner community.

- 3. How many Public Works project applications were received in FY09? How many to date in FY10?**

Answer: In FY09, EDA received 222 Public Works project applications. As of April 30, 2010, the agency has received 278 Public Works project applications in FY 2010.

4. How many EAA applications were received in FY09? How many to date in FY10? Of those projects, how many were for Public Works-type projects?

Answer: In FY 2009, EDA received 133 EAA applications. Of these 133 applications, 44 were for construction projects. From these applications, EDA awarded 19. As of April 30, 2010, the agency has received 206 EAA applications for FY 2010 funds. Of these 206 applications, 75 have been for construction projects. So far this year EDA has awarded three of these projects.

A witness referred to EDA as the only Federal agency that he knew of with a mission to create jobs. Assistant Secretary Fernandez said, "What is unique about EDA is it is the only federal agency...whose sole mission is to help build and lead an economic development strategy for the entire country...."

5. Given the current economy and EDA's track record in helping create new jobs, including impressive obligation rates for ARRA funding, why didn't the Administration propose significant additional funding for both Public Works and EAA?

Answer: The Administration is committed to moving the nation from recovery to rebuilding our economy by building a new foundation for the long-term job creation and prosperity for all American families. EDA is an integral part of President Obama's economic recovery team and is committed to sustained economic growth through its efforts to create jobs, harness innovation and increase capital investments in economically distressed areas.

EDA's 2011 budget reflects the importance of competitive, high-performing regional economies as the building blocks of sustainable growth, consistent with the FY10 budget request, which was an increase of 6% over the FY09 budget. Our 2011 budget is also in line with the Administration's need to spend in a fiscally responsible way by maintaining a flat budget.

Application Flexibility

6. Has the Administration considered whether it would be valuable to streamline the application process for all EDA grants, including EAA and Public Works, so that applicants can utilize one application for all funding programs?

Answer: On October 1, 2008, EDA introduced a streamlined single application. The single application simplified EDA's application requirements and created a single document that can be used to apply to any program. It clearly notes which sections should be filled out for the unique programs, and tells applicants what supporting documentation may be required later in the application process.

The Committee has been led to believe that streamlining the application process in this way would require a statutory change.

7. Did the Assistant Secretary recommend such a change in his recent testimony before the Transportation and Infrastructure Subcommittee on Economic Development, Public Buildings, and Emergency Management?

Answer: A statutory change is not required. The Public Works and Economic Development Act of 1965 (PWEDA) does not specify the application process and simply states that EDA may make grants “on application of an eligible recipient.” See sections 201(a), 203(a), 205(b), 207(a), 209(a), 214(a).

EDA officials have been discussing internally how the agency can make our grant process work better for our grantees – How it can be faster, more transparent and more competitive so that the very best projects are funded and applicants know where they stand in the process. EDA is in the process of redesigning its approval process with the goal of standardizing procedures across the regions, enhancing the competitiveness of the grant-making process, and drastically cutting the amount of time it takes for an applicant to receive a positive or negative reply from EDA. Headquarters staff has convened a working group of experts from the regional offices to work on developing the new process, which will aim to review, approve, and award grants within ninety days. And, the agency will conduct extensive outreach to its stakeholder network for input and feedback.

8. Would the Administration propose such a change to the authorizing committees in the upcoming reauthorization process?

Answer: No, since a statutory change is not required.

EDA Reorganization – Office of Innovation and Entrepreneurship

In March, the Committee received notification of a reorganization within EDA.

9. Please explain the purpose of the reorganization.

Answer: EDA's primary goals in proposing this reorganization are to streamline existing business processes and programs, right-size the organization structure, and redeploy resources where they will be most effective. This reorganization is expected to clarify reporting relationships, strengthen communications and coordination between Regional Offices and Headquarters, allow EDA to focus on its key programmatic priorities, enhance programmatic expertise to provide guidance to Regional Office staff, extend EDA's outreach to the country's most distressed communities, optimize service delivery, and further improve EDA's performance evaluation program.

Part of this reorganization will move the Office of Innovation and Entrepreneurship (OIE) to EDA. OIE, currently housed in the Office of the Secretary, is a great fit for EDA's mission to promote innovation and competitiveness. EDA has a long history of investments in regional innovation clusters, business incubators, and technology-based economic development organizations. OIE will leverage existing resources to promote high-growth entrepreneurship and support commercialization of federally funded research to drive economic growth and job creation.

10. Will additional resources be required in fiscal year 2011 as a result of this reorganization?

Answer: This reorganization can be accomplished with existing resources.

11. Will the reorganization require additional resources beyond fiscal year 2011?

Answer: No, EDA does not expect the need for any additional resources beyond FY 2011 to fund reorganization.

Last September, the Secretary of Commerce announced the creation of a new Office of Innovation and Entrepreneurship within the Department of Commerce, and the new Office is included in the EDA reorganization.

12. Has the Office been operating since the announcement? Where has the Office been located since September?

Answer: The Office of Innovation and Entrepreneurship is currently located within the Office of the Secretary of Commerce.

13. Describe the new Office and its purpose.

Answer: The mission of the Office of Innovation and Entrepreneurship (OIE) is to leverage existing Department of Commerce (Commerce) resources to promote high-growth entrepreneurship and support commercialization of federally funded research to drive economic growth and job creation.

OIE was launched and incubated in the Office of the Secretary as a key Commerce priority. Secretary Locke views OIE as a prime example of intra- and interagency collaboration and coordination to better serve our constituents, a role it will continue as part of EDA. Due to the cross-cutting nature of these issues, OIE is working closely with multiple bureaus within Commerce (Economic Development Administration, National Institute of Standards and Technology, U.S. Patent and Trademark Office, National Telecommunications and Information Administration, National Oceanic and Atmospheric Administration, Minority Business Development Agency, International Trade Administration, Economic Statistics Administration, Bureau of Economic Analysis and the Census Bureau),

as well as the White House and other federal agencies. In addition, it serves as a key member of the White House-led interagency Innovation and Entrepreneurship Working Group.

14. What are the benefits to establishing the Office in EDA?

Answer: OIE is a great fit for EDA's mission to promote innovation and competitiveness. EDA has a long history of investments in regional innovation clusters, business incubators, and technology-based economic development organizations.

15. Who will be in charge of the Office? Who will that person report to?

Answer: The existing Director will continue to lead the OIE and will be staffed by detailees from multiple bureaus of Commerce to reinforce its intra-agency scope. OIE will maintain its report to the Office of the Secretary as well as to the Assistant Secretary of Commerce for Economic Development.

16. How is this Office funded? Is it specifically included in the fiscal year 2011 request? If so, where? If not, why not?

Answer: This office is currently funded with existing resources. This office is not specifically included in the 2011 request because the request to establish this office came after the 2011 request was submitted to Congress.

17. How is this Office being funded in fiscal year 2010?

Answer: This office is funded with existing resources.

Energy Efficient Building Systems Regional Innovation Cluster Initiative (E-RIC)

The Administration has announced a multi-agency funding opportunity to support an Energy Regional Innovation Cluster.

18. What role will EDA play in this initiative?

Answer: EDA played a leadership role in the development of the E-RIC, serving as primary drafter for the Funding Opportunity Notice (FOA). The agency will participate in the selection of the E-RIC winner, and it has committed to making up to \$3 million in Public Works funds and up to \$2 million in Economic Adjustment Assistance funds available to the competition winner.

The recipient may use EDA Public Works funds to construct or upgrade infrastructure to fill a critical need in the E-RIC, including but not limited to a business incubator or network of business incubators; a workforce training facility; laboratory space or other applied research facilities; or publicly-owned

infrastructure such as water, sewer, broadband, or rail needed to support manufacturing operations in the E-RIC.

19. What funding levels will EDA be expected to contribute?

Answer: EDA has committed to making up to \$3 million in Public Works funds and up to \$2 million in Economic Adjustment Assistance funds available to the competition winner out of deobligated funds.

20. How do the goals and vision of this initiative mesh with EDA's mission?

Answer: The E-RIC pilot is closely tied to EDA's mission "to generate jobs, help retain existing jobs, and stimulate industrial and commercial growth in economically distressed areas of the United States." The objectives of the E-RIC FOA, as identified in the FOA and reflected in the selection criteria, are as follows:

1. Develop and demonstrate sustainable and efficient models for attaining national strategic objectives, with a focus on (i) developing, expanding, and commercializing innovative energy efficient building systems technologies, designs, and best practices for national and international distribution and (ii) reducing the carbon footprint of the United States;
2. Create and retain Good Jobs;
3. Eliminate gaps between the supply and demand for skilled workers in the E-RIC through training and education;
4. Increase regional gross domestic product (GDP);
5. Promote innovation in science and technology generally and, with respect to the Hub, promote energy efficient building systems, designs and best practices; and
6. Enhance the economic, technological, and commercial competitiveness of the United States on the global stage.

The second, fourth, and sixth FOA objectives directly support job creation/retention and industrial/commercial growth, while the third and fifth indirectly support these mission by creating the building blocks—innovation and a skilled workforce—needed to support job creation/retention and industrial/commercial growth.

Revolving Loan Funds

The Committee is concerned that funding that would have capitalized revolving loan funds (RLFs) were unavailable because of the E-RIC initiative or other new funding initiatives.

21. How many RLFs were capitalized in FY09 and how many are planned for FY10?

Answer: EDA awarded 16 RLF grants in FY09. To date in FY10, EDA awarded three and expects additional RLFs will be funded before the close of the fiscal year. However, no target number for FY10 exists. EDA has a competitive grant process and does not know how many RLF applications we may receive and of those received how many will be found competitive and receive funding. Since providing "access to capital for small and medium sized and ethnically diverse enterprises" was established as a new EDA funding priority this year, EDA anticipates that both the number of RLF applications received and the number of successful applications may increase over time.

22. Provide a list, by region, of RLFs capitalized since 2000.

Answer:

Region	FY	Project Description	Applicant Name	Grantee City	State	EDA \$
Philadelphia	2000	Recapitalize RLF	S Alleghenies P&DC	Altoona	PA	\$504,000
Philadelphia	2000	Revolving Loan Fund	Brooklyn Econ Dev Corp	New York	NY	\$450,000
Philadelphia	2005	Incubation Network Asst	TEDCO	Columbia	MD	\$325,000
Philadelphia	2010	Revolving Loan Fund	SEED Corp.	Taunton	MA	\$500,000
Atlanta	2001	RLF Recapitalization	AL Tombigbee Reg Comm	Camden	AL	\$583,000
Atlanta	2001	RLF Recapitalization	S AL Reg Ping Comm	Mobile	AL	\$250,000
Atlanta	2001	Revolving Loan Fund	Eastern Carolina Council	New Bern	NC	\$500,000
Atlanta	2009	RLF Recapitalization	Green River ADD	Owensboro	KY	\$1,924,334
Denver	2000	RLF recapitalization	Great Falls Devel Auth	Great Falls	MT	\$750,000
Denver	2000	Establish RLF	Boonslick Regional PC	Warrenton	MO	\$300,000
Denver	2000	Establish RLF	Beartooth RC&D Area Inc	Joliet	MT	\$125,000
Denver	2000	Recapitalize RLF	Bear Paw Dev Corp	Havre	MT	\$303,238
Denver	2000	Capitalize RLF	Lake of the Ozarks	Camdenton	MO	\$348,000

Region	FY	Project Description	Applicant Name	Grantee City	State	EDA \$
Denver	2001	Establish RLF	CLG Region 6 Planning Comm	Marshalltown	IA	\$150,000
Denver	2001	Recap RLF	Black Hills Cmty Dev Inc	Rapid City	SD	\$300,000
Denver	2001	Recap RLF	Missoula Area EDC	Missoula	MT	\$600,000
Denver	2001	RLF	San Luis Valley DRG	Alamosa	CO	\$494,290
Denver	2007	Recapitalization Revolving Loan Fund	Montana Bus Assist Conn	Helena	MT	\$500,000
Denver	2009	Revolving Loan Fund	East Central Iowa COG	Cedar Rapids	IA	\$1,500,000
Denver	2009	Recap RLF	Plg & Dev District III	Yankton	SD	\$750,000
Denver	2009	Establish RLF	Southwest Iowa PC	Atlantic	IA	\$400,000
Denver	2009	RLF	Region XII COG	Carroll	IA	\$450,000
Denver	2009	Recapitalization Establish RLF	North Iowa Area COG	Mason City	IA	\$400,000
Denver	2009	RLF Recap	Boonslick Regional PC	Warrenton	MO	\$300,000
Denver	2009	Revolving Loan Fund	Iowa Northland Reg EDC	Waterloo	IA	\$750,000
Denver	2009	Revolving Ln Fd Recap	East Central Intgov Assn	Dubuque	IA	\$500,000
Denver	2009	Establish RLF	South Eastern Dev Fdtn	Sioux Falls	SD	\$225,000
Denver	2009	Recapitalize RLF	Southeast Iowa RPC	Burlington	IA	\$900,000
Denver	2009	RLF Recap	Mid Iowa Dev Assn COG	Fort Dodge	IA	\$250,000
Denver	2009	RLF Recap	SE Missouri RP & EDC	Perryville	MO	\$500,000
Denver	2009	Revolving Loan Fund	Omaha Cncl Bluffs MAPA	Omaha	NE	\$510,000
Denver	2009	ARRA Timber/Wood RLF	State of Montana	Helena	MT	\$2,700,000
Denver	2010	RLF Recapitalization	South Eastern Dev Fdtn	Sioux Falls	SD	\$500,000
Chicago	2000	Recap existing RLF	Southeastern IL RPDC	Harrisburg	IL	\$170,415
Chicago	2001	RLF	Racine County EDC	Sturtevant	WI	\$466,000
Chicago	2001	Recapitalization RLF	Shorebank Enterprises	Chicago	IL	\$787,500
Chicago	2001	Recapitalization Revolving Loan Fund	Upper MN Valley RDC	Appleton	MN	\$300,000
Chicago	2009	ARRA Micro Loan RLF	ACCION/Chicago, Inc.	Chicago	IL	\$800,000
Chicago	2010	Revolving Loan Fund	Bi-State Regional Comm	Rock Island	IL	\$750,000

Region	FY	Project Description	Applicant Name	Grantee City	State	EDA \$
Seattle	2000	RLF for S. Central LA	FAME	Los Angeles	CA	\$550,000
Seattle	2000	Pomona Valley RLF	Inland Valley Dev Corp	San Bernardino	CA	\$450,000
Seattle	2001	Long Beach RLF	Long Beach, City of	Long Beach	CA	\$1,000,000
Seattle	2001	Revolving Loan Fund	Southern Oregon Regni ED	Medford	OR	\$315,633
Seattle	2001	TA & RLF	Rural Nevada Dev. Corp.	Ely	NV	\$500,000
Seattle	2002	Drought relief RLF	South Central Oregon EDD	Klamath Falls	OR	\$500,000
Seattle	2002	Revolving Loan Fund	San Diego, City of	San Diego	CA	\$1,500,000
Seattle	2002	Revolving Loan Fund	Mid Columbia EDD	The Dalles	OR	\$320,000
Seattle	2003	RLF Recap & Admin	EBCRC	Alameda	CA	\$700,000
Seattle	2004	Revolving Loan Fund	PPEP Microbusiness	Tucson	AZ	\$500,000
Seattle	2004	Technology RLF	SIRTI	Spokane	WA	\$1,466,609
Seattle	2004	Revolving Loan Fund	Lane COG	Eugene	OR	\$500,000
Austin	2000	Revolving Loan Fund	Oklahoma City City of	Oklahoma City	OK	\$500,000
Austin	2006	Hurricane recovery	LA Hurricane Recovery	Baton Rouge	LA	\$500,000
Austin	2006	RLF Recap	JEDCO	Metairie	LA	\$500,000
Austin	2006	RLF recap	New Orleans City of Rbdl	New Orleans	LA	\$600,000
Austin	2006	RLF Recap	Acadiana RDD	Lafayette	LA	\$600,000
Austin	2006	RLF Recap	South Central PDC	Gray	LA	\$300,000
Austin	2008	RLF Recap	New Orleans City of Rbdl	New Orleans	LA	\$460,000
Austin	2008	RLF Recap	Acadiana RDD	Lafayette	LA	\$500,000
Austin	2008	RLF Recap	Tri District Dev Corp	Alexandria	LA	\$250,000
Totals:		60				

23. Does EDA intend to capitalize RLFs in FY11?

Answer: Yes, EDA expects to capitalize RLFs in FY11.

Global Climate Change Mitigation Incentive Fund

In fiscal year 2010, Congress provided \$25 million for the Global Climate Change Mitigation Incentive Fund (GCCMIF), an increase of \$8.5 million above the request and \$10.3 million above the fiscal year 2009 enacted level.

In addition, the statement included language directing EDA to expand the program beyond Leadership in Energy and Environmental Design, more commonly known as LEED certification.

24. What kind of response has the program received?

Answer: The program has been extremely well-received. Appropriated funding in both FY 2008 and FY 2009 was obligated within the respective fiscal years. This feat is more impressive due to the fact that all funding for each fiscal year was obligated in the final quarter (Q4) due to delays in the approval of the required GCCMIF report and spend plan. EDA looks forward to making the process for accessing GCCMIF funding more routine, building a robust pipeline of applications by providing potential applicants with continuity of access. In addition, EDA's regional offices regularly report receiving inquiries regarding the status and potential use of the GCCMIF.

25. Has the additional flexibility, including opportunities for projects other than LEED certification, increased interest and demand for the program?

Answer: The expansion of the GCCMIF in FY09 to allow for a wide-range of projects that promote or contribute to climate change mitigation (from planning and program development to infrastructure construction) has been well-received. Of the 21 projects funded (wholly or in-part) with GCCMIF dollars, approximately 40% of the projects were focused on an output other than the construction or renovation of a LEED certified green building. Instead, these projects had a green end-product output (i.e., development, construction or manufacture of something that, while advancing the EDA mission, furthers or contributes to sustainability in general and/or the environmental quality of the associated community or region.

The 'end-product' can take numerous forms (i.e., activity, item, thing, plan or program). Examples include: construction of a green collar workforce training facility; development of a renewable energy resource center; installation of infrastructure to a business park in which the primary tenant will be constructing wind turbine towers; and design and installation of supervisory control and data acquisition technology for a utility district to increase efficiency and save energy. In addition to obligating the full \$14.7 million appropriated for the GCCMIF in FY09, EDA has seen an increase in demand as exemplified by the GCCMIF-type projects funded by regular EDAP.

For FY11, the Administration requested the same level, \$16.5 million, as it had requested for FY10. This is \$8.5 million below the FY10 enacted level.

26. Why has the Administration chosen to reduce the amount of funding available for these projects?

Answer: A reduction in the funding request for the GCCMIF reflects the establishment of a separate investment funding priority (see below) for environmentally-sustainable development. This priority is intended to encourage EDA's other programs to seek and achieve many of the GCCMIF's desired outcomes.

27. Should all EDA funding eventually be utilized for projects that incorporate some elements of green construction?

Answer: Infusing the principles and priorities of environmentally-sustainable development into all of EDA's investment projects is clearly a worthwhile goal. Balancing the concepts of people (i.e., community well-being/equity), planet (environmental quality), and prosperity (economic vitality) should be a critical element in EDA's economic development mission. In terms of green construction, it is likely that EDA's funding of green buildings will be increasingly commonplace as green building standards for construction become a regular fixture at the community level. In addition, in FY09, EDA funded a number of LEED certified green construction projects with regular EDAP (non-GCCMIF) funding, reflecting the general acceptance of green building standards and policies.

28. How will EDA's newly established environmentally sustainable development funding priority affect EDA's economic development assistance programs (EDAP)? Does this apply to all EDAP programs?

Answer: The Environmentally-Sustainable Development investment priority acknowledges the critical role of environmental quality in spurring economic development -- and the importance of the green economy in promoting economic growth. As such, EDA would like to see more of its projects foster the principles of sustainable development -- including the non-GCCMIF portions of its EDAP programs. This concept has been realized through the funding of various sustainable development projects using regular EDAP programs. For example, using traditional Economic Adjustment Assistance funding, EDA recently awarded (in FY10) a \$3 million grant to Tulane University to establish a center for the commercial development of hydrokinetic power (i.e., turbines that can be placed in rivers to generate electricity).

Length of Review Concerns

The length of time that it takes to review grant applications appears to be an issue affecting specific regions, rather than all of them.

29. Does EDA have a process to evaluate the length of time it takes a region to review grant applications?

Answer: EDA can use data from its grants management system to gather information about how long it takes a region to review grant applications. Recently, the agency used this information as baseline data in a major examination of its approval process.

30. Are there consequences for regions with protracted review times?

Answer: Regional directors' performance plans include an evaluation of their ability to meet the obligation schedule established for their particular region.

31. Provide a review, by region, of the response times for grant applications since 2007. Include the date the application was accepted, the date the project was approved, and the date the project began, as well as the date by which the applicant had to complete the project.

Answer:

Region	Average Days From:			
	Initial Application to Award	Full Application to Award	Award to Start Date	Start Date to Completion
Philadelphia	152	59	237	507
Atlanta	212	42	198	650
Denver	417	64	163	680
Chicago	484	53	182	561
Seattle	180	54	401	639
Austin	260	71	409	912

Note that part of the difference between the time from an initial application to the award and the time from a full application to the award is the recipient submitting additional documentation for a full application once EDA has determined that it merits further consideration. EDA generally allows recipients 4-6 weeks to submit documents, but some projects take longer. The project start and completion dates are both original estimates, some projects may have their start or completion date amended if construction is able to begin early or encounters a delay.

32. What is EDA doing to ensure that review times are appropriate and responsive to the needs of the communities applying for grant funding?

Answer: EDA is in the process of redesigning its approval process with the goal of standardizing procedures across the regions, enhancing the competitiveness of the grant-making process, and drastically cutting the amount of time it takes for an applicant to receive a positive or negative reply from EDA. Headquarters staff has convened a working group of experts from the regional offices to work on developing the new process, which will aim to review, approve, and award grants within ninety days.

Planning Funds

In fiscal year 2009, Congress provided \$4 million above the request for the Planning program to increase the amount provided to each Economic Development District (EDDs) and to reduce the backlog of designated but unfunded EDDs. This direction was continued in the FY10 bill.

33. Does the fiscal year 2011 request incorporate the increased levels for the EDDs?

- If yes, how much does this provide per EDD?
- If not, why not?

Answer: EDA's requested level of funding for the Partnership Planning program, \$31 million in FY11, will maintain the program funding increases to the EDDs and tribal planning organizations that were put in place in 2009 and 2010. While EDD and tribal grantee funding levels vary slightly EDA's FY11 request will continue the program increases established in 2009 and 2010 providing approximately a \$10,000 increase to each EDD and approximately a \$4,000 increase to each tribal planning grantee over the FY08 funding levels, i.e., prior to the enactment of the program funding increase (from \$27 million to \$31 million in annual funding).

34. How many funded EDDs are there in fiscal year 2010?

Answer: There are 378 funded EDDs in fiscal year 2010.

35. How many designated but unfunded EDDs are there?

Answer: None, all designated EDDs have been funded.

36. What is the process for designating EDDs?

Answer: For a District Organization to be designated by the EDA, the organization must: have a Comprehensive Economic Development Strategy approved by EDA, one geographic area which meets the economic distress criteria, and be a sufficient size with resources to foster economic development activities in more than one geographic area. Upon demonstrating this information, the Regional Offices will assist the organization.

The Organization will work with the Regional Office to prepare an action memo which provides a socio-economic background of the region and economic justification for designation. The Organization must submit by-laws, committee and membership rosters, and list of participating jurisdictions. In addition, the Organization must provide support letters from representatives in the Organization's State and county affirming approval, and a letter from the Organization chair requesting action. Upon review and approval by appropriate Regional Office and Headquarter staff, the EDD is designated.

ARRA Funding

Congress appropriated \$150 million for EDA in the American Recovery and Reinvestment Act, and directed EDA to give priority to areas of the Nation that have experienced sudden and severe economic dislocation and job loss due to corporate restructuring.

37. How much of the funding has been obligated to date?

Answer: As of September 30, 2009, EDA obligated 100% of its \$147 million (American Recovery and Reinvestment Act) ARRA program allocation. As of April 30, 2010, EDA has obligated 33% of its \$3 million ARRA S&E allocation.

38. What areas of the country had experienced sudden and severe economic dislocation and job loss due to corporate restructuring?

Answer: Moody's compiled a list of states with the worst job losses; seven of them can attribute the losses directly to loss of manufacturing jobs.

<u>State</u>	<u>Job loss</u>
Michigan	175,368
Florida	231,265
Missouri	80,550
Ohio	154,938
Kentucky	51,341
West Virginia	20,409
Mississippi	29,693

39. How did EDA determine the allocation per region?

Answer: The Act calls on EDA to “give priority consideration to areas of the Nation that has experienced sudden and severe economic dislocation and job loss due to corporate restructuring.” As a result, EDA has decided to allocate funding to the regional offices using a hybrid of its traditional allocation formula. EDA’s proposed allocation drops lagging economic indicators in favor of a single allocation metric, 3 month unemployment figures (Unemployment data from BLS as of 1/31/09). These were the most contemporary data on unemployment that were available and best represented current economic conditions for the purposes of EDA’s allocation.

40. What types of projects have been undertaken with ARRA funding?

Answer: Examples of EDA Recovery Act Investments:

Regional Innovation Clusters: EDA’s Recovery Act funds supported 23 projects for a total of \$51.6 million to promote the development of regional innovation clusters. According to grantee estimates, these grants will help create or save over 11,000 jobs and leverage \$1 billion in private investment.

Example: EDA invested \$4.8 million in the City of Santa Cruz, California to help create the Digital Media Center at the Tannery, a business incubator for digital media companies. This high-tech business incubator, which is expected to create 220 jobs, will promote entrepreneurship and innovation and spur development of the region’s media production industry cluster.

Business Incubation: EDA’s Recovery Act funds supported 13 projects for a total of \$37.4 million to promote business incubation. According to grantee estimates, these grants will help create or save over 6,000 jobs and leverage \$246 million in private investment.

Example: EDA invested \$4.3 million in the City of Scottsburg, Indiana to create a Technology, Innovation and Entrepreneurship Center. The facility will provide job training and a manufacturing/technology incubator to support the development of new businesses and the creation of an anticipated 620 jobs.

Entrepreneurship: EDA’s Recovery Act funding supported 24 projects for a total of \$56.8 million to promote entrepreneurship. According to grantee estimates, these grants will help create or save over 11,000 jobs and leverage \$511 million in private investment.

Example: EDA invested \$1.5 million in the Renew Moline, Inc. Midwest Intellectual Property Management Institute in Moline, Illinois to support the Institute’s efforts to grow start-up businesses through the transfer of underutilized

patents to new ventures. The Institute's work will help make the regional economy less dependent on traditional manufacturing, and will generate higher-skill, higher-wage jobs.

Green and Blue Businesses and Jobs: EDA's Recovery Act funds supported 14 projects for a total of \$26.9 million to promote green and blue businesses and jobs. According to grantee estimates, these grants will help create or save over 4,700 jobs and leverage \$267 million in private investment.

Example: EDA invested \$800,000 in the Delaware Technical and Community College to help construct a Green Building Technology and Alternative Energy Systems Training Center, which will train former automotive workers for new jobs in green industries such as green roofing and solar, wind and geothermal energy systems. The grantee anticipates that this project will help create 300 jobs.

Trade Promotion: EDA's Recovery Act funds supported 5 projects for a total of \$11 million to help promote international trade. According to grantee estimates, these grants will help create or save over 3,000 jobs and leverage \$122 million in private investment.

Example: EDA invested \$2 million in the Georgia Ports Authority in Savannah, Georgia to enhance the Port's service capacity by increasing the number of containers that can be managed and maintained at the Garden City Terminal. This project will incorporate advanced technology and world-class best practices in the implementation of an innovative systems approach to strengthen port operations, thereby creating 590 jobs within the 10-county coastal Georgia region, according to grantee estimates.

Advanced Manufacturing: EDA's ARRA program funded 11 projects for a total of \$22.5 million to promote the development of regional advanced manufacturing clusters. According to grantee estimates, these grants will help create or save nearly 6,000 jobs and leverage over \$900 million in private investment.

Example: EDA invested \$3.7 million in the Itawamba Community College in Tupelo, Mississippi to help convert a former furniture manufacturing building to a one-stop workforce development and training center. The facility will help retrain former furniture manufacturing workers for new positions in advanced manufacturing, and will help diversify the Northeast Mississippi region. The project is expected to help create over 1,000 jobs according to grantee estimates.

Biotech: EDA's Recovery Act funds supported 4 projects for a total of \$13.3 million to promote the development of regional biotechnology clusters. According to grantee estimates, these grants will help create or save over 2,700 jobs and leverage \$85 million in private investment.

Example: EDA invested \$4.48 million in the Illinois Institute of Technology in Chicago, Illinois to help create a life sciences business incubator with wet and dry laboratories. The project will create 370 jobs according to grantee estimates, and will build on the region's competitive strengths in biotechnology and related clusters.

Automotive: EDA's Recovery Act funds supported 3 projects for a total of \$6.3 million to promote job creation in the automotive industry. According to grantee estimates, these grants will help create or save 2,145 jobs and leverage \$605 million in private investment.

Example: EDA invested \$3 million in Hamilton County, Tennessee to expand rail service to the Enterprise South Industrial Park in order to accommodate new companies, including the first Volkswagen plant in the United States. The grantee expects the project to create 645 higher-wage jobs in the region, including jobs at new Volkswagen supplier companies.

Disaster Funding

In June of FY08, Congress appropriated \$100 million in disaster supplemental funding for EDA, and in September FY09 provided another \$400 million.

As of March 10th, \$22 million of the June 2008 funding is still unobligated, or 22 percent, specifically in the Denver and Chicago regions. This does not include funding considered to be "in the pipeline."

41. Explain the phrase "in the pipeline" and what this means for the projects involved.

Answer: Projects in the pipeline are those that are in any part of the grant processing workflow and which have not been denied, discontinued or withdrawn. Generally, EDA uses "in the pipeline" to include only those that are pending or on hold. Pending means the staff is actively reviewing the grant and working on moving it "through the pipeline" to the next processing stage. Note that the next stage could lead to removing the project from the active pipeline because the status is changed to denied, discontinued or withdrawn. On hold means that processing has stopped temporarily while staff waits for the applicant to provide missing or additional information.

42. What is the reason for the delay in obligating the rest of the disaster funding in Denver and Chicago?

Answer: There are two principal reasons for the delay: environmental reviews, and complexity of the projects.

An example of the delay caused by environmental reviews is in Austin, Minnesota. EDA received the application on December 12, 2008. On March 10, 2009, the State Historical Preservation Office (SHPO) told the City of Austin that an archaeological survey was required for the project for which the city had applied for EDA funds. On November 19, 2009, the survey was sent to the SHPO, which rejected it on December 21. A second survey was sent to the SHPO on April 26, 2010. The project must be cleared by the SHPO before EDA can approve it.

An example of how the complexity of flood recovery projects extends the time to complete an EDA grant is in Gays Mills, Wisconsin. A FEMA-funded recovery strategy for Gays Mills was completed in November 2008. EDA had been interacting with the town well before that date but began working with them on an EDA application to implement the strategy in November when the strategy was complete. In addition to EDA, local, state and other federal agencies were involved in implementing the FEMA-funded strategy. It took from November 2008 until March 25, 2010, to get the project from inception to approval. Most of this time was needed to coordinate with the multiple agencies working with Gays Mills.

Calculated from the date the full application was received (whether or not it had deficiencies or other issues) to the date of approval:

Public Works: 106 days
 Planning: 55 days
 Technical Assistance: 67 days
 Economic Adjustment: 82 days
 GCCMIF: 68 days
 Disaster Supplemental: 75 days
 ARRA: 78 days

43. Are there projects in these regions which are appropriate for the disaster funding provided?

Answer: Yes, for example:

- In April 2010, EDA invested \$22 million to assist in the relocation of one of Iowa City, Iowa's wastewater treatment facilities out of the Iowa River Floodplain. In June 2008, the Iowa River remained above flood stage for 32 consecutive days; commerce and transportation were halted for weeks. One

of the City's two wastewater treatment plants (the North Wastewater Treatment Plant) was inundated and, as a result, wastewater that had undergone only primary treatment was released downstream. The biological treatment and disinfection operations of the plant were disabled for over 30 days. Significant effort and good fortune combined to prevent the total loss of the facility; as part of their flood mitigation strategy, City officials have decided to relocate the North Plant treatment operations by expanding the South Wastewater Treatment Plant which is not in the floodplain.

- In December of 2009, EDA invested \$15.6 million in disaster supplemental funds to reconstruct the South Dock of the St. Louis Municipal River Terminal. The dock, which comprises two-thirds of the terminal, was severely damaged by the floods of 2008. Damage was so great that the dock could face dangerous blowout failure. The construction will ensure that the nationally and internationally significant container freight operations and the city's warehouse and distribution cluster will avoid disruption. According to grantee estimates, 2,000 jobs will be retained.

44. Update the status of this funding to the response date. When does EDA expect to obligate the rest of the funding?

Answer: EDA's six Regional Offices have reported that all remaining Disaster Supplemental funding will be obligated by September 30, 2010.

As of March 10th, \$143 million, or more than 35 percent of the September 2008 funding, not including funds "in the pipeline," is still unobligated for projects in the Atlanta, Denver, Chicago, and Austin regions.

45. What is the reason for the delay in these regions?

Answer: Environmental reviews including NEPA and Historic Preservation, securing matching funds and the sheer complexity of the projects are the primary reasons for the delay.

46. Are there appropriate projects for disaster funding in these regions?

Answer: Yes, for example:

- In April 2010, EDA awarded \$3 million to fund the construction of the River Turbine Laboratory of the Tulane University RiverSphere Center for Excellence for Sustainable Energy Systems. The multi-faceted business incubator and demonstration facility will be built on underutilized inner-city riverfront in New Orleans. The facility will focus on hydrokinetic energy systems, creating high wage jobs, and bringing significant private sector investment to the region, which sustained great damage from Hurricanes Gustav and Katrina.

- In February 2010, EDA invested \$4.8 million in disaster supplemental funds to Southwest Mississippi Community College to help construct the Regional Workforce Training Center on the college campus, which experienced extensive infrastructure damage from Hurricane Gustav in 2008. The expanded facility will offer new courses in emergency medicine, disaster readiness, and homeland security to respond to evolving workforce needs. Eight existing companies have already committed to support the Center and to create and retain high-skilled high wage jobs.

47. Update the status of this funding to the response date. When does EDA expect to obligate the rest of the funding?

Answer: The Regional Offices have reported that all remaining Disaster Supplemental funding will be obligated by September 30, 2010.

Ranking Member Frank Wolf
Questions for the Record

Coordination with Other Federal Agencies

There are a countless number of Federal agencies that are involved in economic development activities. Within the Department of Commerce, the International Trade Administration, EDA, and the Minority Business Development Administration all work to promote US economic activities. Outside the Department of Commerce, there are several other development programs such as the Small Business Administration, urban development programs at HUD and rural development programs administered by the Department of Agriculture. At our EDA grantee hearing, we heard from several witnesses that there wasn't much coordination between agencies.

1. How does a local government official or a business person know what agency to go to for technical or financial assistance?

Answer: There are numerous federal agencies and programs that support economic development activities. One Government Accountability Office (GAO) study identified some ten agencies and 27 sub agency units that administer 73 programs that can be used to support one or more of the six activities that they identified as being directly related to economic development. The six activities identified were planning and developing economic development strategies, constructing or renovating nonresidential buildings, establishing business incubators (facilities that help small businesses get started), constructing industrial parks, constructing and repairing roads and streets, and constructing water and sewer systems. As daunting as this number is, these activities represent only a small fraction of federal assistance that is available to support a much broader range of economic development activities including things like access to capital, loan guarantees, and technical assistance to businesses.

The Department of Commerce has recognized the challenges that businesses have in understanding and accessing federal financial and technical assistance and has launched a bold new initiative called CommerceConnect. This initiative has been underway since October 2009 on a pilot basis. The goal of CommerceConnect is to serve as a single point of contact for businesses looking to access the Department of Commerce's services as well as to make strategic referrals to federal programs that provide assistance to businesses outside of the Commerce Department such as the Small Business Administration. As designed, local CommerceConnect offices will help firms identify appropriate programs to meet their needs throughout the life cycle of a business.

Communities and local government officials also face challenges in learning about and accessing Federal financial and technical assistance to support economic development activities and EDA and other federal agencies can assist

with this. EDA currently has six regional offices and 18 state-based economic development offices around the country. These offices are the entry point to access EDA assistance, but the bureau's economic development professionals are also very knowledgeable about other development programs in the federal portfolio and can frequently assist communities with referrals to appropriate programs outside the Department of Commerce and EDA. EDA is also working diligently to upgrade the Bureau's website and increase the amount of information about economic development assistance programs that is available to the practitioner community regarding complementary federal assistance programs. Finally, it is worth noting that the federal government now has a single on-line portal through which eligible applicants can identify and apply for federal assistance across applicable development programs called grants.gov.

2. What are you doing to improve coordination between Federal agencies?

Answer: The Obama Administration has initiated an unprecedented effort to improve interagency coordination and collaboration. Within the Department of Commerce, Secretary Locke has directed the Department's diverse bureaus to work more closely together to tackle common challenges and exploit common opportunities. For example, the Director of the Office of Innovation and Entrepreneurship has convened a working group of bureaus across the Department, including EDA, the Minority Business Development Agency, the International Trade Administration, the National Institute of Standards and Technology (Manufacturing Extension Program) and others to explore how the Department can best support innovation as a driver for economic development as well as the important role that entrepreneurs play in supporting national economic development objectives. In another example, EDA has worked closely with the National Oceanic and Atmospheric Administration to make coastal communities – that may have suffered adverse economic impacts from fishery declines or other natural resource related issues – aware of EDA's economic adjustment program and how it can be used to help communities develop and implement strategies for economic recovery.

On a broader level, EDA has met with counterparts at the Small Business Administration, the Department of Housing and Urban Development and the Department of Agriculture to explore ways that we can collaborate to more effectively target and leverage our economic development assistance.

An even more path-breaking effort to break down traditional program silos and encourage improved collaboration among federal assistance providers is the Energy Regional Innovation Cluster (E-RIC) initiative. The Executive Office of the President, through the Domestic Policy Council and the National Economic Council, have convened a variety of inter-agency taskforces in order to confront some of the greatest challenges facing the nation. EDA has emerged as a leader within these working groups, bringing expertise in regional innovation clusters, economic development generally, and inter-agency management. In

regards to the aforementioned E-RIC initiative, in February, one inter-agency taskforce published a joint Funding Opportunity Announcement (FOA) by an unprecedented seven agencies—DOE, EDA, NIST, SBA, DOL, ED, and NSF—to support a regional innovation cluster in energy efficient building systems. Four agencies (DOE, EDA, NIST, and SBA) are making discretionary funds available pursuant to the FOA, in the amount of approximately \$130 million, while the other three will support the selected regional innovation cluster with complementary federal investments. The interagency taskforce held a conference for prospective applicants on February 21, 2010. Proposals—which must consist of applications for each of the four discretionary awards, in addition to an overarching regional innovation cluster narrative, submitted under single cover by a Consortium of co-applicants—are due May 6, 2010, and the awards to the selected Consortium will be made no later than September 30, 2010. The selection process and the evaluation criteria reflect a collaborative, cross-functional, interagency approach designed to result in four separate, but highly coordinated awards, to a single Consortium in a single region; the award negotiation and announcement process will be coordinated across the granting agencies, as will award monitoring and administration.

Trade Assistance

At the State of the Union, the President announced an effort to double US exports. I understand this effort will be led by the International Trade Administration but:

3. What is EDA doing to promote exports?

Answer: One of EDA's six investment priorities focuses on supporting high-growth businesses and innovation-based entrepreneurs to expand and compete in global markets. EDA advances this priority through investments in:

- Strategic planning to promote the international competitiveness of U.S. regions;
- Infrastructure investments in business incubators, technology centers, inter-modal ports, and other facilities that build capacity for expanding businesses and increasing exports;
- Eleven Trade Adjustment Assistance Centers (TAACs) across the nation that provide assistance to businesses in strengthening their global competitiveness and increasing exports.

EDA is also partnering with the Department of Commerce's International Trade Administration (ITA) to develop a pilot initiative to lead U.S. economic development organizations (EDOs) and businesses on EDA/ITA Job Creation Missions to overseas markets. The objective of the initiative is to help connect U.S. EDOs and the businesses they represent with overseas EDOs and businesses to increase U.S. exports and Foreign Direct Investment in the U.S.

4. How are you coordinating your efforts with ITA?

Answer: EDA's Trade Adjustment Assistance Division is coordinating with the ITA U.S. Commercial Service's Strategic Partnership program and the Export Trade Certificate of Review program, to cross-promote ITA export initiatives and EDA Trade Adjustment Assistance programs.

EDA's eleven Trade Adjustment Assistance Centers frequently coordinate with U.S. Commercial Service offices across the U.S. in the development and implementation of export strategies for import-impacted U.S. firms. For example, TAACs have worked with the Gold Key services provided by the U.S. Commercial Service to help clients find potential customers and partners in export markets.

As mentioned in the response to Question 3 above, EDA is also partnering with the Commercial Service and ITA's *Invest in America* program to develop a pilot initiative to lead U.S. economic development organizations (EDOs) and businesses on EDA/ITA Job Creation Missions to overseas markets. The objective of the initiative is to help connect U.S. EDOs and the businesses they represent with overseas EDOs and businesses to increase U.S. exports and Foreign Direct Investment in the U.S.

5. How successful is your network of Trade Adjustment Assistance Centers at helping US business find new markets?

Answer: One of the great strengths of the Trade Adjustment Assistance for Firms (TAAF) program is its ability to provide customized, specialized assistance to companies across the nation through the use of outside, private sector consultants, including export assistance consultants. This enables distressed firms to effectively address their weaknesses as well as to leverage any special competitive advantages they may have in terms of competing in the global marketplace. From a company's perspective, TAAF's ability to provide highly-specialized technical assistance is one of our most important differentiators from other government business assistance programs.

EDA's national network of 11 TAACs provides assistance to import-impacted U.S. businesses through cost-shared projects to strengthen international competitiveness. Export development is an important component in many business recovery strategies that EDA's TAACs help to develop and implement. Since the Department's export promotion expertise is in the International Trade Administration's U.S. and Foreign Commercial Service (USFCS), the TAACs frequently integrate coordination with USFCS Export Assistance Centers (USEACs) into business recovery strategies. This coordination with USEACs has resulted in, among other things, the use by EDA TAAC client businesses of USFCS's Gold Key services to develop export markets, as well as the development of Free Trade Zones to reduce costs to manufacture for export.

TAAFs have used TAAF program funds to:

- Produce export feasibility studies;
- Develop and translate websites and other sales and marketing materials to communicate with overseas markets;
- Help firms comply with international trade standards, such as ISO 9000 (international business standards) and Customer Engagement (CE) marketing for European distribution capability.

Examples of TAAF projects to help U.S. businesses find new markets include:

- An Ohio auto supplier that was losing business to Chinese, Canadian and Mexican competitors used TAAF assistance to secure and help finance an outside export expert who developed relationships with potential foreign customers. The export expert promoted the client and its products overseas and trained company personnel (including top management, sales engineers and others) on how to sell to overseas Original Equipment Manufacturers (OEMs) and Tier 1 suppliers. Three major overseas customers were won during the engagement, with many opportunities for additional customers pending. Importantly, the new export business it generated helped sustain the company during the domestic auto industry's accelerated downturn last year. Despite this downturn, the client's sales were actually higher in 2009 than at the time they entered the program in 2007 (up 7%). Meanwhile, this TAAF project developed internal capabilities and established external business relationships that will help the firm continue to expand its export sales long into the future.
- A California tooling supplier used TAAF assistance to develop and implement a quality management system and to certify that system to the international ISO 9001:2000 standard. In addition, the TAAF program supported several consulting projects to increase its manufacturing capability by vertically integrating manufacturing, and several marketing projects that assisted in increasing market visibility through key trade shows in Asia. Since completing the TAAF-funded projects in 2009, sales have increased 15%, employment has increased 3%, export sales to Asia increased 11.3%, and productivity improved 11%.
- A Georgia metal cutting equipment firm leveraged the TAAF program to fund a project with "Exxportise LLC," a consulting firm specializing in export feasibility studies and market channel development to obtain significant inroads into European and other global markets; Many firms in the Pacific Northwest have used TAAF funds to secure experts to produce export-facilitating websites and obtain ISO 9000 certification, including the development of a website for an aluminum smelting firm to translate its website into four different languages and a seafood producer to successfully develop product labels to meet South African requirements.

Access to Credit

Over the past year, we have often heard that businesses, particularly small businesses, do not have access to credit. I know that you administer EDA grants to capitalize revolving loan funds.

6. Does this program duplicate SBA's business loan guarantee programs?

Answer: EDA published an Interim Final Rule on October 22, 2008, abolishing loan guarantees, and this change in regulations was also enshrined in EDA's Final Rule, published January 27, 2010. EDA's Revolving Loan Fund recipients are therefore no longer allowed to guarantee loans, but instead must make direct loans to small and mid-sized businesses. It is EDA's understanding that SBA offers three types of services to small businesses: loan guarantees (whereby the borrower receives a commercial loan backed by an SBA guarantee), surety bonds for small business contractors, and equity financing. EDA does not offer any of these services, so there is no direct duplication of programs.

7. Aren't you trying to help the same constituency, businesses that are credit worthy but can't get a bank loan?

Answer: Yes. EDA's Revolving Loan Fund program is designed to capitalize revolving loan funds to assist creditworthy businesses in distressed communities that cannot access a bank loan. While both EDA and SBA ultimately serve small businesses, one important distinction is that EDA's program is focused solely on distressed communities—for recipients to qualify for an EDA grant to capitalize or re-capitalize a revolving loan fund, the geographic region served by the fund must meet EDA's distress criteria.

8. Are you experiencing growing default rates with the downturn in the economy?

Answer: Default rates actually appear to be declining, although they are still high. As of March 31, 2009, 32 percent of EDA RLF recipients had more than 15 percent of their principal outstanding in default; by September 30, 2009, the percentage of RLF recipients with default rates in excess of 15 percent had declined to 29 percent. This improvement may be attributable to a slight improvement in market conditions, or it may be due to an increased EDA emphasis on recipient loan servicing and collections. When a recipient is identified as having a high default rate (>15%), EDA first assesses the health of the portfolio in light of the recipient's RLF Plan and then makes a determination whether a corrective action plan is needed; an increased emphasis on corrective action plans and technical assistance may be driving these rates down.

Disaster Assistance

In the wake of a natural disaster, FEMA provides grants for immediate assistance to eligible victims and SBA provides loans to individuals and businesses for long-term recovery. In major disasters, HUD will usually provide community governments with additional assistance. In recent years, EDA has been appropriated \$500 million in disaster assistance funding intended to assist in long-term economic recovery.

9. How does your disaster program differ from the other Federal aid that is provided in the wake of a disaster?

Answer: EDA programs aid in long-term recovery in the wake of a disaster most often through economic impact assessments, strategic planning, infrastructure development, and RLF business loans. These programs are not designed for immediate, "first-responder" assistance but long-term economic recovery. These programs are also only eligible for (i) District Organization; (ii) Indian Tribe or a consortium of Indian Tribes; (iii) State, city or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions; (iv) institution of higher education or a consortium of institutions of higher education; or (v) public or private non-profit organization or association acting in cooperation with officials of a political subdivision of a State.

1) Economic Impact Assessment: EDA assists FEMA through a mission assignment protocol to help evaluate the economic impact of the disaster. FEMA may ask EDA to perform economic impact evaluations or carry out other specific tasks through special "mission assignments." This happens almost immediately post-disaster. The Economic Impact Assessment includes infrastructure, businesses, and the overall damage impact of the disaster.

2) Strategic Planning: EDA offers financial resources and technical assistance to help rebuild economic development plans following a disaster.

3) Infrastructure Development: EDA offers grant funds to build new infrastructure (e.g. business incubators, technology parks, research facilities, basic utilities such as water treatment) that foster economic development to retain or attract jobs to the region.

4) Business Loans: Through EDA's Revolving Loan Fund (RLF) program, non-profit and governmental entities can apply to establish an RLF which in turn makes below market-rate loans to businesses to help recovery.

10. How do you coordinate your efforts with HUD and SBA to ensure you aren't duplicating programs?

Answer: EDA, SBA, and HUD coordinate efforts through ESF-14 by combining aid, meeting target areas, and cooperating on specific projects.

EDA coordinates with SBA and HUD to target unmet areas for funding. SBA funding is directed only toward individuals or business owners while HUD has a plethora of grants designed for immediate relief after a disaster event or for longer-term funding focused on housing and community development. The EDA is capable of funding in areas mentioned in Question 9 specifically to benefit the long-term economic development recovery of a locality. The utilization of these agencies programs assures that all areas of a community receive short-term and long-term funding post-disaster.

In addition, following certain disasters, EDA, SBA, HUD, and other applicable agencies work together to support recovery. For example in 2000, EDA, SBA, and Civil Aeronautics Board, and other partners developed a Memorandum of Understanding to exchange program information, handle loan and grant applications, and provide liaisons to promote an atmosphere of cooperation and reduce duplication.

WEDNESDAY, FEBRUARY 3, 2010.

ECONOMIC DEVELOPMENT ADMINISTRATION

WITNESSES

MAYOR DAVID BRADFORD, MUSCLE SHOALS, ALABAMA
CHUCK WEMPLE, HOUSTON-GALVESTON AREA COUNCIL, TEXAS
JOHN BROWN, BROOKE-HANCOCK-JEFFERSON PLANNING
COMMISSION
MICHAEL KING, NORTH COUNTRY COUNCIL
DR. LES WYATT, ARKANSAS STATE UNIVERSITY

OPENING REMARKS

Mr. MOLLOHAN. Welcome. The hearing will come to order. In fiscal year 2010 Congress provided \$255 million for the Economic Development Administration's Economic Development Assistance Programs, but in fiscal year 2011 the budget proposes \$246 million. Beyond the proposed \$9 million reduction the budget also proposes to shift almost \$90 million from Public Works grants to the Economic Adjustment Assistance grants.

EDA provides critical funding for communities across the nation working with state and local governments, private industry, academia, and nonprofits, and leveraging investments to create and sustain jobs and improve local economies. Through the testimony of today's witnesses we will hear about the value of such appropriations to local communities as well as suggestions from grantees on how EDA can improve its processes and provide better services as it plays a critical role in our national economy.

Today we will hear from grantees from various regions with a wide variety of EDA grant experiences. Each grantee will touch on his or her depth of EDA experience. Most, if not all, of our witnesses, have received Public Works grants, possibly the most important and clearly the most traditional of EDA's grant options. Today's witnesses will also talk about the importance of Planning grants, Economic Development Districts, disaster assistance, revolving loan funds, University centers, and technical assistance. Through their collective testimony the Subcommittee hopes to obtain an alternative view of EDA's programs and their effectiveness. A view from the ground, a view from implementors, a perspective we often do not get from the Beltway.

In the first panel we will hear from John Brown, Executive Director of the Brooke and Hancock Regional Planning and Development Council in Weirton, West Virginia; and Michael King, Executive Director of the North Country Council in Bethlehem, New Hampshire and board member of the National Association of Development Organizations.

In the second panel we will hear from Mayor David Bradford of the City of Muscle Shoals, Alabama, and the immediate past Chair-

man of the Northwest Alabama Council of Local Governments; Chuck Wemple, Economic Development Program Manager of the Houston-Galveston Area Council; and Dr. Les Wyatt, President of the Arkansas State University System.

Well, thank you all for coming. Following the statement of the ranking member, Mr. Bonner, we will move to welcome your oral testimony and your written statements will be made a part of the record.

Mr. BONNER. Mr. Chairman, distinguished panel, my name is Jo Bonner and I am pleased to sit here today on behalf of our Ranking Minority Member Frank Wolf of Virginia, who has another conflict but who hopes to be with us to join in welcoming you to the Committee. We certainly appreciate your coming today and we are interested in hearing from you about how you have utilized EDA grant funding.

With unemployment nationally at 10 percent, and in parts of our country at much higher, I have a county in my district that is at 20 percent unemployment today, we all know, Democrats and Republicans, and certainly this Subcommittee under the leadership of our Chairman, that it is critically important for us to hear from the people outside of Washington, D.C. on how the federal government can do a better job than what we have done to create sustainable economic growth. We encourage each of you to be very candid in talking about the things that have worked, the good things that the government and EDA specifically are doing and are doing well, as well as to be constructively critical of those things that we are doing poorly.

Thank you again for the opportunity to hear from you today, and we look forward to not only your testimony but also the answers to some of the questions we might have. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Bonner. Today, I would especially like to welcome to the hearing Dr. John Brown, who is the Executive Director of the Brooke-Hancock Regional Planning and Development Council. He is doing really outstanding work up in the northern part of our district, which has been particularly challenged. And we look forward to not only his testimony here today but continuing to work with him in the final organization in order to be successful, and get our economy in the northern part of the state turned around, which is challenging, as I am sure we are going to hear. And I also welcome Mr. King to the hearing and look forward to your testimony. I am going to start with Dr. Brown.

OPENING STATEMENT BY DR. JOHN BROWN

Mr. BROWN. Chairman Mollohan, Ranking Member Bonner, and members of the Subcommittee, thank you for the opportunity to testify on behalf of the Brooke-Hancock Regional Planning and Development Council. We are located on top of West Virginia, in the northern panhandle. Our region is a rust belt with a population of 50,000. Through the devastation of international steel competition since 1995 our two-county region has lost 12,000 steel worker jobs. Our two domestic steel companies are now international conglomerates. In 1995, Weirton Steel, the regional lynchpin in our region, was the top private sector employer in West Virginia. Today West Virginia's top employer is Walmart. As recently as Thursday, that

is last Thursday, January 28th, we lost another 180 steel related jobs.

So from the perspective of the U.S. Economic Development Administration and its mission we are ground zero. For our region the need to have an active and engaged EDA could be no greater than today. Mr. Chairman, I would like to focus on three major issues related to EDA. First, as a region in transition we are literally re-inventing our economy. While we understand our leadership role, we need partners to invest capital and to provide technical skills through the core EDA Public Works and the Economic Adjustment Assistance programs. In 2007 we received \$891,000 for an EDA Public Works grant to construct related downtown infrastructure to a state office building. That was matched with \$600,000 in local funds. The project was completed one and a half years later in '06 and resulted in over 300 new or saved jobs. Located in our key downtown, the project has sustained the integrity of our downtown and leveraged private sector downtown investment. I wish I had a picture. We were not allowed to put pictures in here, but if you could see our downtown, what we are about, I think that picture is worth a thousand words.

In late '09 we received 215,000 economic dollars in an Economic Adjustment Assistance grant to create and carry out a detailed project, specific action strategy, for job growth and diversification. And that project will use market information to develop site investments while benchmark measurements will be defined. Our approach focused on advantageous employment clusters as a way to identify job training needs, launch programs to attract investments, retain and expand emerging industries, and increase employment opportunities for workers. Over a five-year period the project will result in the creation or retention of over 500 jobs in the region.

My second point is we support and advocate stronger incentives to reward regional collaboration, partnerships, and initiatives, not only among the public and private sector but between EDA regional offices, and you all probably know there are six regional offices. Our region is one labor force, crossed by two states, and divided by the Ohio River. In the case of employment these barriers are literally transparent. EDA's Chicago region, which serves our West bank communities, and the Philadelphia Regional Office, which serves our East bank communities, has initiated the steps to recognize this one labor force issue that we have.

So in 2009 through the encouragement of local development agencies, and we have two of them, and the regional Chamber of Commerce, our joint program we call the 3-2-1 Program was created. And the 3-2-1 should be no secret. It stands for three counties, two states, one goal. And this approach challenges the Chicago and Philadelphia regions to coordinate plans and provide, boundary flexibility. We have 50,000 on the West Virginia side, we have 70,000 on the Ohio side. And so in the Chicago office, they incorporated our three-county labor force in a recent targeted industry study. The strategy is to find a clear building block for a forthcoming U.S. EDA management project outside the Chicago EDA map boundary, but inside our labor force boundary.

So the lesson here is boundary flexibility can and will define truer markets and assure wiser investments. And we do have this issue up and down the Ohio River, whether you are in Wheeling, Parkersburg, or Huntington. They are all, the labor forces go in two states.

My third comment is that the Economic Development District Partnership Planning Program has been invaluable to us. Due to the downturn in the economy the demand for the Partnership Planning Program has increased significantly. In our region, Congressman Bonner, for example, our unemployment is running at 12.5 percent in one county, it is 13.5 percent in the other. We have a lot of discouraged workers that have left the area, so I do not even know how to count those.

Established in 2005, we are a relatively new EDD. And since that time, through the mandated Comprehensive Economic Development Strategy, that is called CEDS, we have prioritized future investments and set a path for the future. Through the Planning Program we created companion programs such as brownfield initiatives, because we have got a lot of brownfields. We have a lot of properties that need to be returned and act as job generating sources. And we have a small business start up program called Valley Ventures. And in the case of brownfields, we have initiated hazardous waste and petroleum site clean up to attract jobs. We have created a dialogue for a river barge to rail/truck and intermodal site. And we have communicated a very viable economic future for our region.

In January '08 ArcelorMittal Weirton, which used to be called Weirton Steel, the key remaining steel company in the region, announced its intent to divest its nonessential properties. These nonessential properties, characterized as mothball commercial industrial properties, constitute, and this is the key, they really constitute 30 percent of the city's land area in Weirton. This divestment issue has created an unusual opportunity. Without EDA's planning partnership resources we could not complete the necessary due diligence to organize, prioritize, and redevelop these sites.

In the case of Valley Ventures, we recognized small business is the key driver for new jobs. Over 70 percent of all new jobs are created through small businesses. And for the past twenty-plus years our community has held, and I have heard Congressman Mollohan say this, has held adamantly to the myth that the steel companies will reopen, and jobs will return. In recent years reality has set in and this myth has deteriorated. Valley Ventures is a private, non-profit organization formed and managed by a board with business and professional men and women. This innovative organization assists entrepreneurs and small business owners. Valley Ventures provides businesses with hands on technical assistance, financial resources, business education, and important business networking. In '09 Valley Ventures is credited with starting ten new businesses.

So in summary, EDA is the only federal program focused exclusively on private job creation. At ground zero it has been an invaluable and flexible resource. And given the ongoing challenges facing the communities in my region, and across the nation, the need for EDA has never been more pressing. With its forty-year track record

of job creation and retention and ability to leverage private sector funds, we know EDA has the tools necessary to help communities. Now is the time to assure it has the resources to fully develop its potential. I thank the Committee for this opportunity to testify in front of you, and I welcome the chance for any questions.

[The written statement of Dr. John Brown, Executive Director, Brooke-Hancock Regional Planning and Development Council, follows:]

WRITTEN STATEMENT FOR THE RECORD

John C. Brown
Executive Director
Brooke-Hancock
Regional Planning and Development Council

United States House of Representatives
House Appropriations Subcommittee on Commerce, Justice and Science and
Related Agencies

Hearing on the U.S. Economic Development Administration

Washington, DC
February 3, 2010

Testimony of John Brown, Executive Director of the Brooke-Hancock Regional Planning and Development Council. Weirton, West Virginia. Remarks before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies Hearing on the U.S. Economic Development Administration

Chairman Mollohan, Ranking Member Wolf, and members of the Subcommittee, thank you for this opportunity to testify on behalf of the Brooke-Hancock Regional Planning and Development Council.

My name is John Brown. I am the Executive Director for the Brooke-Hancock Regional Planning and Development Council. Located on top of West Virginia in the Northern Panhandle, our region is a rust belt region with a population of 50,000.

Due to the devastation of international steel competition, since 1995, our two-county region has lost 12,000 steel worker jobs. Our two domestic steel companies are now international conglomerates. In 1995, Weirton Steel, the regional lynchpin industry in our region, was the top private sector employer in West Virginia. Today, West Virginia's top employer is Wal-Mart. As recently as Thursday (January 28th), the loss of another 180 steel related steel jobs was announced.

From the perspective of the U.S. Economic Development Administration (EDA) and its mission, we are ground zero. For our region, the need to have an active and engaged EDA could be no greater than today.

Mr. Chairman, I would like to focus on three major issues related to EDA.

Testimony of John Brown, Executive Director of the Brooke-Hancock Regional Planning and Development Council. Weirton, West Virginia. Remarks before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies Hearing on the U.S. Economic Development Administration

First, we respectfully request increased funding for EDA's core programs, the Public Works and Economic Adjustment Assistance programs. As a region in transition, we are literally reinventing our economy. While we understand our leadership role, we need partners to invest capital and provide technical skills.

In 2005, we received an \$891,000 EDA Public Works grant to construct a downtown state office building. Matched with \$600,000 in local funds, the project was completed in 2006 and resulted in over 300 new or saved jobs. Located in our key downtown, the project has sustained the integrity of our downtown and leveraged private sector downtown investment.

In late 2009, we received a \$215,000 Economic Adjustment Assistance grant to create and carry out a detailed, project specific action strategy for job growth and diversification. The project will use market information to develop site investments while benchmark measurements will be defined. Our approach focuses on advantageous employment clusters as a way to identify job training needs, launch programs, attract investments, retain and expand emerging industries and increase employment opportunities for workers. Over a five-year period, the project will result in the creation and retention of over 500 jobs in the region.

Testimony of John Brown, Executive Director of the Brooke-Hancock Regional Planning and Development Council. Weirton, West Virginia. Remarks before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies Hearing on the U.S. Economic Development Administration

Second, we support and advocate stronger incentives to reward regional collaboration, partnerships and initiatives not only among the public and private sector, but between the EDA regional offices.

Our region is one labor force crossed by two states and divided by the Ohio River. In the case of employment, these barriers are transparent.

EDA's Chicago Regional Office, which serves our west bank communities, and the Philadelphia Regional Office, which covers our east bank communities, have initiated steps to recognize our "one labor force" issue.

In 2009, through the encouragement of local development agencies and the regional chamber of commerce, a joint program called the "3-2-1" program was initiated. The "3-2-1" phrase stands for three counties, two states and one goal. This approach challenged the Chicago and Philadelphia regional offices to coordinate plans and provide boundary flexibility. In the case of the Chicago Office, they incorporated our full three-county labor force in a recent targeted industry strategy. The strategy has defined a clear building block for a forthcoming US EDA site management project outside the Chicago EDA mapped boundary, but inside our labor force boundary. The lesson is boundary flexibility can and will better define truer labor markets and assure wiser federal investments.

Testimony of John Brown, Executive Director of the Brooke-Hancock Regional Planning and Development Council. Weirton, West Virginia. Remarks before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies Hearing on the U.S. Economic Development Administration

Third, the Economic Development District (EDD) partnership planning program has been invaluable. However, demands on EDDs have increased significantly due to the economic downturn and we encourage increased funding for the program.

Established in 2005, we are a relatively new EDD. Since that time, through the mandated Comprehensive Economic Development Strategy (CEDS), we have prioritized future investments and set a path for the future. Through the planning program, we created companion programs such as brownfield redevelopment initiatives and a small business start-up business program called Valley Ventures.

In the case of brownfields, we've initiated hazardous waste and petroleum site clean-up to attract jobs; we've created a dialogue for a river barge to rail/truck intermodal site and; we've communicated a viable economic future for our region.

In January 2008, ArcelorMittal Weirton, the key remaining steel company in the region, announced its intent to divest its nonessential properties. These nonessential properties, characterized as mothballed commercial-industrial properties, constitute 30 percent of the city's land area. This divestment issue has created an unusual opportunity. Without EDA's planning partnership resources, we could not complete the necessary due diligence to organize, prioritize and redevelop these sites.

Testimony of John Brown, Executive Director of the Brooke-Hancock Regional Planning and Development Council. Weirton, West Virginia. Remarks before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies Hearing on the U.S. Economic Development Administration

In the case of Valley Ventures, we recognize small business is the key driver for new jobs. Over 70% of all new jobs are created through small business. For the past 20+ years, our community has held adamantly to the myth that the steel mills will reopen and jobs will return. In recent years, reality has set in and this myth has deteriorated. Valley Ventures is a private, non-profit organization formed and managed by a board of business and professional men and women. This innovative organization assists entrepreneurs and small business owners. Valley Ventures provides businesses with critical hands-on technical assistance, financial resources, business education, and important business-to-business networking. In 2009, Valley Venture was credited with starting 10 new businesses.

EDA is the only federal program focused exclusively on private job creation. At ground zero, it's been an invaluable and flexible resource. Given the ongoing challenges facing the communities in my region and across the nation, the need for EDA has never been more pressing. With its 40 year track record of job creation and retention and ability to leverage private sector funds, we know EDA has the tools necessary to help communities. Now is the time to ensure it has the resources to fully deliver its potential. I thank the committee for the opportunity to testify on this important issue. I welcome the chance to answer any questions.

OPENING STATEMENT BY MR. MICHAEL KING

Mr. MOLLOHAN. Thank you, Dr. Brown. Mr. King.

Mr. KING. Good afternoon, Chairman Mollohan and members of the Committee. My name is Michael King and I am the Executive Director of North Country Council, which is the Regional Planning Commission and Economic Development District for the northern region of New Hampshire. I am also a board member of the National Association of Development Organizations. Thank you for affording me the opportunity to testify today. I have submitted my written statement for the record and would like to submit this oral testimony in regards to the Economic Development Administration.

I would like to provide you some examples, and I have tried to meet your goal of looking at some of the things that EDA does well and looking at some of the things that maybe we can make some improvements in. So there are three examples that we have seen EDA invest in over the last several years in my region. EDA and the State of New Hampshire invested \$3.9 million in the Littleton Industrial Park, this was several years ago, which was a Public Works project driven by local leaders to attract and nurture new manufacturing and service businesses to the region at the time of an economic downturn. After two companies left the area taking with them 700 jobs, community leaders formed a local government corporation, and with the help of the Economic Development District, EDA, and the State, created the Littleton Industrial Park. Today the industrial park supports eleven companies with over 1,200 jobs and a combined payroll of \$48 million.

Another example, more recently, is the Sustainable Economic Initiative (SEI) Program. It is a perfect example of how economic development funds can be successfully used to promote regionalism and regional innovation. This four-state project brought over sixty community and state leaders together to build on a common economic demographic, environmental interest. You have got to understand the northern part of New Hampshire is a heavily forested area and a very rural area. We developed a strategy for the region in the sustainable forest industry, in telecommunications, and transportation networks, and for the development of renewable energy. These central themes, along with additional priorities outlined in the SEI action plan, aim to balance the unique environmental characteristics of the region with our core economic, cultural, and geographic assets.

Another example is the Dartmouth Regional Technology Center, DRTC. This initiative is focused on nurturing the growth of our biomedical and engineering technology cluster. In partnership with Dartmouth College, and with funds from the State of New Hampshire and EDA, we have built a 32,000 square foot incubator and are in the process of adding on to it with a 28,000 square foot addition. We are very proud of the accomplishments with this project. To date, eighteen companies have taken tenancy in the DRTC with eleven still located in the building. Over \$60 million in venture capital investment has been made by DRTC's tenants in the last three years. In addition, the most recent graduate, Mascoma Corporation, consolidated its Boston and Lebanon operations building

a 32,000 square foot facility of their own two miles from our incubator. That is a big success for us.

Mr. Chairman, one of the common threads of all three of these success stories is the involvement of our Economic Development District, the EDD. My EDD uses EDA's matching funds from the Planning program to bring public and private sector investments and public and private sector leaders together on a regional basis to identify, prioritize, and pursue common economic development opportunities and strategies. This leverages the assets of our region to create and retain high quality jobs. And the aim of our region is to try to create the jobs where we can. This results in projects such as the Littleton Industrial Park, the Dartmouth Regional Technology Center, and the Sustainable Economic Initiative, which happened over quite a span of years. We have been an Economic Development District since 1975 and those are three examples over those years that I brought to you.

Mr. Chairman, I would also like to offer a couple of observations and recommendations for making further improvements to the programs and operations of EDA from a local practitioner's perspective. First, we have seen a major decrease in the number of EDA's professional program staff positions both in headquarters and in the regional field offices. These EDA staff reductions have caused delays in project approvals and funding which can be fatal to closing and implementing economic development projects. Especially in a region such as mine in the northern part of New Hampshire, where our construction season might be very short, it is important that we get things through EDA as quick as possible.

Second, we remain steadfast in our support for maintaining the agency's core Public Works program, which provides vital matching funds for distressed communities like mine to address the necessary building blocks for economic development.

Third, we urge the Committee to provide new and additional resources for the administration's proposed regional innovation initiative. It is essential that our nation's distressed regions pursue more in-depth and sophisticated economic competitive strategies that leverage local assets and foster the development of emerging clusters.

Most importantly, we encourage the agency to tap into the existing regional planning process, spearheaded by EDDs, as the primary building blocks for regional innovation strategies.

In closing, Mr. Chairman, I would like to thank the Committee for your recent efforts. Increasing the minimum funding levels for EDA planning grants, these modest yet invaluable matching funds are used by organizations such as North Country Council to provide much needed professional economic development planning and project implementation assistance to our local governments and communities, especially in the distressed small rural areas like mine. Thank you again for allowing me to testify today, and I welcome any questions.

[The written statement of Mr. Michael King, Executive Director of the North Country Council and Board Member of the National Association of Development Organizations, follows:]



WRITTEN STATEMENT FOR THE RECORD

**MICHAEL KING,
EXECUTIVE DIRECTOR OF THE
NORTH COUNTRY COUNCIL
AND
BOARD MEMBER OF THE
NATIONAL ASSOCIATION OF
DEVELOPMENT ORGANIZATIONS**

**BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES**

**WASHINGTON, DC
FEBRUARY 3, 2010**

**Testimony of Michael King, Executive Director of the North Country Council
Before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies
U.S. Economic Development Administration
February 3, 2010**

Thank you, Chairman Mollohan and members of the subcommittee, for affording me the opportunity to testify today on issues related to the U.S. Department of Commerce's Economic Development Administration (EDA).

My name is Michael King. I am the Executive Director of North Country Council, which is a regional planning commission and economic development district for three counties, 67 communities and 25 unincorporated places. It is the most rural region of New Hampshire with a population of 83,000 citizens in 3,418 square miles of heavily forested area. My organization is a member of the National Association of Development Organizations (NADO) and I currently serve on the NADO board of directors.

North Country Council has been an EDA-designated Economic Development District since 1975. In those 35 years, we have seen EDA change and grow with the country. We have been the recipient of numerous public works, economic adjustment, planning and technical assistance investments that have helped create and retain jobs in a region persistently challenged by mill closings, geographic isolation and global economic change.

In my testimony today, Mr. Chairman, I would like to focus on three specific projects within my region that demonstrate the unique leadership and partnership roles EDA plays within the broader federal portfolio of community and economic development programs. In addition, I will offer ideas for improving the operations and programs of the agency from a grassroots perspective.

First, Mr. Chairman, EDA and the State of New Hampshire invested \$3.9 million in the development of an industrial site in Littleton, New Hampshire during the 1980s. This facility, with its modern infrastructure and public services, allowed local leaders to attract and nurture new manufacturing and service businesses within the region. Today, the complex supports over 1,200 jobs with a combined payroll of \$49 million and generates annual taxes of \$6.6 million. The facility hosts a variety of firms, ranging from manufacturers of footwear, tools and medicine products, a publishing company and coin company. More importantly, the success of the Littleton project has generated an annual economic multiplier effect to the region of \$147 million.

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Second, Mr. Chairman, EDA invested technical assistance funds into a unique four-state regional strategy process for the Northern Forest portions of Maine, New Hampshire, New York and Vermont. Building upon the common economic, demographic and environmental interests and challenges of this vast multi-state rural region, the Sustainable Economic Initiative (SEI) was launched in 2006 to create a comprehensive action plan for integrating the economic development and conservation assets of our local communities and states.

With matching funds from EDA, the North Country Council and Northern Forest Center worked in partnership to bring more than 60 participants appointed by the governor of each state to take a fresh and in-depth look at ways to reposition the region for the future. The SEI committee consisted of individuals from state agencies, private industry, non-profit organizations, philanthropic foundations and other leaders in the communities representing economic development, forestry, tourism, conservation and a number of other interests.

This two-year, grassroots effort resulted in a more targeted vision, with specific goals and focus areas, for the region that is now being used to guide public, private and philanthropic economic development investments and initiatives. The SEI committee identified and prioritized several key clusters and areas of regional innovation, such as developing a sustainable forest industry, making our telecommunications and transportation networks world class and pursuing the development of renewable energy for the multi-state area.

These central themes, along with additional priorities outlined in the SEI action plan, aim to balance the unique environmental characteristics of the region with our core economic, cultural and geographic assets. In addition, the SEI project offers a great starting point and framework for continued multi-state and sub-state regional collaboration through the recently enacted Northern Border Regional Commission.

Third, Mr. Chairman, an innovative public-private partnership for economic development and entrepreneurship was formed in 2005 with support from the State of New Hampshire and EDA. The

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special initiative focused on nurturing the growth of our technology cluster, resulting in the development of new companies and desirable, technology-focused employment.

A partnership between North Country Council, the Grafton County Economic Development Council and Dartmouth College was created to lend assistance to emerging companies in an incubator setting through the Dartmouth Regional Technology Center (DRTC). Today, this incubator focuses on developing technology innovation with the potential for significant social impact. The DRTC offers an educational and infrastructure support program aimed at developing promising technology startups by assisting them in refining their business plans, helping them identify and seek sources of investment and expertise, and providing them with basic business infrastructure and support to make them as productive as possible in as short a time as possible. While this concept may be more commonplace in urban and suburban settings, it is a major undertaking in rural settings such as our part of New Hampshire.

A critical piece to this project was Dartmouth College's willingness to partner with our local government-based organizations and private sector entrepreneurs. We were able to draw on the resources of the Dartmouth Entrepreneurial Network, a seven-year-old office established to provide commercialization support at Dartmouth College. Another vital part of the project was our ability to leverage \$2.6 million in EDA public works funding with \$2.3 million from the State of New Hampshire and other sources to build a state-of-the-art research and development business incubator facility, known as the Dartmouth Regional Technology Center (DRTC).

We are very proud of our accomplishments with this project. The DRTC facility has 32,500 square feet on two floors, including much needed wet lab, manufacturing and office space. To date, 18 companies have taken tenancy in the DRTC, with 11 still located in the building. Over \$60 million in venture capital investment has been obtained by DRTC tenants in the past three years. In addition, the most recent graduate of the incubator, Mascoma Corporation (cellulosic ethanol technology) – who consolidated its Boston and Lebanon, New Hampshire operations – moved from the DRTC in August 2009 to a newly constructed 32,000-square-foot facility two miles away in Lebanon.

By May 2007, only a few months after the DRTC was completed, space in the building was fully committed and a waiting list developed. Because the need for technology incubator space continues to grow within the region, we are now expanding the facility with a 28,000-square-foot addition. We are

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very thankful that EDA has invested another \$4.3 million to help fund the expansion, with construction scheduled to begin in the summer of 2010.

Mr. Chairman, one of the common threads to each of these success stories is the involvement of our economic development district (EDD). Similar to my colleagues in the nation's nearly 380 EDA-designated planning and development districts, we use EDA's matching funds from the planning program to bring public and private sector leaders together on a regional basis to identify, prioritize and pursue common economic development opportunities and strategies. The EDA partnership planning program is not about supporting your stereotypical planning exercises. Instead, our EDDs focus nationally on action-oriented strategies that leverage the assets of our regions to create and retain high quality jobs, resulting in projects such as the Littleton industrial complex, Dartmouth Regional Technology Center and the Sustainable Economy Initiative.

The EDA planning program is an invaluable resource for organizations like North Country Council to tackle complex and constantly evolving economic issues while promoting economic development through regional collaboration, intergovernmental partnerships and strategic planning that is driven by local government officials and grassroots leaders. In the end, the EDA planning program helps our organization and our many local partners develop and implement successful projects that provide the greatest value and return for federal, state and local dollars, while also leveraging significant private investment and creating the greatest number of high-wage jobs.

In closing, Mr. Chairman, I would like to offer a couple observations and recommendations for making further improvements to the programs and operations of EDA from a local practitioner's perspective.

First, we have seen a major decrease in the number of EDA's professional program staff positions, both in headquarters and in the regional and field offices, during the past several years. This has made it increasingly difficult for EDDs and our local partners to perform our jobs. These EDA staff reductions have caused delays in project approvals and funding, which can be fatal in closing and implementing economic development deals. It has resulted in costly and inconvenient delays in obtaining payments and reimbursements for project costs and it adds to the ever-increasing administrative burdens and requirements of both EDA and organizations like our EDD. Therefore, we wish to thank the committee for your recent actions to increase the agency's operations budget in the FY2010 appropriations cycle

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and other recent supplemental appropriations. We want to express our strong support for maintaining these increased funding levels for EDA's operations as part of the FY2011 appropriations bill.

Second, we urge the committee to work with the agency to restore the local cost share requirements for distressed communities. In 2005, the agency made significant modifications to the agency's distress rate guidelines, resulting in dramatic increases in local match costs for the nation's most distressed communities. These harmful changes were made without the input of Congress and against the adamant opposition of local governments, economic development professionals and other EDA partners.

Third, we remain steadfast in our support for maintaining the agency's core public works program, which provides vital matching funds for distressed communities to address the necessary building blocks for economic development. Most of the communities being served by EDA are among the nation's poorest, so they still need assistance in developing and improving basic infrastructure such as water and sewer systems for industrial development, intermodal facilities and brownfields redevelopment. Today, the definition and scope of the public works program also includes eco-industrial parks, business incubators, science and technology facilities and middle mile broadband networks.

Fourth, we urge the committee to provide new and additional resources for the administration's proposed regional innovation initiative. It is essential that our nation's distressed regions pursue more in-depth and sophisticated economic competitiveness strategies that leverage local assets and foster the development of emerging clusters. Most importantly, we encourage the agency to tap into the existing regional planning processes spearheaded by our EDDs, known as Comprehensive Economic Development Strategies (CEDS), as the primary building blocks for regional innovation strategies. While the CEDS are often more general in nature, the regional governance and planning frameworks used to develop regional CEDS offers a perfect platform for regions to engage in more targeted regional cluster work.

Finally, we thank the committee for your recent efforts to increase the minimum funding levels for EDD planning grants. These modest yet invaluable matching funds are used by organizations such as North Country Council to provide much needed professional economic development planning and project implementation assistance to our local governments and communities, especially in distressed small

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metropolitan and rural areas that lack the full-time staff of their urban and suburban counterparts. As noted in past studies of EDA's impressive track record, the regional strategy development and prioritization process that precedes the agency's commitment and investment in projects is closely associated with the planning efforts of the EDDs.

EDA remains one of the most effective and flexible federal programs that my organization deals with in the federal government. It has a specific and clear mission to help local leaders create and retain jobs in distressed areas of the nation. Even in the best of times, thousands of communities fight every day to remain competitive and overcome shifts in the global and national economies. In periods of severe economic dislocation and suffering like today, agencies like EDA are even more essential.

Thank you again for allowing me to testify today. I welcome any questions.

LENGTH OF REVIEW CONCERNS

Mr. MOLLOHAN. Thank you. Thank you, gentlemen, both. Dr. Brown, I know that you have recently been going through a pretty intensive assessment of the condition that we are facing up in the northern part of the State. And you have been interfacing with EDA in that process. Just describe to what extent you think the EDA involvement has been helpful, and areas where perhaps it could be more helpful? And what do you think the outcome might be?

Mr. BROWN. Well, we have been an Economic Development District for four years. I have been at the regional council for twelve. I want to tell you, first of all, that it is apparent to me that there has been more hiring in our Philadelphia regional office, so we have gotten a little more assistance. That is good. In terms of doing applications for EDA, it is, as it should be, a long, extensive process of review. We made an application in February, heard in—

Mr. MOLLOHAN. February of 2009?

Mr. BROWN. Yeah. At least, we heard in July. The program has been up and running, and at last getting a consultant, we are in that process right now. So we are sitting here, what, six or seven months after that point in time. We have a nine or ten month window to complete the program. So we will be rolling very fast. And probably, if I could, later on tell you how it is going because I am sure you are very curious about it, too. We have ten months to get it done. I do know, if you come into any region like I am in, and I know, we all had lunch, and I was interested about how this all works. It is the fact that clearly in our region people are tired of getting plans and putting it on the shelf. They want to see action. If you have a high unemployment rate of 12.5 or 13.5 percent, councils, commissions are very cautious of where you are going and how you are doing it. In our time with EDA, timewise, we clearly told them that. We have beefed up staff a little bit.

Mr. MOLLOHAN. I hear you saying that actually they beefed up staff a little bit, and that is your way of saying they needed to beef it up a long time ago—

Mr. BROWN. Absolutely.

Mr. MOLLOHAN [continuing]. And this process needed to be expedited—

Mr. BROWN. Absolutely.

Mr. MOLLOHAN [continuing]. Considerably. Yeah, I mean, if you are going to give help with regard to economic development, I mean, it has got to, the approvals have got to come much more quickly and the aid has got to come much more quickly—

Mr. BROWN. Yes.

Mr. MOLLOHAN [continuing]. Than a year, which is what I am hearing you say.

Mr. BROWN. Absolutely.

Mr. MOLLOHAN. Have you broached this subject with them? And if so, what do they say?

Mr. BROWN. I have not personally broached the issue with them. Clearly, we have told them we need it in a certain time, but I never said there is an issue here and we need you to move forward with that. I do not, I guess Michael, I defer to you.

Mr. MOLLOHAN. You are talking about some of the process issues. And Mr. King, will you speak to that?

Mr. KING. Yeah, I have broached with the regional director some of those concerns in getting projects through. And I think the answer that I got, received, was that indeed the agency was hurt in reductions, but has since recovered from that. But the problem that we are having now is the staff is somewhat inexperienced. And there is a learning curve that regional staff and even, if you look in the Philadelphia region all of the EDRs, with the exception of one, are fairly new to the region. So there is that learning curve. There is that, you know, administratively it is a federal bureaucracy, and we have to go through those federal bureaucracies. So there is something to be said for that. Getting things through the agency is critical. We are building this new addition to the incubator, and we are right on the timeline to be able to meet construction in time right now. And you know, in the Northeast, our construction season, as I said, is shorter. So you just have to, you have to be able to move those along quickly.

PLANNING

Mr. MOLLOHAN. Where do you find the Economic Development Administration most helpful? In the planning process? In funds for infrastructure?

Mr. KING. I will defer a little bit. I think they are pretty helpful in most of the areas. I think the planning process is very good. You know, planning sometimes gets a bad name. And I want to be careful to say what EDA does in their planning process is, it is an implementation process and not just a planning process. And at least in my region, that is what we use it for. We are not sitting there developing plans. We are meeting, our planning process is to meet with practitioners and decide which projects are the best projects and can get the most bang for the buck in our region. And that is our planning process, so we can follow right into implementation when we are doing that. And EDA is very supportive of that. And their particular planning process is very supportive of us doing that.

Mr. MOLLOHAN. What do they bring to the table in that process?

Mr. KING. Well—

Mr. MOLLOHAN. Besides money?

Mr. KING. They bring money, which is important. I think—

Mr. MOLLOHAN. How about advice?

Mr. KING. I do not think we get a lot of advice from the agency itself.

Mr. MOLLOHAN. Should you?

Mr. KING. And I do not think we ask for a lot of advice, to tell you the truth.

Mr. MOLLOHAN. So you are not really interested in their actually coming forward with lessons learned in other areas, or—

Mr. KING. Well, I guess I have not thought too much about that, Mr. Chairman.

Mr. MOLLOHAN. I mean, you may have those resources at your disposal. How about you, Dr. Brown?

Mr. BROWN. I think that is a good point. And I am thinking why I did not ask our EDR, who is both in West Virginia and Maryland

spread so thin, but that is a very good question, about how we could better use that. I would say, I hate to say we are working and we know better, but quite honestly when we get our CEDs we have got \$550 million of projects that are being prioritized. And one of the great advantages, I know Mike and I have talked about this, the fact is if this is the one time I can get the nine incorporated areas, two counties, in one room and talk about, "Folks, these are what the available dollars are." Even if it is not EDA or ARD, we are talking about energy efficient programs. If we did not have planning partnership forums, that would not be happening.

Mr. MOLLOHAN. And that came from?

Mr. BROWN. Those comments of priorities and where we were going to go came from the locals, council people, commission people, private sector, all sitting in a room.

Mr. MOLLOHAN. Mm-hmm.

Mr. BROWN. And we have about fifty-five people on our regional council.

Mr. MOLLOHAN. But the dollars came from?

Mr. BROWN. From EDA.

Mr. MOLLOHAN. Yeah.

Mr. BROWN. Which is, we get \$62,000 a year for a planning grant, which must be matched on a 50-50 basis through our regional council.

Mr. MOLLOHAN. Yeah. Okay. Mr. Bonner.

COORDINATION OF FEDERAL AGENCIES

Mr. BONNER. Mr. Chairman, as I was listening to the witnesses give their testimony, and answered some of your questions, I was reflecting on a conversation that I had with a small businessman in my district, a gentleman by the name of Albert Winfield, on Monday of this week. Mr. Winfield is like a lot of other small businessmen in America, not just in Alabama. He has been very successful after some time developing a barbecue restaurant that has become one of the most popular barbecue restaurants in my district. So popular, in fact, that he wanted to expand and sell franchises. So he went to the Small Business Administration to get their help. They agreed he had good barbecue but they said that he needed to go to the banks. So he goes to the banks. And they said, "Well, you have really good barbecue but you need to go to the Small Business Administration." And at the end of the day he is like so many other small businesses throughout the country, just chasing himself in a spiral, trying to grow, trying to add new jobs. Trying to help sell his franchise to other places around our region, certainly around our State. And he seems to keep running into one roadblock after another. So listening to you, Dr. Brown, say, I believe this was your quote, that EDA is the only federal program that you know of that really focuses on job creation, something to that effect.

Washington has so many alphabet agencies that are acronyms, and yet to small towns and to planning commissions and others that really are your lifeline to the federal government. And I guess my question to you would be, not only within the Department of Commerce, International Trade Administration, EDA of course, Minority Business Development Administration, but outside SBA, the

rural development programs, Department of Agriculture, HUD grants, and other things, how well do you think the federal agencies coordinate their activities and their support with each other in an effort to help Mr. Winfield and other small businessmen and women around the country know that there is some real help out there? If that makes sense?

Mr. KING. In my opinion, not well, Congressman. I think one of the values of EDA are the districts, like mine, who get practitioners together, and like Dr. Brown's. That is more coordination than you will get from the federal government. We access not only EDA in my organization. We access Rural Development. We have people sitting on there that have CDFI corporations, or are getting federal funds for that, SBA, and those kinds of funds. And really the task that we have is to try to bring those agencies together. Because going directly to your question, if we did not I do not think the federal government is going to do it very well at all. I just, they are not set up to do that, to bring small, and particularly the smaller type businesses. I think they probably do a better job in larger developments, but not to the small businessman. It just does not work.

Mr. BONNER. Dr. Brown.

Mr. BROWN. We have small business development centers in our area, SBA run programs. Much like many federal programs that are avenues of assistance, they are clearly understaffed and are not there everyday. If you were to come ten years ago into the area, the SBA office would have been open everyday. They are not. They are there two days a week now, leaving a void. And you would think maybe community colleges will pick up some of that. Well, community colleges do a little bit of small business things. They do training more than anything else.

The group I mentioned, Valley Ventures, probably is our biggest advantage, and that was created through our regional council, through planning partnership funds. It now has a private foundation providing some support for that. One staff member, a secretary, but run by businesswomen; people who have a barbecue place and are able to, if they know Valley Ventures is out there, can get assistance for that. But it is local, it depends on originality, locally what emphasis is on it, and what kind of funds you can get for it. But I recognize the conflict and the discussion, the dialogue sometimes does not quite work. And I understand the frustration. I have people walk in my office asking about small business assistance. I am not a small business person. We will try to point them in the right direction.

APPROVAL TIMELINE

Mr. BONNER. Mr. King, you indicated that because of the decreases in the EDA staff, that that extends the time, the process, to get the EDA support approved. What on average is the timeline in terms of going after EDA funding and finding out whether or not you have gotten it?

Mr. KING. I think it varies quite a bit, and it varies quite a bit depending on what is coming down through EDA and what their priorities are, and what funding buckets they need to get out quickly, and what funding buckets they do not need to get out as quick-

ly. And so I know that is not a great answer but it does vary widely. If we push hard on it, and particularly, and get projects to be a priority, they can do it very quickly. And if we are not pushing as hard it takes a long time. For instance I can give you an example. There was a particular public works project, bank erosion along a particular industrial park that was going to wash away a building. And that problem is still there. But we have lost this season to be able to do it because they could not get the money out quick enough. And, you know, you have to get this when the water is low, and so forth and so on. So this will not be done until next fall when we can do it. Now, the money is out, the grant is approved, and we are going to go ahead with it. But that was put back in, sometime back in April, that funding. And we just lost the season.

Mr. BONNER. April of last year?

Mr. KING. April of last year. And, you know, on the other hand, for the Dartmouth Regional Technical Center they did a very good job. We were able to get that funding through. That is ARRA money, so it was a little bit, it had a little bit more behind it to say, you know, this is the kind of thing where the nation wants to create jobs so let us get that money out. And I think in some cases it is, you know, the priorities are set by you yourself that tell you how fast, you know, you want funds, how the bucket of funds go out. And we just have got to be a little careful of that in my opinion. We want them to move ahead.

Mr. BONNER. Well, my last question, I know there are other members, other colleagues that would like to have a chance to ask some questions of you, is this Committee has been very active. I have only been on it for a year, but I thought Chairman Serrano worked me hard when I was on his subcommittee, and he did. But Chairman Mollohan, last year, my first year on the Committee, really brought a lot of people in to give us some good feedback about what programs worked, what programs did not work, and what we could do to make better use of the limited resources that were available.

I read in the paper yesterday, in the Washington Post, I believe I am right, that thirty-three cents of every dollar that we will spend this year is borrowed money. So that makes your testimony on behalf of a program, either things that work well or things that need to work better, especially in light of the pressure that the administration is under and that we are under, all the more valuable. Of what we can do to make programs like EDA stretch those dollars even further. And certainly it seems to me that one constructive comment that you have just offered is it is just unacceptable that it takes so long to get approval. Think of what could have been done if that could have, that timeframe could have been met last year? So I would just encourage not only you, and the next panel that will come after you, to think and to continue this dialogue as we go forward. Things that we could do a better job at our, in our role in government of trying to make the process work a little bit better. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Bonner. Mr. Serrano.

GREEN PROJECTS

Mr. SERRANO. Thank you, Mr. Chairman. Gentlemen, thank you for being here. And as you know, there is an emphasis greater than ever on green industries, green businesses, and just hopefully the greening of America, as we would like to call it. Do you sense from EDA's actions a desire to promote green projects? To invite people to submit green project requests? Do you see anything that indicates that that could be happening? Either one of you, or both?

Mr. KING. I do not necessarily see a sense of that coming directly from EDA. I think, however, the agency itself is very supportive of those projects that will come forward, in my opinion. And I think, in my particular region, again, you did not, you were not here for my oral testimony, but it is a very forested land, and very concerned with creating green energy projects. We are very concerned with our forests, and maintaining sustainable forestry, and so forth. So it is very receptive, they are very receptive to those kinds of projects. Though I do not feel that they are promoting that, *per se*, if you will.

Mr. SERRANO. And I am not sure, Mr. Chairman, if that is correct on my part, to assume that EDA would promote any kind of business. But rather, I am not sure I know what their role should be other than to accept good projects and then promote them. But there seems to be a national desire on all sides to get more of this going. So I was just wondering—

Mr. KING. If I can just make one, you know, my personal feeling is I see EDA's role is, and I think, is to create jobs. And jobs are extremely important, be it a green job or a non-green job. I mean, it just, we need to be out there creating jobs and EDA is helpful doing that. I guess that is how else to say it.

Mr. BROWN. I would certainly say, if it is not EDA, I hear from other agencies, whether it is Appalachia Regional Commission, or a lot of different agencies, clearly energy means jobs. We are doing a strategic cluster now, trying to look at our employment sources, and it is tough to figure out how energy mixes into all of that. But the economy is changing, there is no doubt about it. And we have seen energy, at least in the northern panhandle, the environmental aspect may be second to the aspect that it means jobs. And there is the maximizing dollars, and where the opportunity is, appears to be in the energy field.

Mr. SERRANO. Right.

Mr. BROWN. And whether it is EDA, or ARC, or some other agency, and we hear a lot about different agencies, we are looking at it. People that would not have looked at it five years ago or sort of deflecting on the energy issue, or clean, are much more accepting of that.

PARTNERSHIPS WITH HIGHER INSTITUTIONS

Mr. SERRANO. And I think that that is the key. You have hit on the most important part of this whole argument, that the same folks who years ago found themselves as enemies, the environmental movement and the business community, now realize that it is not only sound for the environment but it is good business practices. And it does create jobs. And so I think we have now gotten

to a point totally different from where, when I started out in public service, where these folks were at each other's throats all the time.

With that in mind, higher education, also institutions of higher education always play major roles in our communities. And they serve as a place for training of people, and promoting business practices, and other issues. Do you know of any partnerships with higher institutions in different regions that we could be discussing?

Mr. KING. Well, I am right in the middle of a partnership with Dartmouth College. And we built a 32,000 square foot incubator at Dartmouth College. We are adding on a 28,000 square foot addition, 28,000 square feet. And we are doing that because that 32,000 square feet was fully subscribed. Not only Dartmouth College but the State of New Hampshire, commercialization of the knowledge coming out of that college is a very big priority for the region within the State. So, yeah, we have got super priorities with them. It is a major project in our region.

Mr. SERRANO. It is an incubator you said?

Mr. KING. It is a technology incubator. In the Dartmouth area, for Dartmouth College, they have the Thayer School of Engineering, and the Dartmouth Medical School, and a major, major hospital, the Tuck School of Business. But when they did all the biomedical engineering some of the businesses coming out of that, there simply was no lab space for businesses, for people who wanted to come out of the school doing research at the hospital and had ideas to commercialize things, there was no lab space. And that is what our incubator did. And we started to have 50–50 lab space. When we finished the building it was about 75–25. So it just fit a need to really help with getting businesses in it. And we have been very, very successful with that.

Mr. SERRANO. All right, good. Any thoughts on that?

Mr. BROWN. Well, our area is a little different. We have only one four-year college. And really where the technical skills and training occur in our region are through the two-year community colleges. And that may be due to the fact that we have three major steel mills, and most people up till about fifteen years ago were promised a job in the mill. And they saw community college as a potential training, or revisiting but with that with workforce investment, councils in the community colleges, it is moving along.

I would say to give you an example, we are, through Ohio University, which is by the way located 180 miles from us, one of their schools, is doing a targeted industry study. And we will have people from our training group in the community colleges, workforce investment. We are going to really try to establish where our employment advantages are in the future. And I have certainly thought about the energy field, I am going to tell you, and it certainly it is coming up as one of those areas. I am not sure how viable it is, we will know in a couple of more months where that is, but our point is in the industrial heartland of Weirton. And Brooke and Hancock are the community colleges that are sort of taking that on. That is a good bang for the buck, too, for the population.

Mr. SERRANO. Thank you. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Serrano. Mr. Aderholt?

Mr. ADERHOLT. I do not have any, thank you.

Mr. MOLLOHAN. Mr. Culberson.

EFFECTIVENESS OF EDA AS A LOAN PROGRAM

Mr. CULBERSON. Thank you, Mr. Chairman. I want to ask you each if I could, and Mr. King in particular, you have got, each of you have got a lot of success stories to talk about locally that you have been able to use the money from, the grant money from the EDA. And Mr. Bonner's questions, in order to sort of follow up on his point, we are entering a whole different era in the United States of really unprecedented levels of debt and deficit. And the good work that EDA has done, could you both speak to, certainly because these programs you are talking about have been successful, what if Congress were to restructure this as a loan program? And to expand, for example, the responsibility of the SBA? Could a lot of these grants not be repaid to the taxpayers to the job creation, success you have had with these incubators, the local tax I am sure incentives that the State of New Hampshire and Littleton, New Hampshire, I suspect, probably granted some property tax exemption, or some tax break of some kind? Could you not put together packages, rather than grants, recognizing the scale of the debt and the deficit that we could structure this program as a loan program, and still be as successful and repay our kids?

Mr. KING. I suppose we could. I do not know if it would be as successful. You know, you get involved with the Dartmouth Incubator, for instance, we pay full taxes, property taxes on it. And we try to do the best we can in that. We think what you are doing is you are generating, there is a number of small businesses going into that incubator, and some of them are going to be successful and some of them are not. And they do not in particular own the property. The property is owned by nonprofits that are trying to help these companies. I think one of the biggest problems we have with midrange companies is that the lack of funding, as Mr. Bonner stated, you know, there is this guy, he just cannot get any money to keep his business going. And I think we are faced with the same problem in some of the companies we bring into the incubator.

You know, on the other side of the tax benefit, they are creating jobs. And those jobs create tax dollars. For instance the tax dollars, just going back to the Littleton Industrial Park, I forget what the number was.

Mr. CULBERSON. Oh sure, no question it is worthwhile. But—

Mr. KING. It is millions of dollars worth of tax dollars being generated from making that investment. And I—

Mr. CULBERSON. But based on your experience, and what you have seen, this program could be restructure as a loan program, and the money could be paid back?

Mr. KING. I do not think it would be as effective. Just personal opinion, I just do not think it could be. I think you would have trouble making it as effective, for instance, we could not pay the money back from the Dartmouth Incubator. That would not be something that we could do. We just, it would, the program would not go forward. The building would not have been built.

Mr. CULBERSON. Mr. Brown, what about in your experience? Recognizing the level of debt and deficit, we are really about to hit a brick wall as a nation, turning this into a loan program?

Mr. BROWN. I would say Governor Joe Manchin of West Virginia probably understands the debt issue like most governors do. And if you ever walk into the Governor's office, he visits with you, he always wants to know what you have in the game. You are not going to get a grant. Things have changed. You have to have significant investment in the project, whether it is a loan, or whatever, a bond. You are going to have to, you cannot walk away from this.

Mr. CULBERSON. And that is always a good thing.

Mr. BROWN. Yeah. And the word is out. No one is showing up at the Governor's Office saying you want a grant. That is not, that is not happening. In terms of loans, it all depends how it is configured. I just do not know how, I do not know if I have a real good feel for that in terms of how it is configured, what is being loaned, what is being granted, what the max is, what jobs it brings, could bring. I mean, if it is a wise investment, and—

Mr. CULBERSON. What would you recommend? Just, I throw that out as food for thought, because we are entering a whole new era, unlike anything the country has ever faced before.

Mr. BROWN. You are going to have to give me some time to think about that one.

Mr. CULBERSON. Okay. Thank you very much.

Mr. BROWN. I am sorry.

Mr. CULBERSON. Thank you. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Thank you, Mr. Culberson. Mr. Fattah.

Mr. FATTAH. Thank you, Mr. Chairman. I think the first place we should start in these loan agreements is the \$20 billion we spent in Iraq on reconstruction. Now, if we want to get a loan, maybe they should pay us back. But when we tried to structure that in the Appropriations Committee I know that there was not a lot of enthusiasm. In fact, we have wasted over \$1 trillion of our money in this ill-conceived war in Iraq.

PLANNING NETWORK

But I am very happy that you are testifying here today, and that you are trying to put Americans back to work, and that you are doing it. I saw the President was in your home state, Mr. King, yesterday, in New Hampshire, and talking about the recovery. And the shift in, you know, last January we lost 780,000 jobs in this country. This week's job's report will probably show us dead even, not gaining jobs, not losing jobs, but definitely putting a break on this hemorrhage of jobs in our economy. And we saw the gross domestic product go from negative 6 percent to a positive 5.7 percent a year later, both in purchasing orders, and a whole range of other economic indicators. We seem to be moving in the right direction.

Now, I know that people in New Hampshire pay federal taxes. And I assume they have every right to expect to be, when they have a worthy project, like the incubator. Now this first grant was 3.9 and it was overbooked, almost, and you had to move forward again. And I am glad EDA is giving you another grant. These are the kinds of efforts we should be involved in as a government because it is critically important that if we are actually concerned about the debt and the deficit that we put Americans to work, and that we create the economy that will carry our nation forward. And

this partnership you have with Dartmouth is an excellent example of how higher education, and the private sector, now I understand in this network you have dozens and dozens of players, private sector, nonprofits, for profits. And if you could talk about that level of cooperation and collaboration it might inform us. Because one of the things that I think EDA may want to do is to use as a model this kind of effort of Americans working together. Everyone understanding how important it is that we develop economic basis on a regional level.

So I want to welcome you to the Committee. I thank the Chairman for having you, and I would like you to expand on the work of this network.

Mr. KING. Well, thank you. I have somewhat of a bone to pick with the President because I happened to be——

Mr. FATTAH. You got caught in a traffic jam?

Mr. KING. No I happened to be flying out exactly at the same time he was flying in, so they shut down the airport and I was stuck on a plane waiting for him to come out. But that was okay. It was not a long period of time. But when you are the President you get to do those kinds of things, I guess.

I think, as I said earlier, one of the things that we do have is the CEDS document and the CEDS process. It is not so much a document as much as it is a process, allows us to bring these practitioners together. And though Chairman Mollohan asked about what advice EDA gives. You know, I think one of the best things they do is they have this planning process. And as I stated earlier, I really do not think it is a planning process but it is an implementation process because it brings different kinds of economic development together. You know, local development corporations, directors from regional development corporations, private businesses, people like SBA people, and people who can provide short term financing to companies together. And we meet once a month, and we spend our time looking at the various projects that are in the region, looking where they are in their cycle of development. And it really is a marvelous tool. And I hope it is used the way we use it throughout the country. I do not know if I am answering your question or not, but that is the kind of thing we are doing.

Mr. FATTAH. No, I think that is very helpful. I want to know, and also Mr. Brown in West Virginia, since the President has laid out a goal of doubling our export over the next five years, in the work that you are doing do you see, I know in the Philadelphia region, I am from Philadelphia, and we are very parochial. I looked at these stats the other day. We are behind the eight ball in terms of our export, you know, versus other economic regions in the country. There is obviously a great deal of growth. I have got the peanut chew factory in my district. I love peanut chews. They have been around for 125 years. We got them connected up with the export/import bank and now they are, they are selling peanut chews in forty-five other countries. Now, these are still the same candy bars that I have been eating since I was a kid. But they have got the language of the nation of origin on the cover, and other than that they are produced right there in my district. People are working.

I have got another company that is making, they have no domestic competitor at all, and they make saltwater fishing reels, the very best in the world. They sell for almost \$1,000 a reel. They are employing people, and they are selling this product all over the world. But there are plenty of these opportunities for us to take American products and to make sure that doors are opened. And I just wonder in your instance whether you think that the goal, I know all of the economists who have commented say that the President's goal is absolutely achievable, I think is the words that were used by one of the most noted ones. So the question is, you know, to get all of our business, and small and medium-sized businesses really focused on these markets overseas.

Mr. BROWN. Well, that is a very good message. I am not sure if, at least in our region, it has reached ground zero, or the local level. It is getting there. I think if you ask that question two or three years from now, it would be well enhanced. I am saying this. We are on the Ohio River. And we seen the Ohio River as a major freight mover from the Gulf up through the Mississippi, all the way up through the Ohio. And it is going to expand our opportunities. As you probably all know, even what is going on on the interstates now, traffic is, freight traffic is going to double here in the next twenty years, or three times that, in the next twenty years. And we do not have the infrastructure to handle that. We feel that we have an infrastructure advantage in where we are located, and particularly for exporting through the Gulf. That message is coming a little louder, I think, for us. I think in terms of looking at export opportunities, clearly we know it is, although the steel market is down, and if there is a new steel market it will be less labor intensive and it will be a different type of specialty steel.

So I think, at least at our local level, it is probably evolving in terms of our interpretation of what you are saying. But ask in two or three years. It is much like the energy argument. I think we will be much more knowledgeable about that.

Mr. KING. We have industries, you know, in my testimony with the Littleton Industrial Park, there is a number of companies that are selling internationally right now. You yourself, if you go hiking in the woods, might use DEET, is one product that is made in this little town of Littleton, New Hampshire. And one of the companies is a foreign company that makes large connectors for electrical connectors. So yeah, I think from a product standpoint, we surely are promoting those kind of companies if they want. And we are, interesting enough we are right on the Canadian border. And we have some French speaking companies that come into the region, and they are building there. And just on the other side of that coin, in the service industries in, and technology, there are companies developing, I am not the scientist enough to be able to know what I am talking about here, but developing the different kinds of immunologies for cancer and infectious diseases. And if those kind of start up kind of companies, if they really hit it, that is better for all of us.

Mr. FATTAH. Absolutely. Well, thank you for your testimony, and we need to look forward to continuing the progress that you are making. And I know that the Chairman is committed to making sure that as we consider the appropriations request of the adminis-

tration that we look at the work of EDA and some of the other organizations and agencies in the Commerce Department to make sure that we are doing what we need to do to promote job growth in this country. Thank you.

Mr. MOLLOHAN. Thank you, Mr. Fattah. Certainly, Mr. Serrano.

Mr. SERRANO. Mr. Chairman, just a reminder that it is okay under the House rules to bring products from your State to share with the other members.

Mr. MOLLOHAN. Member to member?

Mr. SERRANO. Peanut chew?

Mr. MOLLOHAN. Yeah, I do not think the Committee has received any peanut chews.

Mr. FATTAH. I am going to make sure that the Chairman has the first opportunity to experience this product.

ECONOMIC DEVELOPMENT DISTRICT DESIGNATION

Mr. MOLLOHAN. This is the serious business of legislating. Both of you are EDA designated economic development districts. Mr. King, you have been one for some time. Dr. Brown, you have been one for less time. If each in turn would describe the value of the EDD designation for your organization. Maybe you have had one longer, Mr. King, you could talk first? What is the benefit of that?

Mr. KING. Well first of all, being recognized by EDA, the obvious one is you are eligible for funding. And that is, you know, a huge benefit. And I think in the wisdom of when the law was written, making, developing economic development districts and developing a planning and implementation process that they did was the reason that you become eligible, because some of the things that I talked of with Mr. Fattah. It is just, I think that is a huge benefit. I think some of the things that I was disappointed in in the last go round was that they took away some of our ability to create more of, which made the communities provide more of a match. I hope that the Committee will consider restoring what it used to be. And, you know, it used to be easier for communities and the local project developers to be able to, for EDA to contribute more to the project, and the local people commit less.

Mr. MOLLOHAN. How did, just tell us how that changed, and how that—

Mr. KING. Well I think, you know, for instance in my district, and I am not sure what happened, we were a 60 percent funded and a 40 percent match. That went down to 50-50. And, you know, that does not seem like a lot, but it is a lot to a project and a project developer, in some cases. And there was always the ability before from the Assistant Secretary to be able to get more than the 60 percent, and maybe up to 75 percent. That went away, and we were not able to do that. And that hurt some projects. You know, some projects were not able to go forward because of that. And you know, just to say it again, you know some of the things that we do as a district, and when we are doing the project development, we have got to get the project funded. And, you know, EDA is only one piece. And so we are out looking for the rest of the funding. We are looking for private investment. We are looking for state to put some skin into the game. I hope I am answering your question there.

Mr. MOLLOHAN. No, you certainly are. Are you opposed to the match in and of itself, or just opposed to the percentage of the match?

Mr. KING. I think it is critical that we have a match.

Mr. MOLLOHAN. And what do you think would be a better ratio?

Mr. KING. Well, at least we would like to go back to where it was in prior years.

Mr. MOLLOHAN. What do you think would be the optimum match?

Mr. KING. I do not know if I know. I think the 60-40 was good at the time we were doing it. I would like to at least see it restored to that.

Mr. MOLLOHAN. It was workable?

Mr. KING. And have the ability that depending on the project to allow the regional directors and the Assistant Secretary to look at it and see if—

Mr. MOLLOHAN. Have some sort of waiver authority?

Mr. KING. Some kind of waiver authority, yes.

Mr. MOLLOHAN. Dr. Brown.

Mr. BROWN. Well—

Mr. MOLLOHAN. Describe the value of the EDD designation to you.

Mr. BROWN. Right. It allows locals to be focused, committed, and prioritized. And without that to go to congressional representatives, state representatives, otherwise, if we did not have that we would not be looking at priorities. You would be looking at a variety of people that you may have seen sometime come into your office on an hourly basis, and they are all talking about something different, and you did not realize was a problem in your district.

Mr. MOLLOHAN. So it is important to you as establishing a real process and funding that process?

Mr. BROWN. Absolutely. And then we are in tune with the other federal partners, or state partners, how that all works. Clearly, the more committed we are locally the much easier job we can do for our other partners. The other thing is EDDs, and the funding for the economic development districts, is increasingly more important. Let me give you an example. The City of Weirton had to cut its budget 20 percent last year. That is our major business center, major city in our area. What is important about that, what they cut out was their economic development person. Now they are depending on us to be their economic development people. We do mapping, technical assistance, but otherwise if we weren't there, an economic development district and the planning district funding, there would not be, I do not know, I am sure it would be filled some way. But I am not sure it would be adequately filled to give those priorities and commitments for you.

And in terms of the match, we are all different. There are a lot of original EDDs in the area. I would like to have your money, match money. Because I have 50 percent match, and have had 50 percent, and it has always been that. I would say that if they looked in the last five years at the eligibility criteria we have probably changed. So I would ask that maybe the eligibility criteria should be updated on an annual basis.

Mr. KING. Yeah, that is a good point.

Mr. MOLLOHAN. And the eligibility criteria be a sliding scale based on some needs based formula?

Mr. BROWN. Right, whether it is unemployment rate, per capita income, measures, other measures of distress would be very helpful. And if that were updated on an annual basis it would be very helpful.

Mr. MOLLOHAN. Yeah, too high a match obviously biases less economically distressed areas against more economically distressed areas, if you follow that. I think I said it the way I meant it. That the less economically distressed areas would be more likely to get the assistance than the more economically distressed areas, because you would be out of the game because you could not make the match.

Mr. KING. That is right.

Mr. MOLLOHAN. Yeah, we have seen that in some other programs, too.

The funding associated with the designation, Mr. Brown, would you speak to its importance? It may be some specific examples, or you already have a little bit, but just for the record?

Mr. BROWN. The funding?

Mr. MOLLOHAN. The funding associated with the EDD designation? And you have already said it does matter.

Mr. BROWN. Right. The—

Mr. MOLLOHAN. I mean, that is just crucially, let me just answer this, is that crucially important to the whole designation?

Mr. BROWN. It is very crucial to our region because we would not—

Mr. MOLLOHAN. As you testified.

Mr. BROWN. I mean we have these projects, a lot of our water and sewer projects are essentially the planning, the application, the monitoring, the close out of projects is done through that type of program. If we did not have those funds, just the moving of technically the project forward and closing it out would be, we would not be staffed to do that. And I would say, where we are the locals do not have, when we are talking communities of a relatively small size that just do not have the ability to carry staff to make that happen.

PUBLIC WORKS FUNDING LEVEL

Mr. MOLLOHAN. Okay. Shifting gears here, the administration has proposed to shift significant funding away from the public works account into the economic adjustment assistance program based on the rationale that EAA is a more flexible program. From your perspective, is this shift desirable, appropriate? Why and why not?

Mr. KING. Well my opinion is, you know, where they are shifting it to be more flexible, and to provide more innovative types of projects, I mean, we need some more innovative types of projects. I do not think necessarily the way to do that is to take money out of public works and shift it into economic adjustment. I think, you know, you want to do that, give more money to economic adjustment. Public works in a rural area is critical. We still need the basic building blocks to be able to do economic development. You know, most of my communities are under 5,000 people, and many

of them are under 1,000 people. And that infrastructure, you know, there has to be some kind of continued infrastructure. And I am not saying we need to continue to build industrial parks. But there are serious places where infrastructure needs to be continually built. And do not take too much away, you know, public works was the core of EDA. And it, has not changed that much that we should take all the money out of public works and start shifting it to these innovative planning things. We need more, we need bricks and mortar, and we need to have people doing that.

Mr. BROWN. Yeah, I agree, bricks and mortar are key. But economic adjustment does create the creativity and ideas to get the bricks and mortar. So it is sort of a catch-22 type of approach. But I, once again, it is just bricks and mortar which are fundamental projects. And you are looking back ten years from now, that is what you are looking at. The infrastructure that is there.

Mr. MOLLOHAN. Mr. Bonner.

Mr. BONNER. I have no further questions, Mr. Chairman.

Mr. MOLLOHAN. Mr. Serrano. Mr. Aderholt. Mr. Culberson. Mr. Fattah.

Mr. FATTAH. No further questions, Mr. Chairman.

Mr. MOLLOHAN. Gentlemen, we want to thank you very much for your appearance here today. We understand that you had to travel a long distance, prepare. You have been very helpful to the Committee. There may be some questions submitted which if you would be kind enough to take some extra time to answer it would be really helpful to the Committee. I know I do have some follow up questions, actually, which I may be in touch with both of your individually about. But thank you for your appearance here today, and your good testimony.

Mr. KING. Well, thank you for affording us the opportunity to come down and talk to you.

Mr. BROWN. Thank you.

Mr. MOLLOHAN. You are welcome, and for your good work back in your regions.

Mr. KING. Thank you.

SECOND PANEL REMARKS

Mr. MOLLOHAN. If the next panel would take come forward? Okay. We welcome our second panel. Mayor David Bradford, the City of Muscle Shoals, Alabama, was the immediate past Chairman of the Northwest Alabama Council of Local Governments; Chuck Wemple, Economic Development Program Manager of the Houston-Galveston Area Council; and Dr. Les Wyatt, President of the Arkansas State University System. Gentlemen, we welcome you all to the hearing today. Your written statements will be made a part of the record, and after Mr. Bonner makes any comments he might want to make, or if Mr. Aderholt would like to make a comment before the witnesses proceed please, Mr. Bonner?

Mr. BONNER. I would be happy to yield to Congressman Aderholt.

Mr. ADERHOLT. Well I just want to say thank you. It is good to see Mayor Bradford here. Thank you for your testimony today. And thank you for your work, you and other regional leaders in Northwest Alabama, and the direction you have taken Northwest Alabama. And so we thank you for your testimony here today, look for-

ward to hearing it, as well as your colleagues here today to testify before the Committee. So thank you.

Mr. MOLLOHAN. Okay. Thank you, gentlemen. Why do we not just lead off with Mayor Bradford?

OPENING STATEMENT BY MAYOR BRADFORD

Mr. BRADFORD. Thank you, Mr. Chairman. Good afternoon, my name is David Bradford. I am the current Mayor of the City of Muscle Shoals, Alabama, and the immediate past Chairman of the Board of Northwest Alabama Local Governments, an EDA designated economic development district. We thank you for the opportunity to be here today and speak on the role of the Economic Development Administration. And we have submitted a lengthy statement for the record so I will limit my remarks to a few key points.

First, I would like to stress the importance of EDA to local economic development efforts. EDA provides support for strategic planning, ongoing collaboration, and project implementation. And each type of support is tremendously important to successful strategies to create jobs. Through its strategic planning investments EDA lays the groundwork for successful strategies to prepare and promote communities. With its planning partnerships, EDA gives regional organizations, such as the Northwest Alabama Council of Local Governments, and other economic development districts, the capacity and the support to maintain planning, project development, technical assistance, and grant resource opportunities. And finally, EDA supports job creation efforts by investing in infrastructure, revolving loan funds, business incubators, and other economic development projects. With these investments EDA has helped to create or retain over 4 million jobs and over \$130 billion in private investment.

In our region alone EDA's support was important to the location decisions of two international companies that have had great positive effects on our local economy. Without EDA assistance, SCA Tissue of Sweden in 2003, and North American Lighting Koito of Japan in 2007, would have been more difficult, if not impossible to recruit. For both of these companies EDA's strategic planning and infrastructure investments proved to be critical. These investments were coordinated through the economic development district which proved to be a vital partner along with local governments and the Shoals Economic Development Authority. In both cases modest investments and strategic plans laid the groundwork for success by pointing out opportunities and focusing on regional efforts in collaboration with governments. In each case EDA made investments in infrastructure to prepare sites for industries. Combined, EDA's \$2.83 million for water production storage at two locations in Colbert County helped create over 600 new jobs and leverage over \$300 million in private investment. These new industries located in our region in 2003 and 2007 and immediately helped to improve unemployment rates and incomes in an area that has long suffered from economic troubles. These industries continue to be strong employers despite these economic times that we are in.

EDA's investments in our region are coordinated by the Northwest Alabama Council of Local Governments, which was recognized by the EDA as an economic development district in 2001. EDA's

support allows the council to provide vital resources to regional collaboration through a five-county region in Northwest Alabama. And EDA's planning partnership investment is used to provide ongoing planning and project development, technical assistance, and grant resources to area governments and partners throughout a five-county region.

Despite working with EDA through the years there are probably two areas that EDA activities could be strengthened. First, EDA sometimes takes too long to review the application and these delays can sometimes strain relationships with industries and other local partners. And second, EDA is charged with creating higher skill, higher wage jobs, and oftentimes, for more rural areas, the quality of job opportunities is relative to the existing conditions. Certain industries in our region, such as tourism, may not have nationally competitive wages but are strong local industries, and they are part of a regional strategic context. Improving EDA's ability to speed up the application process and understand the context of its investments will make EDA an even stronger partner.

Finally, I would like to point out the EDA's significance going forward. We are currently in the middle of one of the deepest economic crises in memory. But for over two decades our region steadily improved its lagging economic performance. And we had double digit unemployment because of the loss of manufacturing, and textile jobs in the late nineties, or mid-nineties. And through much of 2005, 2006, and 2007 our region had unemployment rates as low as 3.5 to 4 percent. For a region with historically bad performance compared to much of the nation, this was an amazing task to accomplish. It was done as a result of strategic planning and investment in economic development, with help from EDA.

Today, however, in each of the five counties our EDD serves, unemployment rates have more than doubled in just over the past two years, in some cases 12 percent, as much as 17 percent. Rates are as high as they have been in decades. Because of our positive experiences with EDA we think that the administration can be a model for economic recovery. EDA's investments and strategic plans create a solid base of support for working toward regional solutions. Its support for regional councils and economic development districts enhances local capacity to pursue development in a way that no other agency can replace.

EDA's commitment of investing in a variety of solutions has tremendous value. We need solutions to be regionally developed and supported so they can take a variety of forms, and EDA has a commitment to regions for strategic planning, ongoing collaborative action, and a variety of implementation opportunities. In addition, EDA has a proven track record for promoting economic development success and taken together these qualities make the EDA a vital partner for the nation's economic recovery.

And I thank you again, Mr. Chairman, and members of the Subcommittee for this opportunity to be here today. And I welcome any questions.

[The written statement of Mayor David Bradford, of the City of Muscle Shoals, Alabama, follows:]

WRITTEN STATEMENT FOR THE RECORD

DAVID H. BRADFORD, MAYOR
CITY OF MUSCLE SHOALS, ALABAMA
AND
IMMEDIATE PAST CHAIRMAN OF
THE BOARD OF DIRECTORS OF THE
NORTHWEST ALABAMA COUNCIL OF LOCAL GOVERNMENTS

BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES

WASHINGTON, D.C.
FEBRUARY 3, 2010

Thank you Chairman Mollohan, Ranking Member Wolf and members of the subcommittee for the opportunity to testify on the vitally important role the U.S. Department of Commerce's Economic Development Administration (EDA) plays in the pursuit of sustainable regional economic development.

My name is David H. Bradford. I am Mayor of the City of Muscle Shoals, Alabama and the immediate past chairman of the Board of Directors of the Northwest Alabama Council of Local Governments (NACOLG). This organization serves as the region's Economic Development District (EDD) as designated by the Economic Development Administration (EDA).

In my testimony, I would like to focus on three main themes regarding EDA's participation in regional development.

First, I would like to recognize EDA's successful approach to regional planning and infrastructure investment. Without EDA's participation in strategic planning, project development and project implementation, economic development efforts would suffer greatly in regions throughout the nation.

EDA's regional planning and coordination and infrastructure investment process have played a central role in the establishment of two international companies—SCA Tissue of Sweden and North American Lighting/Koito of Japan—in a region suffering from significant challenges and persistent economic dislocation.

Second, I would like to recommend how EDA investments in regional collaboration might be strengthened in order to take a celebrated and successful agency to new heights.

Finally, I would like to describe recent experiences in our region that mirror those of many communities throughout the nation and illustrate the need for continued support of EDA's investment in economically distressed regions across the country.

Northwest Alabama is a diverse, largely rural region made up of five counties that have historically been tied to agriculture, textiles, and manufacturing. In the north, adjacent to the Tennessee River, are Colbert and Lauderdale Counties and the Florence-Muscle Shoals Metropolitan Statistical Area (MSA), made up of several of the largest communities in the region.

Textiles and metals processing and manufacturing dominated the local economy throughout the middle-half of the twentieth century. These industries began deteriorating in the 1980s and continued to throughout the 1990s and 2000s. Throughout this period local economic indicators were consistently poorer than the rest nations, qualifying the region for EDA's assistance.

Through a commitment to regional collaboration from area local governments, economic development agencies and the EDD, and with support from EDA, these trends were halted and eventually reversed. In recent years, the region posted economic performance above the national average with increases in area per capita income and monthly unemployment rates consistently at or near "full employment."

The Economic Development Administration's support of strategic planning and implementation in northwest Alabama is emblematic of the role that EDA plays in regions throughout the United States.

EDA's approach to economic development provides opportunities for planning, for supporting and promoting regional cooperation, and for investing in economic growth through the implementation of strategic plans. Throughout its history, EDA's strategic planning investments have laid the groundwork for economic development activities in regions throughout the nation by lending direction to the ongoing process of economic development and being the basis of EDA's subsequent funding decisions.

A key element of this approach has been the latitude given to local leadership to form strategies compatible with the regional development context. Through the Comprehensive Economic Development Strategy (CEDS) process and EDA's planning investments, EDA has greatly enhanced the capacity of local EDDs to take a leading role in the ongoing and collaborative planning process, and the implementation of strategic objectives necessary for growth and development.

Regional experiences in northwest Alabama illustrate this point:

- In 1998, in response to job losses primarily centered in textile industries, local leaders solicited EDA's assistance to develop an analysis of local industry targets associated with the 1,900-acre Barton Riverfront Industrial Park in Colbert County. The results presented recommendations for economic development in seven recruitment areas including the paper products cluster. EDA also provided an investment of \$1.5 million toward the expansion of water treatment and storage facilities for the park. Subsequent collaboration among the Shoals Economic Development Authority (SEDA), local governments, and NACOLG led to SCA Tissue, a Swedish company locating a \$240 million U.S. facility. As of today, EDA's initial investments in planning and infrastructure have been integral to SCA Tissue's private investment, creating approximately 470 jobs in northwest Alabama.

- In 2003, again in response to strong demand for jobs creation in the region, the City of Muscle Shoals proceeded to develop the Wilson Dam Road Corridor Study, an EDA-supported transportation, land-use, and economic development plan for a newly developing highway corridor. The Study demonstrated the need for increasing the amount of commercial air accessible industrial property available for economic development in Colbert County. Subsequently, the City of Muscle Shoals, following study recommendations, invested over \$6 million to acquire and prepare property adjacent to the Muscle Shoals Regional Airport. The 475 acre Muscle Shoals Research Air Park was created. As with previous economic development projects, a collaboration brought the Japanese firm North American Lighting/Koito to the table. Eventually, with support that included \$1.33 million for infrastructure, North American Lighting/Koito located on a 35-acre tract in the Muscle Shoals Research Airpark.

These two economic development projects were significant in the region's recovery in the early part of the last decade. EDA played a critical role in the planning and execution of the strategies. Importantly, EDA's role as a facilitator of economic recovery was significantly strengthened in 2001 with the establishment of NACOLG as the EDD for the region, enhancing the region's capacity to pursue continuous planning and project development.

Despite EDA's robust participation in our region's economic development, EDA effectiveness in our region can be enhanced by addressing two key issues:

- First, EDA is often criticized for the length of time necessary to review applications and reach conclusions. These delays cause problems working with industries that expect quick answers. A delay of several months for approval of applications can frustrate economic development activities.

- Second, EDA has been criticized for decisions made without reference to the regional context. For example, despite supporting multiple strategic plans related to heritage tourism and the entertainment industry in northwest Alabama, EDA recently rejected an application by the Town of Killen that would have created 110 new jobs and a \$115 million private investment in the tourism industry. While tourism and travel have been integral industries with widespread community support and have been successful *within the regional economic development context*, they are deemed unacceptable as a matter of course by EDA. Improving EDA's capacity to understand and support the regional strategic plans as they relate to each region would be an important improvement.

EDA is a critical partner and has demonstrated tremendous impact and effectiveness in our distressed communities. But as with any partnership, opportunities exist for strengthening commitment and cooperative resolve. EDA as it exists is a valuable partner; an EDA focused on ways to find solutions and improve upon itself will be an even greater partner.

EDA is an agency with a proven track record of supporting the strategic planning, collaboration and project development and implementation necessary for economic recovery. In mid-2007, optimism ran high throughout the Northwest Alabama region as volunteers, private-sector participants and elected officials worked to craft a CEDS. At the time,

economic conditions in the region were better than they had been in decades, in part due to EDA and the efforts of NACOLG, local governments and economic development agencies. For example, in the Florence-Muscle Shoals MSA, unemployment rates were commonly less than 4% throughout 2007. A little over two years later, in the midst of the greatest economic crisis most have experienced, unemployment had reached double digit rates.

Recent changes in national and international economic conditions have undone decades of work in many regions throughout the nation. Fortunately, we have a model for recovery that has been proven in numerous locations nationwide including northwest Alabama. The model for developing and implementing strategic actions leading to recovery and fostering innovation exists in EDA. By supporting strategic planning, EDA galvanizes commitments toward goals and objectives that lead to better opportunities. By investing in the continuous process of economic development through planning partnership grants, EDA recognizes the dynamic, ever-evolving nature of economic development and provides a support structure for technical assistance, planning, and grant resources that leverage additional opportunities and sustain collaborative efforts. Finally, by providing access to resources to seed and match grant programs, EDA facilitates the implementation of development strategies through leveraged private investment in distressed regions.

EDA promotes a process that aspires to be responsive to regional context, provides support to projects that are regionally determined, regionally driven and vital to regional success. To that end, EDA should maintain its ability and flexibility to support projects that meet the individualized needs of regions.

From Northwest Alabama's experiences, the central tenet of each EDA investment is that it met a regionally defined need. Communities differ in their needs and objectives. Some struggle for basic infrastructure, others may strive for venture capital and still others have a different need.

Flexibility in the menu of opportunities offered by EDA has been the agency's hallmark. This has meant that communities could pursue the next step in economic development, whatever that next step may be. Continuing to provide regional strategic planning, to support regional collaboration, and to assist implementation of a range of solutions will insure EDA's mission is a success and that regions are innovative, competitive, and successful in the worldwide economy.

In closing, Mr. Chairman, thank you again for the opportunity to speak to the role that EDA has played in our region and to the opportunities that EDA provides to regions around our nation. By forging ahead together with the lessons of our shared experiences, EDA and all of its partners can prevail over our current distress.

I welcome the opportunity to answer any questions.

Mr. MOLLOHAN. Thank you, Mayor Bradford. Mr. Wemple.

OPENING STATEMENT BY MR. WEMPLE

Mr. WEMPLE. Good afternoon. Thank you, Mr. Chairman, Subcommittee members. Thank you for allowing me to testify before you today. My name is Chuck Wemple. I am the Economic Development Program Manager for the Houston-Galveston Area Council. We are a thirteen-county region, including the nation's fourth largest city. So we have about 5.75 million people in the region. We also have some very small, very rural, sparsely populated counties as well. So it is kind of a challenge for us sometimes to line up those different needs.

I want to get across three key points today with regards to our involvement with EDA. The first being that EDA's response to our region following Hurricane Ike was exceptional, and continues to play a key role in our region's recovery from that natural disaster. Secondly, I want to talk about the effectiveness of the district funding and why we think that is a solid, good investment of federal funding. And then third I want to talk about the importance of not reducing the types of funding that are currently available to our local governments, and also offer up some areas for possible improvement as well.

For those of you who may not be familiar, Hurricane Ike hit our region in September of 2008. And we took a direct hit from Hurricane Ike. The storm came out over Galveston Island, bringing with it 100-mile per hour winds, extensive rain and flooding, and a twenty foot tall storm surge which laid waste to many of our coastal communities. We had widespread devastation. We had neighborhoods turned into debris fields. We have 200,000 homes either damaged or totally destroyed in our region. Thousands of households displaced, thousands of workers displaced, and thousands of businesses impacted either physically or at least through extensive long term power interruptions.

EDA quickly responded to our region following the disaster. While many of our communities were digging out from under debris and trying to get their communities back to a functioning form of government, the local office came down and met with us, and through our development district we identified twenty-eight projects worth nearly half a billion dollars that could be implemented with EDA disaster recovery funds. We narrowed that list down, and ended up funding, through the EDA office, nine projects totaling about \$42 million. And these projects were prioritized based upon the ability to get them implemented quickly, and the relief that they would bring to our communities.

There are a wide variety of projects. All of them are infrastructure based projects. One of our small coastal cities is looking to restore their waterfront area, running sewer and water lines and elevating a roadway. The Port of Galveston on Galveston Island is improving bulkheads and expanding their lay down areas. And some of our rural counties are running utilities along their interstate frontage roads with the attempt to move more of their economic development a little further inland so they will be more resilient if and when the next storm hits.

One of the most exciting projects that we have through the EDA supplemental funds after Hurricane Ike is our revolving loan fund that was granted to our economic development district, which I manage. It is a \$10 million revolving loan fund. The first cycle of funds, that first \$10 million, is going to focus exclusively on businesses that were impacted by Hurricane Ike. We have that program launched. We are currently reviewing about eighteen applications totaling about \$2.5 million. And we expect that that first cycle of funding will create about 500 jobs for our region. It is a large variety of businesses that we are looking at, restaurants, auto repair shops, and medical facilities.

All of these projects are going to bring hope to our devastated communities. It may not sound like much to some folks, but if you are a rural coastal community and you hear that Pat's Tire is coming back in business, and if you got a flat you can call Pat again, that is their slogan, people start to shine a little more. And it kind of helps with that recovery effort. A lot of the businesses that were hit by Hurricane Ike were doing well before the storm. But once they were hit by the disaster, and right on the heels of the Hurricane Ike disaster we had a lot of economic downturn issues nationwide. All of a sudden those folks do not have access to traditional forms of credit. So it becomes very imperative that a revolving loan fund like this be developed and put into play.

I want to emphasize a couple of things about the RLF. It is not designed to compete with private banks. If anything we want to complement what private banks can offer to our applicants. Much like the SBA program, if there is a loan that the bank may not do because they may not be comfortable with the type of business, or the condition of that business after Ike, we are able to come in and provide a loan for part of that funding and the bank can move forward. Or in some cases, traditional funding is not available at all and we are able to come in and help those businesses get back on their feet and recover.

I want to talk a moment about district funding. Personally, I think it is a great investment. Relatively modest amounts, we get about \$50,000 a year to run our economic development district. It provides us to do the regional planning that the previous folks testified about. We develop our comprehensive economic development strategy, able to get those rural folks from the sparsely populated counties, and our urban developers together, and talk about priorities and linkages across the region. It also allows our local governments to go after the EDA grants. And it also allows us to respond to major events, like Hurricane Ike. If our EDD would not have been in place it would have been much more difficult for EDA to move quickly, identify those projects, and get those funds allocated, and help our communities. We view it as an extension of the EDA staff for the region as well.

We are encouraged to see an increase in the level of funding for the districts. It has also allowed us to get people in the room and start to explore new opportunities for our region, so some of our communities can transform or diversify their economies. We have folks that are now looking at renewable energy manufacturing component facilities. We are looking at embracing and capitalizing on the local food movement, raising more food locally and finding ways

to get some of those products to market. So we are very, very excited about that and think those are a good investment that return a lot of dividends.

I want to talk real briefly about the importance of the diversity and flexibility in EDA funding. In my opinion, the current mix works very well. When you have a suite of products that communities can draw from, whether it is public works, or adjustment, or the other products that are offered by EDA, honestly I think that reducing the diversity of their funding portfolio, of moving a lot of money out of public works, is a step in the wrong direction, just to be very frank. So I want to really emphasize the importance of diversity and flexibility. If anything, you might want to consider expanding some of the projects that might be eligible. We heard about tourism a while ago. Infrastructure for ecotourism could be considered. Not every community has a smokestack. Sometimes that is your best bet, to protect your natural resources and have a good quality of life for your citizens and good jobs.

A few recommendations. One thing that I think is important, and it kind of ties into the flexibility I just mentioned, is the final disposition of revolving loan funds. For those of you that may not be familiar with the EDA revolving loan fund, that money stays federal forever as long as you are able to keep revolving those funds, and letting those monies out. And I think there are going to be times, even with our Ike Recovery Fund, when those funds may not be as easy to move as they are going to be after a natural disaster, and when the credit market is tightened. And I think that when you get to a point where maybe you cannot be moving those funds, it would be nice if those funds could be turned into another EDA eligible project. Perhaps the RLF money could then go towards a public works grant, or a planning grant, or some other project. I think that that would probably be a good investment of those funds in the long term rather than having a revolving loan fund that might carry on for many years without being very productive.

I also want to talk about something that was mentioned earlier. Folks talked about hiring in the regional offices. I think it's very important that EDA look at strategic hiring. I think that as with many corporations and HTs that are out there, there's a degrading of the workforce, and I think that it's important that hiring be done to start to fill those slots that are going to be retired and vacated, and I think moving forward with that is a very important thing. Our regional office has actually done that recently and we applaud those efforts.

In closing, I just thank you for your efforts to maintain and hopefully increase funding for EDA, and Mr. Chairman, that completes my testimony, and I would welcome any questions.

[The written statement of Mr. Chuck Wemple, the Economic Development Program Manager for the Houston-Galveston Area Council, follows:]

WRITTEN TESTIMONY FOR THE RECORD

CHUCK WEMPLE,
ECONOMIC DEVELOPMENT PROGRAM MANAGER
OF THE
HOUSTON-GALVESTON AREA COUNCIL
AND
MANAGER OF THE
GULF COAST ECONOMIC DEVELOPMENT DISTRICT

BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES

WASHINGTON, DC

FEBRUARY 3, 2010

Testimony of Chuck Wemple, Economic Development Program Manager of the Houston-Galveston Area Council
Before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies
U.S. Economic Development Administration
February 3, 2010

Good afternoon Chairman Mollohan, Ranking Member Wolf and Subcommittee members.

Thank you for the opportunity to appear before you today and provide testimony regarding the U.S. Department of Commerce's Economic Development Administration (EDA). My name is Chuck Wemple and I am the Economic Development Program Manager for the Houston-Galveston Area Council. Established in 1966, the Houston-Galveston Area Council is the regional planning entity for the 13 county region surrounding the City of Houston and Harris County. Our region is home to over 5.7 million people and includes one of the world's largest petrochemical complexes, the Texas Medical Center, the nation's fourth largest city, one of the nation's most productive estuaries and long stretches of Gulf of Mexico shoreline. Our membership of over 100 local governments includes major urban cities, small cities and towns, and a diverse mix of urban and rural counties. The Houston-Galveston Area Council's Economic Development Program oversees a variety of community and economic development activities including the EDA-funded Gulf Coast Economic Development District (District), the Small Business Administration Local Development Corporation, and a growing portfolio of small business revolving loan funds and micro-loan programs. These combined efforts totaled over \$80 million in 2009. The Economic Development Program also provided recommendations to the State of Texas regarding the distribution of Housing and Urban Development Community Development Block Grant funding associated with Hurricanes Rita and Ike.

Mr. Chairman, I would like to convey three key points to you today. First, that EDA's performance following Hurricane Ike was exceptional and continues to play a critical role in bringing recovery assistance to the H-GAC region. Second, that EDA's funding of Economic

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Development Districts is highly effective. And third, the importance of not reducing the types of funding available through EDA.

Responding to Hurricane Ike

Hurricane Ike made landfall on Galveston Island on September 13, 2008, bringing 100 mile per hour winds, flooding, and a 20 foot storm surge to our region. Recent damage estimates top \$15 billion statewide. Many of our communities were devastated by Ike – and the short-term and long-term economic development needs are enormous. Over 200,000 homes were damaged or destroyed in our region, entire neighborhoods turned into piles of debris, roads washed away, and drinking water, waste water and electrical utilities were rendered inoperable. Thousands of businesses suffered physical damage, economic distress, displaced workforce, reduced customer base and extended periods of business interruption.

While many of our communities were dealing with the immediate needs of providing emergency services, removing debris, and grappling with the damage and destruction, the EDA Austin Regional Office tasked our District with developing a summary of projects that could be quickly implemented and assist in economic recovery. Our initial efforts identified 28 infrastructure projects totaling \$490 million. After conducting site visits with EDA staff, the list was narrowed down to 12 project applications. This upfront planning and coordination enabled the District to line up viable applications in anticipation of the regional office receiving supplemental funding to assist with the natural disaster. EDA quickly allocated \$42 million in funding to 9 meaningful, important projects that address local needs and are aligned with regional priorities. Examples include: rebuilding the water front district in the City of Seabrook;

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reconstructing a biotech incubator on Galveston Island; repairing damaged bulkheads and lay down yards at the Port of Galveston; and infrastructure projects to support new economic development in the town center of Nassau Bay, interstate frontage roads of rural Chambers County, and an industrial business park in League City.

One of the most innovative and exciting projects in our region is the \$10 million Revolving Loan Funded (RLF) awarded to the District. Thousands of businesses were physically impacted by storm surge and hurricane force winds, and thousands more suffered loss of perishable inventories and sales while millions of the region's citizens were without electricity for weeks following the hurricane. These impacts have dealt a serious blow to many business owners and their workforce. Conditions are exacerbated by the erosion of savings, loss of property and loss of income associated with the storm. All of this, combined with the national economic downturn and tightening of credit in the banking sector has produced a bleak outlook for businesses seeking to rebuild after Ike. Although eager to rebuild, many business owners are unable to access traditional lines of credit or conventional financing.

The RLF will play a major role in rejuvenating local economies and providing opportunities for business recovery, retention and expansion by providing the access to capital sorely needed by the small businesses affected by Ike. We anticipate assisting over 100 businesses within the first three years of the program, and are currently reviewing 18 loan applications totaling \$2.5 million. Preliminary estimates indicate the RLF could create or retain over 500 jobs during the first cycle of lending. The reopening of restaurants, auto repair shops, and medical offices bring hope to devastated communities and will kick start the economic recovery process.

District Funding

As seen by the example from Hurricane Ike, even modest amounts of planning funding can allow a District to quickly respond to unanticipated changes that affect the regional economy; like natural disasters, plant closings, and large-scale economic downturns. Funding for the Districts also provides the opportunity for regions to rapidly pursue new and exciting opportunities that can transform and diversify local economies. District funding has allowed our communities to capitalize on the local food movement, identify opportunities for renewable-energy component manufacturing, and conduct economic impact analyses to determine the best mix of businesses they should pursue to improve the quality of life for their citizens.

Planning funding from EDA also allows the District to assist our communities in developing and implementing economic development projects that provide a high level of value by leveraging private resources, State and local dollars. Providing this service is especially important for our rural communities and small cities who have limited resources and staff to address economic development projects.

The Importance of Diversity and Flexibility in EDA Funding Programs

The current mix of public works, planning, technical assistance and other eligible activities provides a robust suite of opportunities for local governments to pursue funding of projects that address local priorities and needs. Reducing the diversity of the current funding options is a step in the wrong direction. Rather than reduce access to opportunities, we strongly encourage the subcommittee and EDA to broaden the opportunities for funding by expanding the current funding portfolio to include special projects in unique economic settings. Examples of

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special projects include rapid redevelopment of manufacturing facilities following plant closure, eco-tourism infrastructure, and job training in areas that experience sudden increase in unemployment. This flexibility and diversity is especially important in the tough economic times currently facing our Nation and many of our cities and rural areas. Often times the single biggest challenge for economic development is a lack of adequate infrastructure. As a result, public works projects play a unique and critical role for many of our communities. We support continued public works funding.

Increasing the flexibility in the final disposition of RLF grants would provide a win-win situation for the Districts and EDA if an RLF loses viability over time. Revolving Loan Funds provide unique opportunities and challenges. While these programs offer sorely needed capital to small businesses unable to secure conventional financing, long term viability of such programs can be weakened when access to conventional financing increases and the national economy recovers. Once revolving loan funds have completed their goal of sparking economic development and increasing the economic health of a community or region, consideration should be given to allow the funds to remain within the District and to be used for other eligible projects – such as business incubators, science and technology centers, or public works projects.

Mr. Chairman, in closing I would like to acknowledge the leadership and staff of the EDA Austin Regional Office. Their leadership following Hurricane Ike resulted in one of the smoothest deployments of federal funding that I have witnessed. We thank you for your efforts to increase funding for EDA operations and programs and express our strong support for maintaining the increased funding levels as part of the FY2011 appropriations bill. We strongly encourage EDA to also invest in additional staff and identify ways to attract the best and the

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brightest to join the EDA team. This approach would be highly effective in reducing the loss of institutional knowledge and experience while increasing the sustainability of the agency. We look forward to continuing our partnership with EDA and providing much needed economic development projects to our communities.

Mr. Chairman, I would like to thank you for holding this hearing and for allowing me to testify before you today. I welcome any questions.

Mr. MOLLOHAN. Thank you, Mr. Wemple. Dr. Wyatt.

OPENING STATEMENT BY DR. WYATT

Mr. WYATT. Mr. Chairman, and Committee Members, I'm Les Wyatt. I'm President of the Arkansas State University System, in Jonesboro, Arkansas. I wanted to tell you how EDA grants to University Centers have help build capacity at our university—

Mr. MOLLOHAN. Dr. Wyatt? I apologize for interrupting you. I just want to note that we have been joined by your distinguished Member of Congress from Arkansas, Marion Berry. Marion, welcome to the hearing. We appreciate your coming by today. If you want to take a seat at the table, you're welcome to do that. Maybe you can see better.

Mr. BERRY. Thank you.

Mr. MOLLOHAN. Yes, sir. You're welcome.

Mr. BERRY. I'm hear to show my support for Arkansas State University and Dr. Wyatt, and the EDA which has been a great agency for our part of the world.

Mr. MOLLOHAN. Well, great. Thank you for coming by. We appreciate your attendance here today.

Mr. WYATT. That is essentially my speech.

Mr. MOLLOHAN. Well, that's why we value him so much up here is because when he says something, it's short, sweet, but has a lot of meaning associated with it. Dr. Wyatt, please continue. I apologize for interrupting you.

Dr. WYATT. That's all right. I want to tell you how our capacity has been increased with these grants; what has been an outgrowth of economic development in our region; and finally I want to describe a tangible outcome of that activity that will affect you and your children.

I live in the 1st Congressional District which is represented by Congressman Marion Berry. He wrote to all of us in our District. This District is the Mississippi river delta of Arkansas, and has some of the richest land and the poorest people in America. Our regional economies have traditionally been based upon agriculture and manufacturing, two sectors that have declined in profitability. Over the last century many jobs have been lost in these areas. Our region's products have had value added and profits taken outside our region, and most recently by offshore interest. As a result, our communities are dwindling. Our schools are inadequate, and our economic future is challenging.

Our university was created 100 years ago to serve the students of this region. We do so with a wide variety of academic programs which have produced over 60,000 alumni. A large majority of these graduates live in the 1st District where they form the basis of hope for economic growth and sustainability for our future. We're at the eastern edge of an EDA region overseen by Mr. Pedro Garza and his staff in Austin, Texas. Mr. Garza has long been concerned for the economic conditions of eastern Arkansas, and he's provided support and expertise, assistance and encouragement to many agencies in our state, including our university. Mr. Garza and his staff are problem solvers, and they are entrepreneurial, in terms of their outlook for our future. They've been patrons when we've badly needed patronage, and their investments are paying off, and in a

moment I will describe a perfect example of that return on investment.

EDA has provided support for economic development centers which are located on several university campuses in our state, and throughout our EDA region. The Delta Center for Economic Development on our campus provides assistance and information to small and large businesses, government agencies, communities and individuals. The Delta Center has also received support from EDA to construct a facility where assistance is given, where data can be generated and kept, and where staff is based for outreach across our region. There is no comparable economic engine in our region, and the Delta Center would not exist if it were not for EDA support. We and thousands of citizens in east Arkansas are grateful for the EDA financial support for the Delta Center for Economic Development at Arkansas State University.

The Delta Center also works closely with the state's economic development agency, local Chambers of Commerce, and city officials across the region to recruit new businesses and industries to our area. This process is frequently supported by a productive relationship between Mr. Berry, Mr. Garza, and our state's governor, Mike Beebe, and a host of other collaborators. Our campus resource, the Delta Center for Economic Development, has been a player in most of these projects across the region, thanks to EDA support for staff, programs, and facilities on our campus. This campus-based university economic development center is a model you can be proud of.

On a parallel track, our campus also receives support from the state to create a research initiative called the Arkansas Biosciences Institute. The purpose of this initiative is to study plant materials which may be produced or modified to improve the lives of Arkansans, often at the intersection of medicine and agriculture. We're particularly interested in health benefits from plants which may be consumed by domestic livestock or by humans, for both chronic and acute diseases. The Biosciences Institute is five years old. It has a staff of research scientists from around the world, and it has successful competitive grant awards from a number of federal, health related agencies.

The Biosciences Institute has also received significant support from EDA to create an incubator facility to move research from benches in the laboratory toward commercialization of products and processes. Several small companies have been created, based on patents received through these research and development activities, thanks again to EDA.

So I've described support from EDA which sustains the Delta Center for Economic Development, which is a business organization, and EDA support which created an incubator, a research organization. The two came together in an important economic development project which will affect you and your constituents and your families.

Our state recruited a New York company, called Nice-Pak. Nice-Pak has produced billions of these little packets. They're disposable wipe products and they're used for sanitary, cosmetic, medical, and hygienic applications. You've used these products. Every citizen has used these products at restaurants, medical facilities, beauty shops, retail stores, daycare centers, and nurseries, all across the country.

Nice-Pak is an organization that was recruited through EDA support and sponsorship. We worked with their company officials to relocate their operation and manufacturing activity to our city. Using the facility and staff supported by Mr. Garza's grants, the project in Jonesboro is up and running. The CPA of Nice-Pak, Mr. Robert Julius, was rightly concerned about the environmental affect of these products, because a billion of these little foil packets, and the wipes that are inside these things, will go into our landfills.

Mr. Julius and one of their customers in Arkansas, the Walmart Corporation, decided to seek more environmentally-friendly packaging and application materials. So they turned to our campus for assistance, and the value of EDA support became very quickly evident. The researchers in our Biosciences Institute got together with the production staff of the company that makes these little things and they're putting together a concept to use cellulose-based materials for the wrapper, and to integrate plant materials into the wipes themselves. These products, when introduced back into the landfill, will be biodegradable, and will leave this planet better for our children because of that activity. The wipes themselves will be based on plant materials which are found in abundance all around us, and this will add an additional layer to our economic capability.

The outcome of this effort, which integrates a number of EDA-sponsored projects will touch the lives of millions of users around the country and across the world, one wipe a time, billions of times. So this has become a win-win, win-win-win outcome. The prime sponsor of all of this activity has been the EDA office, Mr. Garza, and his staff, and because of your appropriations. We want to thank you for directing the people's money for this important activity, for making our university center possible, and for the great success that you've engendered. Thank you, Mr. Chairman.

[The written statement of Dr. Les Wyatt, President of the Arkansas State University System, Jonesboro, Arkansas, follows:]

Dr. Leslie Wyatt
President
Arkansas State University System

I am Les Wyatt, president of the Arkansas State University System in Jonesboro, Arkansas. I want to tell you how EDA grants have built capacity at our university, how that new capability has resulted in economic development in our region, and finally I will describe a tangible outcome of this activity which will affect the lives of you and your children.

I live in the First Congressional District of Arkansas, represented by Congressman Marion Berry, a member of the House Appropriations Committee. This district is in the Mississippi River Delta of Arkansas and has some of the richest land and poorest people in America. Our regional economies have traditionally been based upon agriculture and manufacturing, two economic sectors which have declined in profitability and have lost many jobs over the last century. Our region's products have had value added and profits taken outside our region, and most recently by off-shore interests. As the result, our communities are dwindling, our schools are inadequate, our future is challenging, and our prayers are constant.

Arkansas State University was created 100 years ago to serve the students of this region. We do so with a wide variety of academic programs which have produced 60,000 alumni. A large majority of them live in the First District where they form the basis for hope for economic growth and sustainability.

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Dr. Leslie Wyatt
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The CEO of Nice-Pak, Mr. Robert Julius, worked with the state Economic Development Agency to identify a production facility in our city where he could expand his production lines. During these negotiations, our Delta Center worked closely with company officials to address their questions and provide decision information, using the facility and staff supported by Mr. Garza's grants. Eventually, Nice-Pak located their operation in Jonesboro and is now up and running.

Mr. Julius was rightly concerned about the environmental effect of his products, because a billion foil packets and used wipes will enter our landfills. Mr. Julius and one of their customers, the Wal-Mart Corporation, decided to seek a more environmentally friendly packaging and application material. They turned to our campus for assistance and the value of EDA support became quickly evident.

It happens that researchers in our Biosciences Institute have investigated properties of plant cellulose, primarily for ethanol considerations, but their expertise can also be applied to materials science, as well. Cellulose is abundant in plant materials in our region due to agriculture and fertile soil, but new commercial applications for cellulosic materials in the plants all around us, if developed, could mean new financial gains for our region. So in the incubator facility supported by EDA, these scientists met with the Nice-Pak team to begin to understand how cellulosic materials can be used, instead of foil, to contain the wipes, and how the wipes themselves may be based on plant materials to deliver the product to consumers, one wipe at a time, and many times. The world-wide distribution potential through Wal-Mart and other product vendors is huge.

Dr. Leslie Wyatt
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The outcome of this effort will literally touch millions of users throughout this nation. The aftereffect will be biodegradable materials which can be safely returned to the earth, which will help us preserve the planet for our children. So this is a win-win-win-win-win proposition.

A prime sponsor for all of this has been our regional EDA office, Mr. Garza, and his staff, and because of your appropriations. If I could offer a request, it would be that you continue support for our regional offices of EDA and, through them, the university centers and grants across the United States. The EDA office in our region has an excellent staff, but we need more of them. Finally, a little money from EDA has produced many tangible benefits for many people in a region where even modest improvements are valuable. I thank you for directing the peoples' money for this work, which will benefit the citizens of our country, and bring new prosperity to our region.

RESUME SUMMARY**LESLIE WYATT****1995 - 2010 - President, Arkansas State University System**

- Reports directly to Board of Trustees appointed by Governor.
- Chief Executive Officer of a system of higher education institutions, including a comprehensive residential campus, community college campuses, technical college campuses, and economic development and research institutes.
- Responsibilities include: selection and direction of chancellors; executive staff selection and direction for university foundation, operations, internal audit, attorney, and governmental relations; recommendation and implementation of board-approved university policies; coordination of system and campus planning activities; coordination of financing, construction, maintenance and operation of university facilities; recommendation and implementation of annual and biennial operating budgets; recommendation and implementation of policies regarding academic and support program development, personnel appointments, and employment conditions; development of legislative, governmental and external support efforts; internal and external constituent relations; primary public representative for the university; leadership for the university and higher education in the state, region, and nationally.
- Affiliations include: Professional development and governmental affairs committees – American Association of State Colleges and Universities; Associated Council for Excellence; Arkansas Museum Association; American Council for Education; corporate and public boards and commissions.

1995 - 2003 – Chief Executive Officer, Jonesboro Campus, Arkansas State University

- Reported directly to Board of Trustees appointed by Governor.
- Responsibilities included: leadership for the residential campus offering associate-doctoral degrees; student-centered programs in residential and distance teaching/learning; campus, community, regional and statewide services; and applied and sponsored research activities; selection and direction of campus officers, vice presidents, and athletic director; development and oversight of campus mission, accreditations, and strategic planning processes; development of campus master plans; recommendation and implementation of annual budgets, fiscal management systems, financing and bonding programs, and fiscal reporting; recommendation and implementation of academic and support program policies, personnel appointment, promotion, tenure, retention, and employment conditions; oversight of shared governance system; development and implementation of campus fundraising programs and capital campaign planning; primary public representative for the campus.
- Academic appointment as tenured Professor of Higher Education and Art History.

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Resume – Leslie Wyatt

1988 - 1995 - Vice Chancellor for Executive Affairs, The University of Mississippi

- Reported to Chancellor R. Gerald Turner, Ph.D.
- Responsibilities included: day-to-day administration of chancellor's office; coordination of vice chancellors for academic affairs, finance and administration, student affairs, university development, university medical campus (Jackson), and directors reporting to chancellor; intercollegiate athletic program oversight; planning oversight for 17 facility construction or renovation projects, campus master plan, and landscape master plan; university-wide committees; executive staff recruitment branch campus development (Southaven and Tupelo); organization of shared governance system; legislative liaison.
- Academic appointment as Professor of Art History.

1983 - 1988 – Vice Chancellor for University Advancement, The University of Arkansas at Little Rock

- Reported to Chancellor James H. Young, Ph.D.
- Responsibilities included: development and implementation of external relations units; chief university development officer; legislative liaison; external constituent relations; intercollegiate athletic program oversight; university foundation director.
- Academic appointment as Associate Professor of Art History.

1977 - 1983 - Academic Dean, College of Fine Arts, The University of Arkansas at Little Rock

- Reported to Provost James Fribourgh, Ph.D.
- Responsibilities included: personnel and program development in five academic departments; community school administration; facilities construction and renovation; coordination with local and statewide governmental and cultural organizations.
- Academic appointment as Associate Professor of Art History.

1975 - 1977 - Associate Dean, College of Fine Arts, The University of Texas at Austin

- Reported to Dean Peter Garvie.
- Responsibilities included: capital facility planning and development of Harry Ransom Center, art museums, classroom and laboratory spaces, and the UT performing arts center; graduate adviser; honors program director; student recruitment; and museum exhibition curator.
- Academic appointment as Assistant Professor of Art History and Adjunct Professor, Lyndon B. Johnson School for Public Affairs.

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Resume – Leslie Wyatt

1971 - 1975 - Assistant Dean, College of Fine Arts, The University of Texas at Austin

- Reported to Dean E. W. Doty, Ph.D.
- Responsibilities included: coordination of college student office; student recruitment; and museum exhibition curator.
- Academic appointment as Instructor of Art History.

EDUCATION: Ph.D. The University of Texas at Austin, 1974
M.F.A. The University of Texas at Austin, 1971
B.F.A. The University of Texas at Austin, 1969
B. A. Abilene Christian University, 1968

BIRTHDATE: August 24, 1945

FAMILY: Married to Jeanne Cogburn Wyatt
Three grown children

CONTACT: Home: 1503 East Nettleton, Jonesboro, Arkansas 72401
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E-mail: president@asusystem.edu

Information regarding Arkansas State University may be found at the
website: www.asusystem.edu.

ECONOMIC RECOVERY IN NW ALABAMA

Mr. MOLLOHAN. Thank you for your testimony, Mr. Wyatt. Mr. Bradford, in your oral presentation, you referenced a model for economic recovery.

Mr. BRADFORD. Yes, sir.

Mr. MOLLOHAN. Would you elaborate on that a bit, please?

Mr. BRADFORD. I came into office in 2000. We had double digit unemployment at that time. We'd been suffering a great deal of unemployment since the mid-1990s, and local leaders and I, by local leaders I mean mayors, county commission, chairmen, chamber of commerce counsel, open government such as EDAs, focused on job creation economic development through infrastructure improvements, and we knew we had to diversify as far as our workforce, our labor workforce, and actually go after jobs and so that's what we started working on. We had jobs, economic development infrastructure, education, and transportation issues, and that's primarily what we've been working on to date. But in 2005, 2006, and 2007, we turned that double digit unemployment around into 3.5 to 4 percent, and we were looking for, we were able to pick and choose some of the companies.

Mr. MOLLOHAN. I see. That effort turns out to be a model effort for economic recovery.

Mr. BRADFORD. Well, as far as planning, in 2001 we went to EDA and looked for an economic development model, and for planning on infrastructure, and what type of jobs that we could go after, what type of jobs our area would support our workforce development and so forth, and with that plan in place in 2003, we got our first company, which was a Swedish company, SCA Tissue, and they now employ over 480 people.

Mr. MOLLOHAN. Did you receive from EDA only money and then you went out and hired a consultant to develop your plan, or did EDA themselves participate in fashioning the plan?

Mr. BRADFORD. They didn't participate in fashioning the plan. I think they gave direction as to accountability and how we would be able to go out and actually take bids from consultants and chose the consultant that was the best fit for our area, but they did not participate other than the accountability aspect.

Mr. MOLLOHAN. In your testimony you emphasize the importance of EDA's strategic planning investments through its comprehensive economic development strategy process and planning grants. Is that the process that you just described right there?

Mr. BRADFORD. Yes, sir. It was known as the Wilson Dam Corridor Comprehensive Plan, and actually, in northwest Alabama, we actually lay on the Tennessee River, Wilson Dam is part of the TVA reservoir, and it's one of the largest lift lock dams in the world, but we also have ready access available to rail, in one of computerized railcar assemblies. These companies actually lay in between those areas and also a regional airport, so we were able to coordinate our resources and from there go forward.

DISASTER RECOVERY IN TEXAS

Mr. MOLLOHAN. Mr. Wemple, your testimony discusses how quickly your District was able to provide EDA with suggested

projects following the devastation of Ike. What was the dollar value of that assistance? The total dollar value of that assistance?

Mr. WEMPLE. Dollar value as in number of projects, or how much it cost us to do the work?

Mr. MOLLOHAN. How much money you got from EDA in their assistance in your recovery from Hurricane Ike?

Mr. WEMPLE. We conducted the analysis by leveraging our planning dollars that we get from our District with other projects that we have within our economic development program, and then the amount of funding that actually came to the region from the grants was right about \$42 million dollars.

Mr. MOLLOHAN. And does that count the \$10 million from the—

Mr. WEMPLE. That includes the \$10 million revolving loan fund, yes.

REVOLVING LOAN FUND

Mr. MOLLOHAN. And who administers the revolving loan fund?

Mr. WEMPLE. My program administers that at our economic development district.

Mr. MOLLOHAN. And do you have assistance from a banking institution?

Mr. WEMPLE. Actually one reason why we were able to work with EDA and get the revolving loan fund is my department also administers a very robust small business administration 504 loan program which we've had in existence for a number of years. We are one of the top producers in the state of Texas, and definitely in the Houston region. About a 300 loan portfolio totaling over \$220 million dollars.

Mr. MOLLOHAN. And that revolving loan program is part of EDA's regular authorization? Or was it a special authorization under that emergency funding?

Mr. WEMPLE. It was special under the supplemental emergency funding.

Mr. MOLLOHAN. So it, not only the money but also the authorization, would not have been available except for the emergency authorization?

Mr. WEMPLE. Yes, and we would not have pursued it without the emergency money, the main need.

Mr. MOLLOHAN. In other words, another organization could not go after a revolving loan fund because it was only authorized in that emergency funding bill?

Mr. WEMPLE. We were identified as the only entity within our region that could successfully administer it and come up to speed quickly.

DELTA CENTER FOR ECONOMIC DEVELOPMENT

Mr. MOLLOHAN. Okay I'll follow up on that. Mr. Wyatt, your EDA University Center, that is exciting, there's no question about it, and I guess it's an example of how powerful an association with an academic institution can be. Just explain to us what role that plays in the community and how it facilitates economic diversification, I expect, in most instances.

Mr. WYATT. The fact that it's based on a university campus is misleading. It's really an organization for the community. It covers a large geographic territory and in fact, the entire 1st District. People go out from that base of operations on our campus to other locations and so its real value is perceived by the communities around us in the business and the industries there. But its placement on the university campus is very important because we have assembled a large group of experts in many areas that constitutes the university faculty, and the Delta Center for Economic Development can tap those resources as needed to provide assistance in the communities where they do their work.

Mr. MOLLOHAN. Mr. Bonner.

EXPORTS

Mr. BONNER. Jobs, jobs, jobs. That was the message the President delivered last week in his State of the Union address. It's certainly the message that all of us have been saying for some time now because the economy has suffered so much loss of jobs, and in your testimonies today each of you have given testimonials about the importance of EDA. One question that I'd like you to address is the President also talked about the need to pass some trade agreements that whether it's Columbia, or Panama, or wherever, help export American products and create jobs here in this country. Any of you all have an example of how EDA specifically has helped your community or businesses in your communities take advantage of that opportunity to export American products to other countries overseas?

Mr. WYATT. This is an example of many of the activities where our University Center has been productive. In our area where agriculture product is so prominent, our University Center has given counsel to a number of our agricultural producers to move their products around the world, and in fact, products from Arkansas serve world markets. We could ship a boatload of rice, down that river to any place in the world, and we're doing it, and we're giving assistance through the University Center to the people who would provide for shipping, harvesting, processing, finishing and producing those products. It's happening every day.

Mr. WEMPLE. Our region, given that we have major ports within our region, and also an intra-coastal canal, we have a lot of import and export activity within our region. There's a good likelihood that businesses that will be helped through the revolving loan fund, particularly on Galveston Island, will be eventually looking at exports. You know we do have success stories from our Small Business Administration program and others where that happens, so I can't point to a specific example. But these EDA funds definitely help by diversifying our economies, allowing folks to take advantage of that opportunity.

Mr. WYATT. SCA Tissue, which is a global company, actually the SCA plant located in the Shoals area, serves the entire north American continent, and is a non-pulp paper product company, so you don't get some of the environmental concerns. In fact, we use recycled paper, cardboard, and other products. They make tissue paper, they make restaurant supply type of paper products as well as hygiene materials and cardboard shipping containers. So that's

going all over north America. The North American Lighting, which makes taillight assemblies for Toyota, Nissan, GM, and Ford primarily stay here in the United States.

CREDIT ACCESS

Mr. BONNER. And Mr. Wemple, you had mentioned specifically about some of the problems that businesses, especially small businesses, were having with regard to credit. I asked the previous panel a question using an example, I think you all might have been in the room, of a local businessman's story that he had shared with me. Specifically do you think EDA is positioned to help programs like yours filter out, since there is so much concern about credit today being available, whether it's through commercial lending or through SBA or other federal agencies, is EDA doing as much as they could do to help fill the gap?

Mr. WEMPLE. Well, I think maybe I have two different parts of an answer for you. I think that our revolving loan fund in particular is going to fill a very severe need in our region and so in that regard they are definitely stepping up to help fill that void. One of the best things I think EDA has really done for us is through the funding of our economic development district, and through the development of our comprehensive economic development strategy, we actually get people together, people come to us to ask what types of grants they might be able to get, what type of loans they might be able to get, whether it's a local government or sometimes a business venture, and then because of the ability of our district to exist through EDA, we're able to link them up. Maybe they have a better opportunity going through the USDA Business and Enterprise Fund as opposed to EDA, or maybe SBA is a better option. So it allows us to operate as a bit of a clearinghouse in that regard, so I think that's probably one of the most critical things that they allow us to do.

Mr. BONNER. Mayor, Congressman Aderholt had another meeting for which he had to be excused, and asked that you would forgive him for leaving early.

Mr. MOLLOHAN. Thank you, Mr. Bonner. Mr. Fattah.

REVOLVING LOAN FUND

Mr. FATTAH. Thank you, Mr. Chairman. I realize we have a vote coming, so just some quick questions. Do you charge interest on this revolving loan fund for businesses?

Mr. WEMPLE. Yes. We're required to charge a minimum of four percent.

Mr. FATTAH. Do you charge the minimum, or do you charge above the minimum?

Mr. WEMPLE. Right now, our program is charging four percent as our interest rate.

LENGTH OF REVIEW CONCERNS

Mr. FATTAH. We've got to go vote. Mr. Mayor? I'll try to get my geography right. You've got a golf course there? Shaw Creek?

Mr. WEMPLE. Actually, we do. It's Robert Trent Jones Golf Course.

Mr. FATTAH. Condoleezza Rice just joined, right?

Mr. WEMPLE. Yes, sir.

Mr. FATTAH. I try to keep track of your local economic activity, at least in relation to golf. My colleague from Alabama was telling me about the golf trail. I hope to visit. Mr. Chairman, let me get to the point. In your comments submitted to the Committee, you said one of your concerns, among all of the glory that was bestowed by your comments on EDA, was their decisions are slow. And that sometimes dealing with private enterprise, they're looking for a quicker paced decision package, and so I was trying to see how we might reconcile that with our responsibilities. You know, the government only works at one speed, which is slow. But it's for a reason, that is to say, you have to be caretakers of the public's treasury. So I was just interested if you could share with the Chairman any real life anecdotal story about the slowness of the process.

Mr. BRADFORD. Well, I believe that in both of these projects it was prior to this group or EDA being able to hire additional personnel, and that was the biggest thing. It would take six to nine months to get some of these projects approved, and you're on a time line to get infrastructure to them when they're investing, you know, \$40, \$50 million, sometimes \$100 million on their projects on their site, and they're wanting their infrastructure there and of course you're going through the bid process, design engineering, and so forth, and we understand that there has to be accountability and so forth and making sure that you know where this money is going.

Mr. MOLLOHAN. It sounds like that timeliness is a problem all over the country. We want to get Mr. Schiff and I'm sorry we didn't see him right then, and he hasn't had the chance. Mr. Schiff, welcome to the hearing.

CREDIT ACCESS

Mr. SCHIFF. Thank you. I just wanted to ask and I don't know how much a part of this is in your bailiwick, what efforts EDA has undertaken to help small businesses access credit, because that's the number one complaint that I hear among my constituents, that banks they have longstanding relationships with where they just can't get credit. A lot of the job retention issues in my district are a little different than some of my colleagues. It's more about trying to retain motion picture production and not have that run away to Canada and other countries. But, I'd love to hear your thoughts about EDA's work on access to credit.

Mr. WEMPLE. Again, through our revolving loan fund that we have, that's going to be a major access for our businesses to credit they can't get otherwise. Also we work closely with the small business development centers at our colleges and universities to make sure that the businesses get in good shape where they can maybe have a better chance of having that credit at the bank. If you don't have a business plan or projections and various things in place, it's difficult to get a bank to seriously consider you. So we make that requirement through our EDD revolving loan fund, and then again the district funding is critical to my group to allow us to have the capacity to be able to steer businesses to other non-EDA programs, as well.

Mr. MOLLOHAN. Well, thank you, gentlemen, very much for your testimony. We are looking at five votes which will take us 40 minutes or so. We're not going to make you stay here during that period. Your testimony has been excellent. I think everyone has had two rounds. There may be a question or two submitted for the record. You're not an agency, you're not required to respond to that, but it would be nice if you did because you're really helping the Committee with your expertise. I have one question. Mr. Wemple, you indicated that EDA funding, you're looking for diversity and flexibility, so to broaden the opportunities for funding by expanding the current funding portfolio to include special projects and unique economic settings. If that resonates with you, I'd like a comment on your ability to be flexible with EDA programs. It's a changing environment. We're going from traditional economies to the future, and diversification is very important and just for that reason alone this flexibility is important and I'd like to hear you all comment on that. Only for the record, and I'm sorry to do that because right now I've got zero minutes to go, zero seconds to go vote. But thank you so much, all of you, for testifying, both panels for being here today to testify. It's excellent testimony and will certainly help us to establish a support base for EDA as we move forward, certainly on the Subcommittee and beyond. So thank you for your testimony here today. This hearing is adjourned.

THURSDAY, MARCH 25, 2010.

**USPTO (UNITED STATES PATENT AND TRADEMARK
OFFICE) FY 2011 BUDGET OVERVIEW**

WITNESS

**DAVID KAPPOS, UNDER SECRETARY OF COMMERCE FOR INTELLEC-
TUAL PROPERTY AND DIRECTOR OF USPTO**

OPENING REMARKS

Mr. MOLLOHAN. The hearing will come to order.

Good afternoon, welcome. Today we have with us the Director of the United States Patent and Trademark Office, Mr. David Kappos, Kappos.

Mr. KAPPOS. Kappos.

Mr. MOLLOHAN. Kappos? Thank you.

To examine the fiscal year 2011 budget request and operations of the USPTO.

Director Kappos, you well know that the USPTO plays an important role in fostering innovation which in turn drives job creation, economic recovery, and prosperity.

You also know well that the USPTO found itself in fiscal year 2009 in a precarious fiscal position. Fiscal years 2010 and 2011 will likely present new and equally daunting financial challenges for the Agency and key performance measures like patent pendency and backlogs will likely continue to decline if left unaddressed.

USPTO's fiscal posture of last year highlighted major unacceptable deficiencies in its budget formulation and execution processes and underscored the need for a sustainable funding model that would allow your Agency to weather periods of economic downturn and reductions in fee collections without disruption to patent and trademark operations.

You are aware of these deficiencies and that your budget includes several proposals to address them which we will explore this afternoon.

Your fiscal year 2011 budget request for USPTO is \$2.3 billion, an increase of \$435 million over the fiscal year 2010 enacted level. Of this total USPTO projects fee collections under the current fee structure of nearly \$2.1 billion. The difference, some \$224 million, would be generated under the request by a temporary 15 percent surcharge on patent fees which the Agency would require new statutory authority to impose.

In addition, the budget request proposes new fee setting authority that would permit the Agency to work with its external partners to align fees in future years with the actual cost of Agency services.

These two legislative proposals seek to establish a more sustainable funding model for the USPTO, but are authorizing in nature

and outside the jurisdiction of this Committee. For this reason it is imperative for the Committee to understand the impact of your Agency operations if such new fees are not established for fiscal year 2011.

Lastly, it is important to note that the budget request proposes to establish an operating reserve to ensure the availability of adequate funding to address multi-year budget plans and unexpected fluctuation in revenues, but again the creation of such a reserve is predicated on the collection of new fees.

I would like to thank you for your cooperation and close working with the Committee staff, it is certainly appreciated and your efforts to develop a requirements-based budget, which I think will go a long way in the long term to solving your problem.

We have some structural issues that hopefully your authorizing effort will address or that maybe we can address otherwise.

I am going to invite you to summarize your written statement which is made part of the report, but first I am going to call upon our Ranking Member, Mr. Wolf.

Mr. Wolf.

Mr. WOLF. Thank you, Mr. Chairman.

Mr. Secretary, welcome. You're leading the Patent Trademark Office in a very troubling and difficult and challenging time. Your revenues are down, your patent backlog is over 700,000, unemployment reaching ten percent in the country, inventors now waiting three years, so we are anxious to hear how you plan on dealing with that.

I also know that, I think, through the effort of this Committee over the years on the telework, that you are probably one of the leaders in telework.

How many are teleworking at your—

Mr. KAPPOS. Well on the trademark side of our Agency nearly every trademark examiner can telework. On the patent side, large numbers in the thousands of examiners.

Mr. WOLF. Well we have been told that you want to expand it, so we will be anxious to hear how you want to expand it.

And again, we look forward to hearing your testimony.

Mr. MOLLOHAN. Mr. Kappos.

OPENING STATEMENT BY MR. KAPPOS

Mr. KAPPOS. Okay, well thank you, Chairman Mollohan and Ranking Member Wolf, members of the Subcommittee.

I am really pleased to be able to join you here this afternoon and have an opportunity to discuss the USPTO's operations and our programs and initiatives, and the President's 2011 budget request in order to fund our efforts at the Agency.

Mr. Chairman, we all recognize that innovation is a principal driver of our economy, perhaps the principal driver of this century. Stimulating economic growth, promoting innovation, and creating high paying jobs are key priorities of course for the Administration.

The President's 2011 budget clearly recognizes and supports the role that the USPTO plays in enabling U.S. innovators to flourish and to bring new products and services into the marketplace. Yet the Office currently faces significant challenges, as has been pointed out already, a backlog approaching 750,000 patent applications,

unacceptably long patent pendency rates by any measure, 35 months and counting to final action, and outdated information technology infrastructure.

Our 2011 budget request provides the USPTO with the resources and the flexibility that we need to start addressing these problems.

The President's budget, as you noted, requests \$2.322 billion for the USPTO based on projected fee collections of about \$2.098 billion under the current fee schedule, and an estimated additional \$224 million that would be brought in by an interim fee increase.

Just like the business community, if we collect less fees than expected, we have to manage the Agency based on the revenues that we receive. And to safeguard against economic downturns, the budget request emphasizes business tools such as creating a reserve so that we can insure that we can execute multi-year plans and serve the public without disruption even in cases where patent filings dropped as they did in 2009.

However, to help the USPTO and put us on a solid path toward a more sustainable funding model, the budget further proposes fee setting authority to permit the USPTO to work with its stakeholders and better align our fees with the actual cost of our services.

So specifically, the President's request was formulated as a requirements-based budget at the request of the Subcommittee and supports a five-year plan that would reduce the time to first office action in patent applications to 10 months, reduce total average pendency to 20 months, and invest in a 21st Century IT architecture infrastructure and tools that are badly needed at the Agency.

For those applicants in fast moving industries who need even shorter patent pendency, we are also formulating options to provide 12-month pendency from filing until grant or final action.

To achieve these performance commitments we will initiate targeted hiring to recruit and hire 1,000 patent examiners for a net increase of 400 to 500 after retirements and other attritions annually during fiscal year 2011 and fiscal year 2012.

We are refocusing our hiring strategy to attract experienced IP professionals who will require far less training and will be able to quickly begin working on reducing the patent backlog.

In fiscal year 2011 we will continue to promote a nationwide workforce, as has already been mentioned, and to invest in our telework programs which have been a model for other federal agencies.

We are also studying ways to strengthen our organizational structure to support our extra strategic initiatives, and we look forward to working with the Committee as those efforts progress.

So while fiscal year 2011 looks promising, our current financial situation is less than optimal.

Our revenues from user fee collections declined substantially during fiscal year 2009, and the Office was forced to cut spending sharply in many important operational areas, cuts that cannot be sustained in the long term.

Some of these financial constraints carried over into fiscal year 2010 even as we started to improve the efficiency and production of the Agency while operating on a bare bones budget.

Thus far in fiscal year 2010 we have lost 115 patent examiners through the end of March, and have replaced only six so far. In total for fiscal year 2010, we project nearly 300 patent examiners will leave the USPTO and we will be able to hire about 250.

So our Agency will deteriorate slightly in size even while the backlog grows at current course and speed.

Mr. Chairman, I would be remiss if I didn't provide an update on our current fee income projections.

Based on the first five months of fiscal year 2010, we are seeing a very substantial rebound in user fee collections.

Our current projection is that the USPTO will collect between \$146 million and \$232 million more than its appropriated spending limit for fiscal year 2010.

So our new leadership team has undertaken a broad array of efficiency initiatives to provide the speed and quality of patent processing that our country needs. These initiatives are described in more detail in my written statement.

Progress toward our strategic goals, however, is dependent on a number of important elements. These include establishment of a sustainable funding model, authority to set appropriate fees, an interim fee adjustment on patent fees, and an operating reserve to insure adequate reserves to address multi-year budget plans.

Our fiscal year 2011 budget provides a framework for continuing the work we have already started to make critical changes that support innovation, enable investment, and contribute to the U.S. economic recovery.

Mr. Chairman, the challenges we face at the USPTO are significant, but we can address them with improved management, working closely with our external partners to identify the best solutions for improving the Agency, and with adequate resources.

We appreciate your continued support of the USPTO and we look forward to working closely with you and with your staff on our fiscal year 2011 request in the weeks and months ahead.

Of course I am happy to answer questions.

[The written statement of USPTO Director David Kappos, Under Secretary of Commerce for Intellectual Property, follows:]

STATEMENT OF
DAVID J. KAPPOS
**UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY
AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE**
BEFORE THE
**SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED
AGENCIES
COMMITTEE ON APPROPRIATIONS
U.S. House of Representatives**
“USPTO FY 2011 Budget Request”
MARCH 25, 2010

I. Introduction

Chairman Mollohan, Ranking Member Wolf, and Members of the Subcommittee:

Thank you for this opportunity to appear before you to discuss the United States Patent and Trademark Office's (USPTO) operations, programs and initiatives with the requirements outlined in the President's FY 2011 budget request to fund those efforts.

The USPTO plays a key role in fostering the innovation that drives job creation, investment in new technology and economic recovery. As we move into the second decade of the 21st Century, it has become increasingly clear that innovation is a principal driver of our economy as well as an engine of social advancement. It is also the only sustainable source of competitive advantage for world economies. And since intellectual property is the vehicle that facilitates the delivery of innovation to market, it follows that inventors who use intellectual property (IP) effectively will flourish.

As the currency of innovation, intellectual property fuels capital investment by decreasing price and improving quality and function of innumerable goods, including airliners, computers, telecommunications equipment, and machinery. Innovation also creates opportunities for investment in new kinds of goods and services. Innovation promotes efficiency by generating better ways of working, manufacturing, and selling, including electronic inventorying, e-commerce, and computer-driven manufacturing.

Stimulating economic growth, promoting innovation, and creating high-paying jobs are key priorities of the Obama Administration. The President's 2011 Budget clearly recognizes the importance of USPTO's role in addressing those priorities and invests further in initiatives we have already started at the USPTO to address a number of problems faced by the Office that have reached unacceptable levels in recent years.

II. President's FY 2011 Budget

I am pleased that this budget request provides the USPTO with the resources and flexibility needed to aggressively reduce its patent application backlog, shorten patent pendency, improve patent quality, and invest in rethinking our information technology (IT) infrastructure. These investments will support actions we have already taken and have underway at the USPTO to create a more efficient and effective Office – an office that fuels economic growth, strengthens the competitiveness of U.S. companies that bring new products to market, and hires employees to support those new products and services. The proposed budget also represents the first step toward establishing a sustainable funding model to finance USPTO's patent and trademark operations in support of the USPTO's strategic priorities and the Administration's goals.

We are working closely with the Department of Commerce in planning and preparing our strategic priorities and budget requirements to ensure our goals and initiatives are aligned with and support the goals of the Department.

The President's budget requests \$2.322 billion for the USPTO, and it projects fee collections of \$2.098 billion will be yielded by the current fee schedule. The estimated additional \$224 million would be generated by an interim patent fee increase. To help put the USPTO on a path towards a sustainable funding model, the budget proposes legislation for fee setting authority to permit the USPTO to work with its external partners to better align fees with the actual cost to the USPTO of its services. It also emphasizes business tools, such as creating a patent reserve to ensure that the Agency can execute multi-year plans and can continue to serve the public without disruption during periods of economic downturn.

Specifically, the President's Budget for the USPTO was formulated as a "requirements-based" budget at the request of the Subcommittee and supports a five-year plan designed to:

- Reduce the time to first office action for patent applications on the merits to 10 months;
- Reduce total average pendency for patent applications to 20 months;
- Reach a target patent inventory backlog level of 10 months; and
- Invest in IT infrastructure and tools to achieve a 21st Century system that permits end-to-end electronic processing in patent and trademark IT systems.

In addition, we are formulating an option to provide end-to-end processing within 12 months for those patent applicants who desire it. To achieve these performance commitments, the USPTO will:

- Initiate targeted hiring to recruit and hire 1,000 patent examiners (projected to be a net increase of 400 to 500) annually during FY 2011 and FY 2012. This temporary hiring increase will begin with bringing on experienced former examiners and IP professionals, which will allow Patent Operations to reduce the time necessary for training, and realize benefits that will reduce the patent backlog and reach a targeted inventory level; and
- Achieve efficiency improvements brought about by reengineering many USPTO management and operational systems. Efforts to optimize examination capacity, compact prosecution initiatives, revisions to the patent examiner production system, prioritizing

incoming work, and increased international work sharing will contribute to yield efficiency gains to help achieve these goals.

An additional component of the USPTO's hiring strategy is to promote a nationwide workforce. While the Office's current array of telework programs serve as a model for the Federal government, we continue to review possible improvements and geographical expansion of telework opportunities for our employees. Under our existing authority, we recently adopted a new policy that will reduce the burden on telework employees who live within a 50 mile radius of the Office to report to headquarters every two weeks. We are exploring further enhancements to our telework programs that will allow the Office to attract and retain a highly skilled workforce. We are also studying ways to strengthen our organizational structure to support our strategic initiatives and look forward to working with the committee as these efforts progress.

The President's Budget will enable us to take aggressive steps to make the USPTO more efficient and reduce the unacceptably long pendency periods that hinder the creation of new businesses and new jobs.

III. Current Financial Situation

While FY 2011 looks promising, I want to take this opportunity to discuss our current financial situation. We recognize that we must take a multi-year approach to planning and implementing improvements at the USPTO. Our revenues from user fee collections declined substantially during FY 2009 and the Office was forced to cut spending sharply in many important operational areas – cuts that cannot be sustained over the long-term. Notably, without swift and decisive action from Congress in late FY 2009, the USPTO may have been forced to take even more drastic measures.

Our financial constraints carried over into FY 2010, forcing us to continue operating on a bare-bones budget. Because we are funded entirely from fee revenues, the reduction in user fee collections below our appropriations level that occurred in FY 2009 forced us to continue making hard choices including hiring less than the planned number of examiners, limiting overtime, and postponing critical upgrades to our information technology systems. During FY 2010, we have lost 115 patent examiners (through the end of March) and have only replaced six.

In total for FY 2010, we project that nearly 300 examiners will leave USPTO and we will be able to hire 250 examiners. After a complete halt in hiring for many months, the USPTO has just begun to implement a limited and targeted hiring initiative designed to attract experienced former patent examiners and other experienced IP professionals. These professionals, who will require less training and therefore be productive earlier, will help us turn the tide on the mounting backlog of unprocessed applications.

I would be remiss if I didn't update the Committee on USPTO's current estimates of its fee collections. Based on the first five months of FY 2010, we are seeing a rebound in user fee collections at the USPTO attributable to an improving economy and increased production that may be attributable to managerial initiatives. Last week, we shared an update of revised estimate and forecast assumptions with Subcommittee staff that projects USPTO will collect between \$146 and \$232 million more than its appropriated amount in FY 2010.

IV. Patent Initiatives

We have also sought to create a stronger partnership with our external stakeholders and our employees. We are in the midst of fine-tuning our strategic plan to address the backlog and focus on high-quality, efficient examination, and look forward to receiving Congressional input in that process within the next few months.

Our new leadership team at the USPTO has undertaken a broad array of efficiency initiatives to improve the speed and quality of patent processing. These initiatives include a “first in a generation” reform of the patent examiner count system. We expect this new system to create an environment where examiners efficiently review applications and work with practitioners to come to correct decisions more quickly.

At the end of last year, we announced a new program to provide accelerated examination for green technology innovations, reducing significantly the pendency of applications relevant to climate change mitigation. We also launched a program specifically designed for small and independent entities, enabling this important job creating segment of the innovation community to benefit from accelerated examination of one patent application in exchange for abandoning a second unexamined application. The USPTO will benefit from a smaller backlog as a result.

We are actively engaging overseas patent offices and our user community to obtain substantial benefit from work done by other patent offices on applications filed both overseas and in the USPTO, an effort that can improve the USPTO’s efficiency significantly.

These patent related initiatives are described in more detail below:

Improving Patent Quality and Identifying New Ways to Measure It

The USPTO is reengineering its quality management program from top to bottom to focus on improving the process for obtaining the best prior art, as well as improving the quality of the initial application and the entire examination and prosecution process. We have sought comments from IP professionals on methods to enhance the quality of issued patents (for both applicants and the USPTO), to identify appropriate indicia of quality, and to establish metrics for the measurement of the indicia. We have engaged our external partners in a very public discussion through comment, with our Patent Public Advisory Committee and upcoming roundtable discussions on the best way to address patent process inefficiencies, while also improving patent quality and reducing overall application pendency.

We are committed to being fully transparent with respect to pendency. To that end, we have developed and are fine-tuning an online “dashboard” that will show “true pendency” (meaning pendency from the first filing dates and including Requests for Continuing Examination (RCEs)) and other key metrics of patent pendency and quality. We intend to update the dashboard monthly so that the public can have access to this important information about how the USPTO is doing its job.

Reformulating Performance Appraisal Plans (PAPs)

The USPTO established a task force with representation from all “technology centers” to craft new performance appraisal plans (PAPs) for supervising patent examiners (SPEs) to focus on enhanced examination quality, reduced application pendency, and improved stakeholder responsiveness. The new SPE PAP, which has been finalized and will be rolled out in early April

2010 for these critical managers, provides increased recognition of key SPE activities in coaching and mentoring examiners while also recognizing the importance of contributions to agency-wide initiatives. The task force also created an SPE award program to provide additional incentives to the achievement of these new SPE goals.

In addition, a new joint labor and management task force is now officially under way to update the patent examiner performance appraisal plan (PAP) and to evaluate the existing processes for addressing performance and conduct issues at the USPTO. The focus of this effort is to align the patent examiner PAP to organizational goals, and ensure strategic alignment at all levels. A strong emphasis will be placed on clearly defining objective measures that will be universally applied during the performance appraisal process, as well as developing a framework that focuses on coaching, mentoring, and training. The task force will be looking to modify the PAP to ensure transparency, educate employees on their responsibilities, and enable managers to set clear expectations and objectives for the achievement of organizational goals.

Increased International Work Sharing

Work sharing with other patent offices is a key priority in managing USPTO's workload. The Office has implemented the Patent Prosecution Highway (PPH) with other major patent offices worldwide. In PPH, after an office of first filing determines that an application is patentable, the applicant may request that the second office fast-track examination in its corresponding application. In the more than 2600 PPH applications processed at the USPTO to date, the number of office actions was nearly halved, the grant rate doubled, and the pendency period was reduced by between 8 and 18 months. The USPTO is now working cooperatively with the other patent offices and users to increase the usage of the PPH to maximize its benefits.

Further, the USPTO, in conjunction with the user community, is planning the implementation of a concept known as SHARE (or Strategic Handling of Applications for Rapid Examination). SHARE promotes the prioritization and balancing of examination work among patent offices. This initiative enables the office where an application is first filed to make available search and examination results for use in the other offices where a corresponding case is filed.

Revision to Patent Examiner Production System (Count System)

The USPTO and its patent professional employee union have implemented a new production crediting system that places its emphasis on providing examiners with more time up front to ensure a complete and thorough initial examination, decrease redundancy, and encourage quicker resolution of issues in the patent application process. This revision, which took effect in mid-February, is designed to improve quality and reduce rework, resulting in a decrease in the application backlog and pendency over the long term. We have already seen a decrease in the actions per disposal and an increase in the number of interviews being held between examiners and applicants -- both positive signs relative to efficiency and pendency.

Application Acceleration Pilot for Small Entities (Project Exchange)

Project Exchange, an application acceleration initiative open to small entities, empowers qualifying applicants having two or more pending patent applications to accelerate examination for one of the applications by abandoning a second unexamined application that may no longer be of value to them. This initiative, which gives applicants greater control over the processing speed of their applications, helps the USPTO prioritize its workload while reducing the backlog of unexamined patent applications. The program began as a pilot at the end of last year and more

than 30 applications have since been submitted to this pilot program.

Prioritizing Patent Applications—Green Technology

The USPTO is providing special handling of inventions involving green technology to promote innovation in this important area and focus on pendency of these applications that may be critical to climate change mitigation. More than 850 applications have been submitted to this program since it was announced at the end of last year. In most cases, these applications are picked up within 42 days after the petition for accelerated examination is filed.

Training of Examiners

The USPTO is giving all of its patent examiners detailed training in efficient interview techniques, compact prosecution, and negotiations -- all targeted to streamline the examination process by working with applicants to identify and correctly resolve issues early in the process, thereby reducing patent application backlog and pendency.

PCT Processing

The Patent Cooperation Treaty (PCT) enables U.S. applicants to file a single international application in a standardized format, which is then received by PCT contracting foreign states. The USPTO is working to raise its PCT processing techniques to world-class levels to aid U.S. technology owners to obtain early and fair intellectual property protection internationally.

Transparency of USPTO Materials

The USPTO is promoting transparency by increasing the availability of its public information and by providing patent examiner training materials on the Internet for reference by the innovation community. The USPTO has launched a public “Directors Forum” blog, especially designed to improve the exchange of information between the USPTO and the public, and is establishing dedicated “Feedback Channels” to solicit public input on important initiatives like the count system changes, the application exchange pilot for small entities, and the Green Technology pilot.

The USPTO is working to release all patent and published patent application data to enable applicants and the entire innovation community to better understand trends in USPTO application handling. In particular, we will be publishing decisions on petitions and full-text, searchable application file histories.

Finally, we are also in the process of launching an on-line “dashboard” that will provide a snapshot of key pendency metrics, thereby making pendency more transparent to the general public. Additionally, speeches by USPTO officials are being published on the Internet, and USPTO officials have significantly increased their public speaking frequency.

Investing in IT Infrastructure

It is critical to innovators, job growth and the American people that high quality patents and trademarks are issued in a timely manner. Intelligent investment in our IT infrastructure holds the potential to dramatically accelerate the USPTO towards those goals.

In FY 2011, the USPTO will fund the continued operations and maintenance of our existing IT systems. In parallel, we will begin the work of setting up new systems that will enable end to end

electronic processing of patent and trademark applications. By removing the constraint that the new system must interface significantly with our outdated, current systems, we allow the work to be driven by two guiding principles:

- (1) stakeholders needs lead the process; and
- (2) build small, build fast, and own the design.

We will be moving quickly to get an end to end system built that demonstrates basic functionality and meets core needs of our stakeholders, while at the same time re-engineering our business processes to modernize and streamline them.

Re-engineering the Classification System

To improve quality, reduce pendency and reduce costs, the USPTO is reviewing its patent classification system. An improved system will allow effective assignment of applications for examination and is critical to enable examiners to effectively locate prior art relevant to determining patentability. The USPTO is also learning from and building upon best practices of our partners in foreign IP offices to provide our examiners with the best prior art available. This initiative will improve pendency and patent quality and reduce cost by putting the best prior art in the hands of examiners efficiently, and by partnering with our international counterparts to leverage resources.

Ombudsman Program

In October 2009, the USPTO published a *Federal Register* notice inviting public comment on a proposal to establish an ombudsman program. The program is intended to facilitate any complaints (within 10 business days) when applications become stalled in the examination process. The program would also provide feedback and early warning alerts to upper management regarding training needs based on complaint trends. We are currently reviewing the comments and suggestions received in response to our notice to help us design the most effective program.

Training of Supervisors

In addition to the required supervisor training certificate program, patent managers and supervisors are participating in a newly developed, state of the art leadership development program. This program is designed to help managers and supervisors hone their skills so they can enable all employees to reach their full potential.

Stakeholder Survey

In January 2010, the USPTO expanded its survey methodology to better measure the quality of services provided by the patent examining staff. This survey will give applicants an opportunity to provide feedback on the patent process on a semi-annual basis. The survey design ensures each data-collection period covers a representative sample of patent filers, and that survey findings can be extrapolated to the applicant population as a whole. The survey provides a valuable complement to other initiatives, such as enhancing interview practice. The survey results, along with customer outreach efforts and other initiatives, will enable the USPTO to improve service quality based on the input collected through the survey process.

Reengineering the MPEP

Stakeholder input also is being sought on reengineering of the USPTO's Manual of Patent Examining Procedure (MPEP). In addition to expediting updates to the MPEP, we will establish a more collaborative process involving contributions by our stakeholders; provide more examples and greater integration of guidelines; and include links to related USPTO online examiner education materials. The objective is to create a new MPEP that will enable practitioners and examiners to find information quickly, get accurate and complete guidance, and ensure that the examination and prosecution of all patent applications complies with the laws and regulations governing the patent system.

V. Trademark Initiatives

Our Trademark Operation continues to meet or exceed its performance goals. The decade-old telework program in our Trademark operation has expanded over the years to include 87% of all eligible trademark examiners in its voluntary program, and has served as the model for the successful hoteling program in our Patents Operation. Other Trademark initiatives include the following:

Trademark Pendency

In FY 2011, the Trademark operation will continue to maintain first action pendency at optimal levels, on average between 2.5 – 3.5 months with 13 months final pendency.

Trademark Quality

While current metrics show that the quality of decision making is at high levels, in order to further enhance quality, the Trademark Operation is establishing a new measure that focuses on the comprehensive excellence of the entire Office Action. They have sought input from stakeholders in determining how to define excellence and will be providing focused excellence training to trademark examining attorneys.

Public Roundtables on Trademark Issues

Finally, similar to other such activities we have started at the Office to stimulate public discussion on IP policy and developments, next month USPTO will be co-hosting a panel discussion with George Washington University Law School, titled “The Future of the Use-based Trademark Register.” The panel discussion will identify and discuss the possible effects of the recent decision in *In re Bose Corporation*.

Anti-Counterfeiting and Anti-Piracy

Trademark Operations officials will partner with appropriate entities to promote educational efforts to develop public awareness of the adverse effects of trademark counterfeiting. A partnering effort will also be made with Customs and Border Protection to develop an on-line system to permit Trademark owners to request Customs recordation when filing for a federal Trademark registration.

Investing in IT Infrastructure

The USPTO is upgrading its Trademark IT infrastructure to improve the stability, availability, and performance of the systems that support trademark examination and the public. As part of this effort, the USPTO will re-architect its Trademark systems to provide scalable, redundant, and virtually hosted systems based on current technologies. This will make the trademark process more efficient and more transparent, and reduce trademark portfolio costs for the innovation community. The Trademark Operation has launched an organized outreach effort for internal and public users to ensure that the new system design best meets the needs of its stakeholders.

VI. IP Policy and Enforcement

The USPTO plays a significant leadership role in promoting effective domestic and international protection and enforcement of IP rights and are endeavoring to formulate a data-driven U.S. government IP policy, working to develop unified standards for international IP, and providing policy guidance on domestic IP issues. The USPTO advises Executive Branch agencies on national and international IP policy matters, advocates for the establishment of global IP norms, and conducts technical assistance and capacity-building programs for foreign governments seeking to develop or improve their IP regulatory and enforcement mechanisms. The Office is working closely with the White House's U.S. Intellectual Property Enforcement Coordinator to help formulate a robust and effective Administration IP enforcement plan. Related efforts include:

Creation of Office of the Chief Economist

To assist the USPTO in generating economic analyses of the IP system and to better grasp the economic impact of proposed and actual changes to the system, the Office has designed and filled the position of Chief Economist. The incumbent will conduct studies for presentations to Congress, the Administration, and at public stakeholder events hosted by the USPTO.

Collection of Data on Role of IP in Innovation and Creativity

In conjunction with the creation of an Office of the Chief Economist, the USPTO has launched an initiative to collect and analyze data on the role IP plays in the promotion of innovation and creativity. While there is quantitative support available, particularly for the role of high-quality patents, more empirical work on precisely how IP operates in different innovation contexts needs to be done. The USPTO will sponsor various symposia and roundtable discussions, and otherwise solicit input from stakeholders, to prepare relevant and informative studies and reports. Several of these symposia will be conducted in conjunction with other agencies (e.g. the DOJ and the FTC) as well as with leading academic institutions.

The USPTO is also co-leading a task force with a sister DOC agency, the National Telecommunications and Information Administration (NTIA), to gather data that will help the DOC formulate positions on digital copyright policy for the 21st century. Outputs will include a major policy symposium and whitepaper(s). The outputs on this process will assist the Administration in formulating digital copyright policies as well as the Administration's overall IP enforcement plan.

IP Attachés Program

The USPTO's Attaché Program was formally instituted in 2006 to promote the value and importance of strong IP protection and enforcement in selected, high-profile countries where U.S. IP challenges are greatest. Since that time, IP attaches have played a critically important role in sharing relevant information about international developments with various parts of the U.S. Government and providing critical input to enable the U.S. to more effectively participate in international discussions regarding the development of IP laws. In partnership with the Commerce Department's Foreign Commercial Service (FCS) and the Department of State, the current team of IP attachés are working to improve global IP protection and enforcement overseas. These experts support U.S. embassies and consulates on IP issues, including devising strategies to stop counterfeiting and piracy, and supporting U.S. Government efforts to improve the protection and enforcement of IP. The attachés also advocate U.S. IP policies, coordinate training on IP matters, and assist U.S. businesses that rely on IP protection abroad. They serve at posts in Brazil, Russia, India, China, Thailand, and the U.S. Missions in Geneva. The Office is also employing its expertise in the overseas deployment of IP enforcement personnel as part of a White House task force headed by the White House's U.S. Intellectual Property Enforcement Coordinator which was established to improve the effectiveness of IP enforcement personnel in countries where strong IP enforcement is needed.

IP Law Development

The USPTO continues to work with Congress and the courts to improve the state of U.S. IP law. We are actively engaged with Congress to enact patent reform legislation that fairly balances the interests of innovators across all industries and technologies. We are supporting legislative changes that will simplify the patent process, reduce legal costs, improve quality and fairness, and make significant progress towards a more harmonized international patent system, while continuing to protect intellectual property.

As the Executive Branch's statutory adviser on IP policy, the USPTO has been actively involved in developing the U.S. government's legal position on important court cases. In *Bilski v. Kappos*, which was argued in the Supreme Court last November, the U.S. argued that the USPTO appropriately denied patent claims for a business method patent involving a method for hedging risk. In the "Google Books" matter, we worked closely with the Department of Justice and other government agencies to craft a court filing explaining the many benefits of a settlement that would give consumers easy access to vast numbers of out-of-print works, while articulating a series of concerns about details of the proposed settlement. Likewise, we have helped in developing U.S. litigation positions in other cases involving the USPTO's rulemaking authority, the appropriate standard for considering allegations of collusive conduct in the context of reverse payments from brand name manufacturers to prospective generic competitors in the Hatch-Waxman context, among other important intellectual property matters.

Global IP Academy

Since 2005, the USPTO Global Intellectual Property Academy (GIPA) has provided high-level intellectual property rights training, capacity building programs and technical assistance training to foreign judges, prosecutors, customs officials, IP enforcement personnel, as well as officials from copyright, trademark and patent offices from around the world. Those individuals come to the United States to learn, discuss and strategize about global IP protection and enforcement. The program's goals include fostering a better understanding of international intellectual property obligations and norms, exposing participants to the U.S. model of protecting and enforcing

intellectual property rights, and promoting discussion of intellectual property issues in a friendly and supportive environment. The Academy provides both multilateral programs and country-specific programs as needed. USPTO further envisions programs dedicated to specific legal issues or technologies as the Academy continues to develop. GIPA also delivers training to other stakeholders, including small business owners, U.S. Government officials, and the general public.

VII. Conclusion

The success of the initiatives described above and progress toward USPTO's strategic goals of improved quality and reduced pendency and backlog are dependent on a number of elements. These include establishment of a sustainable funding model; authority to set fees in a manner to better reflect the actual cost of operations; an interim fee adjustment on patent fees to provide resources in the intermediate term; and an operating reserve to ensure adequate reserves to address multi-year budget plans and fluctuations in revenues. Our FY 2011 budget provides the framework for continuing the work we have started to make critical changes at the USPTO so that the Office is supporting innovation, enabling investment and contributing to U.S. economic recovery.

Mr. Chairman, we appreciate your continued support of the USPTO and we look forward to working closely with you and your staff in the weeks and months ahead.

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BUDGET REQUIREMENTS

Mr. MOLLOHAN. Thank you, Mr. Kappos.

You are asking for quite an increase here, and your request is not keyed to your fee collection estimates are they, as they have been in the past?

Mr. KAPPOS. Correct, our request is greater than our fee collection estimates.

Mr. MOLLOHAN. Yeah. And why is that?

Mr. KAPPOS. Well we started this year for the first time with a true requirements-based budget. So we started by asking within our business units what do you need to do in order to make substantial progress against the huge backlog that we have got? How many people do you need? What resources do you need? We simply added all of that up and it came out to more than our estimated fee collections.

Mr. MOLLOHAN. So the budget you are requesting here today is based on what you need to achieve some goals, not based upon what your estimate of the fees that you might collect during a fiscal year that you are projecting.

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. All right. I think that is a whole lot better, and again, in opening remarks I complimented you for that and I want to compliment you again for doing that. I think that is the start of getting some rationality in this whole fashion of fiscal policy for the USPTO and getting away from a lot of misunderstandings, which maybe we just leave behind us as we march forward, unless there is any interest in churning all those issues. Because the issues are structural and not necessarily anybody's fault, it is just people working within a system that I consider to be dysfunctional, which is my term.

So you have requested this pretty large increase, and what are your goals with regard to it?

Mr. KAPPOS. What we plan to do with that money is first in my mind and foremost, is to implement some really significant efficiency improvements.

My belief is that you don't hire a lot of people under broken systems, you have got to fix the systems. I wish we had forever to fix the systems first, but we don't, so we are going to have to fix the systems, which we are already working on, and hire a substantial number of people, as I mentioned. 1,000 people in fiscal year 2011 and 2012 while we are fixing the systems.

We have got to turn on overtime 100 percent, which is an extraordinarily efficient way for us to get work done.

We have got to get the information technology working and start making some investments in our information technology.

We have got to fully fund our Patent Cooperation Treaty, which is an international treaty. We have got to fund the contracts so we can keep that work with our contractors so we can use our internal resources to work on U.S. patent applications.

PENDENCY GOALS VS. PENDENCY STATUS

Mr. MOLLOHAN. Let us go to your goals with regard to your pendency and your first response times. What are they right now?

Mr. KAPPOS. So right now—

Mr. MOLLOHAN. Average pendency.

Mr. KAPPOS. Average total pendency—I am doing this from memory—is about 35 plus months.

Mr. MOLLOHAN. And so that is 35 months starting when?

Mr. KAPPOS. Starting from when the patent application is filed to when we give a final decision on issuance or rejection.

Mr. MOLLOHAN. Okay. So just so emphasize it, from the time a patent application is filed to the average time it is disposed of one way or another is 35 months?

Mr. KAPPOS. Correct. Actually a little more than 35 months.

Mr. MOLLOHAN. Okay. And since that is average there are some shorter and there are some probably much longer.

Mr. KAPPOS. Sure.

Mr. MOLLOHAN. What is the first response time frame that you are working at? What do you call that?

Mr. KAPPOS. First action pendency.

Mr. MOLLOHAN. First action.

Mr. KAPPOS. Right. So the pendency until the first time we give a substantive answer to the applicant is somewhere around 27 months or so.

Mr. MOLLOHAN. So on an average a person filing an application would just say well a couple years from now I will hear from them for the first time.

Mr. KAPPOS. Correct, and that is not good at all.

Mr. MOLLOHAN. Well we agree with you.

So what are your goals now with this new budget? To what extent and how in terms of objective criteria, these numbers—

Mr. KAPPOS. Right.

Mr. MOLLOHAN [continuing]. What do you hope to achieve in terms of reducing those pendency periods?

Mr. KAPPOS. We are going to do three things. And of course it will take multiple years. With a backlog as big as we have we can't get it all done in one year. But we are going to do three things.

Mr. MOLLOHAN. Well we will talk about that in a second, but go ahead.

Mr. KAPPOS. Right, okay.

So we are going to take average total pendency down from the 35 plus to 20 months.

Mr. MOLLOHAN. So your ultimate goal a couple years out is to get to 20 months final disposition.

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. Okay.

Mr. KAPPOS. We are going to take average first office action pendency down to ten months. So 27 or so down to 10, a very substantial decrease.

Mr. MOLLOHAN. Okay. So we file it, we expect to hear from you in 10 months instead of 27 months.

Mr. KAPPOS. Yes.

PENDENCIES, OPTIMAL

Mr. MOLLOHAN. That is improvement.

Mr. KAPPOS. Those are the optimal pendencies.

Mr. MOLLOHAN. Well that is my next question.

What is the right time, I mean the optimal time to use your word, that a applicant should expect to hear back from you with first response and then final disposition?

Mr. KAPPOS. The answer is it depends on the applicant in the situation. Some applicants want to hear back immediately. There is no such thing as too soon for them. We will talk about them in a minute.

But on average, applicants actually want to have some time before they hear from us so that some prior art can get out there, so that they can do market research on their product, for a number of reasons. And it turns out that 10 months is optimal because it is as long as we can wait, but it is less than 12 months. Twelve months is when applicants have to make foreign filing decisions.

So optimally they want to have all of the information they can have from us shortly before they are required to make their foreign filing decisions, which is why you want to push close to 12, and 10 is about the closest you can get and give them time to respond.

Mr. MOLLOHAN. So these times, these target turn around periods are optimal turn around periods. I mean that is what your community, your customers so to speak, that is what they would like to—that is the goal they would like to see achieved.

Mr. KAPPOS. Right.

Mr. MOLLOHAN. They wouldn't like to see you turn these applications around any more quickly.

Mr. KAPPOS. Not in general. There are some who will, we can talk about those.

Mr. MOLLOHAN. Okay.

Mr. KAPPOS. So to talk about the ones who want a very quick response. So frequently—

Mr. MOLLOHAN. But let me just be clear on this and then please on that.

Twenty months for a final disposition and ten months for a first response. Those are the goals the communities advocate for.

Mr. KAPPOS. Right.

Mr. MOLLOHAN. And this budget that you are projecting here achieves those time frames in what time period?

Mr. KAPPOS. Well we will achieve the time frames, and if I am recalling right now, 2014 for the—I might have to refer to my notes here—but 2014 I believe for the 20-month total pendency and 2015 for the 10-month first action pendency. But it is 2014, 2015.

FEE SETTING AUTHORITY AND RESERVE FUND REQUESTED

Mr. MOLLOHAN. Okay. Let us quickly, and I am going to come back to the FTE numbers here later, but let me just finish up my line here by asking you about the funding scheme that you are proposing.

Elaborate on that beyond your introductory remarks, if you will.

Mr. KAPPOS. Okay. So let me make sure I have the question right. Our funding—

Mr. MOLLOHAN. Your proposal for funding and for your new fee proposal—

Mr. KAPPOS. Okay.

Mr. MOLLOHAN [continuing]. And your reserve fund that you want to create, and talk to us about this proposal and how this works for you.

Mr. KAPPOS. Okay.

So it starts with getting the bridge funding provided by the 15 percent surcharge next year.

Mr. MOLLOHAN. Right, because you want to build up the surplus and the reserve fund.

Mr. KAPPOS. Correct. And that helps us to build up starting with a \$50 million reserve fund so that we don't get ourselves in financial trouble in the future.

Mr. MOLLOHAN. Okay.

Mr. KAPPOS. It also enables us to start on the path toward recovery, hiring the 1,000 examiners, turning over time all the way on.

Mr. MOLLOHAN. Well the reserve fund doesn't do that. Your increased fees do that I think don't they?

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. They support your base budget, the reserve fund is sort of your float, if you will.

Mr. KAPPOS. Right.

Mr. MOLLOHAN. It is the "go to" you are proposing in case you don't meet your budget request—

Mr. KAPPOS. Right.

Mr. MOLLOHAN [continuing]. With your fee collections.

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. Okay.

Mr. KAPPOS. Right. So the next major piece to the financial product is having the ability for the Agency to set its own fees with significant oversight and user community input so that we insure that we are staying very balanced and reasonable, but that will provide us with the ability to get fees much more aligned with the cost of actually delivering services, which I believe will help significantly to prevent another major shortfall in the future.

Mr. MOLLOHAN. And a significant difference here in your proposal as compared to what the situation you face now is your fees are set. You can't adjust your fee rates, correct?

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. You can't adjust your fees.

Mr. KAPPOS. Right.

Mr. MOLLOHAN. What you are seeking is authorizing legislation at the best where you would be able to adjust fees through some process that you didn't have to come back to the legislature and ask for that, either through a rule making—is it through a rule making you are proposing that?

Mr. KAPPOS. Yes.

Mr. MOLLOHAN. Well that is not very efficient either. I mean if you actually have to go through a rule making before you change every fee you are talking about a year or two year process.

Mr. KAPPOS. Indeed it is a significant process, and so we wouldn't be changing our fees on any very short-term basis, we would be going through getting significant user input—

Mr. MOLLOHAN. And you are comfortable with having to do that?

Mr. KAPPOS. Yes, I am.

Mr. MOLLOHAN. I guess you are, because somebody told you you had to go that way or because it is okay with you?

Mr. KAPPOS. No, because I think it is actually critically important that we have input from the patent user community.

Mr. MOLLOHAN. I see.

Mr. KAPPOS. And that we keep our fees reasonably balanced.

Mr. MOLLOHAN. So you have an interactive process with your customers, if you will.

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. Okay. Are you requesting an authorization for this?

Mr. KAPPOS. Yes, it is in the President's 2011 budget, director fee-setting authority.

Mr. MOLLOHAN. But my question is a little different than that. That is a request to the appropriators. My question is are you seeking an authorization, going to the authorizing committee and asking for this fee structure change and the reserve fund approval?

Mr. KAPPOS. Well yes, we are. The director's fee-setting authority is a provision that is included in the Senate 515 patent reform legislation.

Mr. MOLLOHAN. Which you are working with the authorizers on both sides of the Capitol, the Senate and the House?

Mr. KAPPOS. Correct. Right. We are trying to support the House right now—

Mr. MOLLOHAN. Do you have an opinion from them as whether you are going to get an authorization in time to give us direction with regard to this fee proposal?

Mr. KAPPOS. No, I don't.

Mr. MOLLOHAN. You don't have an estimate?

Mr. KAPPOS. No.

Mr. MOLLOHAN. Well you might ask them. We will as well, but you might tell them how important it is. Okay. Well that is good.

Mr. Wolf.

EXPORT CONTROL AND SECRECY ORDERS

Mr. WOLF. I thank the Chairman.

I have a couple questions here in a different area. A few months ago I had a visitor to my office who raised a concern that the PTO put its complete patent application for software on the Internet. He was prohibited from exporting his product because of its potential military intelligence capabilities. He would never want to export it and I would be opposed strongly if he ever tried.

But our system of export control is meaningless if the plans for developing technologies are posted by the U.S. government on the Internet. We all know that our country's adversaries, China and others, our rivals are aggressively working to steal as much of our intellectual property as possible.

Two questions. Are you concerned that patent information on dueling technologies is on the Internet, and have you participated in any NSC led multi-agency to reform our Nation's export control laws?

Mr. KAPPOS. Okay, thank you for those questions, Ranking Member Wolf.

I am going to have to offer to get back to you on the second question, because I am not sure about that.

As to the first question, I certainly would be concerned about the export of U.S. controlled technologies.

The role that we play in the USPTO as the patent applications involves in our Agency a very course filter and then relying on other agencies, I believe DoD and DoE, to filter the vast majority of our patent applications and put those that involve controlled technology under secrecy orders. And so, to my knowledge, that process works pretty effectively.

I would be concerned though, if something slipped through, and I certainly would like to investigate that.

Mr. WOLF. Well if you would just give me a call and come back and take kind of a different approach on these secrecy orders.

In fiscal year 2008 there were imposed 69 secrecy orders and in fiscal year 2009, 103, more than 78 percent of these were DoD and NASA initiators, the remainder being foreign initiators.

But did the Patent Trademark Office impose any secrecy orders for reasons of economic security in either fiscal year 2008 or 2009?

Mr. KAPPOS. Not that I know of.

Mr. WOLF. That is important, because we are losing jobs.

What authority, if any, does the PTO have to impose secrecy orders for reasons of economic security?

Mr. KAPPOS. I actually don't believe we have that authority.

Mr. WOLF. But China is stealing us blind. And Mr. Chairman, I think when I hear of this program created in China, maybe we could carry language here, we are giving them that authority. Because while it is great the secrecy orders which would be a national security, but on economic security whereby the stories that I have heard is that China just kind of codes these things, it kind of comes through.

Let me take the third question. Should the technologies restricted for export by the Department of Defense, Commerce, Homeland Security, State, NASA, Justice, and Energy automatically be subject to a PTO secrecy order?

Mr. KAPPOS. So if I understand in the case where there is a dual use technology, right, that is covered—

Mr. WOLF. Put Defense, Commerce, Homeland Security, State, NASA, Justice, and Energy.

Mr. KAPPOS. Yeah, I would think that those issues should be getting caught by those other agencies that do the reviews for us.

Mr. WOLF. Well apparently they all haven't, and it troubles me too that you can't really be economic. Can you see the importance of the economic security?

Mr. KAPPOS. Sure.

Mr. WOLF. Almost ten percent unemployment in the country. The Chinese can come in and access patents and move that. You believe that the Chinese are looking at the patents that come on?

Mr. KAPPOS. I believe that China and lots of other countries are looking at them.

Mr. WOLF. And so does it make sense for you that you would have that ability because of economic security as well as national security?

Mr. KAPPOS. Difficult question to answer.

Mr. WOLF. Because if we get to 11 percent unemployment and 12 percent unemployment all you have to do is get on a train to Washington and take it to New York and look at the factories that are empty or closed.

Probably China is where it is now with the space program because of the stealing of technology. The cyber attacks against our government, DoD, Homeland Security and into companies.

So it is economic security. A great nation needs a strong economic base to support its national security.

You are shaking your head, you agree with me. So how do we deal with this?

I can see I caught you a little bit by surprise, but this is not a trick question.

Maybe we ought to get together and I can bring some people to see how we deal with this issue. Would you not agree that this is important with regard to the industrial base of the Nation so that we don't have this technology and information taken away?

Mr. KAPPOS. Right. I certainly agree with that.

If I could make a suggestion, perhaps this is an idea that we can put together some kind of a study to take a look at what level of potential expansion of secrecy orders makes sense.

Mr. WOLF. Maybe a 30-day study. I don't want a year study or two years. You will be practicing law downtown and move it onto somebody else. So if we can do a quick 30-day that would be fine.

Last question on this area. What arrangements does the PTO office have with the patent offices of Europe, Asia, and other agencies cooperating in non-publication from national or economic security when innovations are involved?

Mr. KAPPOS. I don't believe we have any arrangements. We handle non-publication on a unilateral basis. So for the USPTO, if we get a secrecy order, we put the entire case under lock, if you will, and don't publish anything. We don't tell overseas offices anything about those cases.

Mr. WOLF. So let me ask a last question. What does China do and what does England do?

Mr. KAPPOS. In fact I believe in both of those countries, and some other countries, they have the same requirement as we do for local applicants to get export clearance for their patent applications. So you have to actually go into their patent offices, just like you have to come into the USPTO, and give the office an opportunity to evaluate the subject matter for secrecy purposes.

The UK does that. I am quite confident China does and some other countries do so.

And so I expect they have programs similar to ours where they are pushing those applications through their security apparatus and asking the same questions that DoE and DoD do for us, and pulling some of those with secrecy orders.

Mr. WOLF. I hope you don't have any collaborative agreements with China, do you?

Mr. KAPPOS. Collaborative agreements?

Mr. WOLF. You are not bringing China over and sitting down with them and talking to them.

Mr. KAPPOS. Our major collaborative agreement, which we don't have with China, is called the Patent Prosecution Highway, we

have that with some other countries like the UK, but not with China.

Mr. WOLF. And so you are not doing this with China. What do you do with China?

Mr. KAPPOS. Well we are both members for instance of the Patent Cooperation Treaty, but there are many countries I believe, somewhere around 160 countries, or some huge number.

Mr. WOLF. What is your special relationship with China?

Mr. KAPPOS. I am trying to be helpful. Special relationship?

Mr. WOLF. Well rather than taking up the Committee's time with that why don't you think about these and then maybe arrange for a time to come on by.

Mr. KAPPOS. Sure, sure. Okay, thank you.

Mr. MOLLOHAN. Thank you, Mr. Wolf.

We have two minutes, 50 seconds to go vote, 339 members have not voted, just to let the Committee know, we have a 15 minute—finishing a 15-minute vote and two 5-minute votes.

Mr. Fattah.

PATENT REQUESTS: FOREIGN VS. DOMESTIC

Mr. FATTAH. Thank you, Mr. Chairman.

Along the lines of what the Chairman was talking about earlier, you know, I am very interested in how we can help you work through this backlog and how to get the decision packages done more quickly.

So your optimum is 20 months, and along this continuum of budget request you think you can achieve that by when?

Mr. KAPPOS. Again, I am doing this from memory, but I believe we can get to 20 months total pendency by 2014 and 10 months first action pendency by 2015.

Mr. FATTAH. Okay. And I am very sympathetic to the request in terms of the reserve fund and the 15 percent.

I have another question. Who is requesting patents? Who are the, you know, compared to domestic versus foreign requests what is the balancing of that these days?

Mr. KAPPOS. Okay. Well, I am fond of saying that it seems like everybody is requesting patents these days.

Mr. FATTAH. I understand that. My point is have we arrived at a rubicon where we now have more foreign companies requesting patents than domestic?

Mr. KAPPOS. Yeah, it is about 50/50. It depends on how you count, but the best way to count you come out about 50/50.

Mr. FATTAH. And is there any fee differential?

Mr. KAPPOS. No, there is no fee differential between foreign and domestic.

Mr. FATTAH. And what about your counterparts in the UK and other places, is there a fee differential?

Mr. KAPPOS. No. There are treaty requirements that cause all countries' patent offices to charge local applicants the same as overseas applicants.

PENDENCY BACKLOG REDUCTION

Mr. FATTAH. Okay. And the budget request for the additional 15 percent, this floating reserve fund, right, would generate about \$50 million?

Mr. KAPPOS. Yeah, the reserve fund would start at \$50 million, right. In my view it should become significantly more than that over time.

Mr. FATTAH. And if we wanted to front load the reduction and the delay can you quantify for the Committee how much more it would take to get this backlog to the optimum quicker?

Mr. KAPPOS. More quickly? Well so this is a very difficult point. I totally agree and I would love to get there quicker, but the problem I am going to have—my major tool would be to hire more people, but the problem I am going to have if I hire more people in 2011, 2012 is that it will cause the backlog to go down so fast that I will wind up having potentially some art units in the office literally run out of work, and I won't be able to get people out of the office fast enough by normal attrition.

So I am very concerned about over hiring in early years, which would cause an overshoot.

Mr. FATTAH. I can understand the desire for perfection here, but if you follow the Chairman's thought, and it is in your testimony, that there is a direct link between you doing your work and other Americans being about to go to work, and new inventions come on the market and so on, we might be willing to live with some unevenness.

And plus in your design you are going out and you are hiring former examiners in part, right?

Mr. KAPPOS. Uh-huh, correct.

Mr. FATTAH. In order to expedite this process, which I think is a great way to proceed.

So if the production of the patent decision expedites the development of new products in a way that puts lots of Americans back to work, it may be worth us trying to expedite your work, right? Versus worrying about how neatly the hiring and tradeoffs are in the packages of your personnel.

Mr. KAPPOS. Okay, correct. So we would be happy to go back and—

Mr. FATTAH. If you could provide that to the Chairman that would be helpful.

Mr. KAPPOS. Yes, absolutely.

[The information follows:]

COST OF SPEEDING UP HIRING OF PATENT EXAMINERS IMMEDIATELY

If the USPTO were to speed up the hiring process by hiring 350 more patent examiners during FY 2010, it would cost approximately \$12 million this fiscal year. There would not be any additional cost in the out-years due to already being included in the base funding in our FY 2011 budget request.

The below chart illustrates the impact of immediate hiring on patent pendency and backlog:

PATENT EXAMINER HIRES—ACCELERATE 350 IN FY 2010

Pendency reduction	Backlog reduction
—2011 0.8 mos	—2011 24,300 applications.

PATENT EXAMINER HIRES—ACCELERATE 350 IN FY 2010—Continued

Pendency reduction		Backlog reduction	
—2012	1.5 mos	—2012	24,500 applications.
—2013	2.1 mos	—2013	24,200 applications.
—2014	2.7 mos	—2014	23,700 applications.
—2015	3.3 mos	—2015	22,800 applications.

Mr. FATTAH. All right, thank you.

Mr. MOLLOHAN. We are going to recess and we will be back after two additional five minute votes. It shouldn't be too long. Ten, 15 minutes.

Mr. KAPPOS. Thank you.

Mr. MOLLOHAN. Thank you, Director.

The hearing will resume.

Mr. Schiff.

PATENT SYSTEM REFORM

Mr. SCHIFF. Thank you, Mr. Chairman. Director, good to have you with us.

Congress has been examining proposals as you know and we have discussed reforming the patent system for several years, and I believe the key to addressing the concerns with the current patent system is to work to increase efficiency at the PTO and improve the quality of patents as well as get rid of the backlog. In order to achieve those goals we need to insure we are providing the Office with adequate resources and staff.

What I wanted to ask you about was if you look at the fiscal year 2011 performance chart, you have provided estimates on fee collections for fiscal year 2015. The chart indicates that if funded accordingly, average total pendency will come down to 19.9 months.

Do those fee collection estimates contemplate the 15 percent surcharge or are you building that into your expectation? Can you tell us a little bit about how you arrived at 15 percent? And do the estimates also contemplate other fee increases?

In other words if you are building at 15 percent and you are asking for fee setting authority, are you contemplating other fee increases? If so, what kind of fee structure are you contemplating?

Would it be advisable, for example, to have a scaled fee structure where organizations that have multiple, multiple patent applications pay more because they are utilizing the resources and have the capacity to pay more?

The other question I wanted to ask you is sort of about the long term and about the historic record of the Patent Office.

I asked my staff to look at the Office's projections five years ago as a way of evaluating sort of the projections five years forward, and I know it won't surprise you to learn that the Patent Office, when they estimated this is what we will need to get rid of the backlog, were very close in getting what they said they needed. I mean they were a little bit off, but not off by that much. But when you look at what the result was, the result moved in the other direction.

In fiscal year 2006 the Office projected that the average first action patent pendency in fiscal year 2010 would be down to 18

months, but just a year later in fiscal year 2007 the projection was up to 23 months, and two years later it is up to 26.5 months.

So the resources have come in not all that differently than anticipated, but the pendency times, et cetera, have actually moved in the wrong direction.

So the increase in the times cannot be fully explained by a lack of resources, and this is coming from someone who is a strong advocate of more resources.

So I guess, you know, one question, and you know, I think we all have is, we want you to have the resources, but how much confidence should we have that if you are given the resources you say you need that the numbers will actually change in the right direction? So if you could address that.

And you know, the final comment I would make on the fee issue is, as important or as valuable as it may be for the Office to set fees, unless you have the advantage of using the fees, I don't want a situation where you are raising fees, not getting use of the revenues, and the Patent Office is being used to subsidize other government activities.

So if you could comment on those three areas.

Mr. KAPPOS. Okay. Well thank you, Congressman Schiff, those are great questions. I will see how many I can remember and you can perhaps guide me back to the other ones.

So relative to fee setting, which I think was one of the first issues.

FEE INCREASES CONTEMPLATED

Mr. SCHIFF. You know, let me summarize and make it easy for you.

The three categories I am interested in are do your estimates contemplate fee increases? Well, do they take into consideration 15 percent? Do you contemplate additional fee increases? And what do you think about scaling up those fees for sort of multiple, multiple users? Then how do you in evaluating the performance record of PTO for the last five years, what will you be doing differently to avoid the trap of getting the resources, but not getting the productivity? And then finally the retention of the increased fees.

Mr. KAPPOS. Okay. So the estimates contemplate both the 15 percent surcharge and separate fee increases, but not that they would be operating together at the same time.

So what I mean by that, as Chairman Mollohan pointed out before, is that fee-setting authority under notice and comment rule-making takes at least a year, and my understanding is between a year and 18 months in order to actualize.

If we are going to get started at improving the Agency immediately, we need to have access to additional funding before we would be able to get through any permanent reset of fees.

And so the 15 percent surcharge is designed as a bridge, it is sort of step one. It is something we can put in place immediately while we are working on resetting the fee structure in a more permanent way.

The 15 percent surcharge was calculated, as I mentioned before, literally on a requirements-basis. So we started by adding up what we needed to get done, figuring out how much that would cost,

then subtracting from it the funds we expected to collect, and that left us with some \$232 million, or around that level, that weren't going to be funded.

And so if you then do the math as we did, to ask how much if you were going to do a simple across the board surcharge, how much would you need to do, accounting for some amount of leeway or applicants changing behavior, and it just literally mathematically comes out to 15 percent, so that is how we got the number.

Mr. SCHIFF. And I guess this gets to the Chairman's point, which is a good one. That you know, in the ideal situation you would develop a five-year plan for reducing the backlog, swift processing of patent applications, tell us what you need to establish that and we would appropriate the money. If it is more than the fees, then we would appropriate more than the fees, if it is less than the fees, you know, theoretically we could appropriate less than the fees.

It sounds like in the beginning it would be more than fees because it will take you time to change the fees, but is it your goal with the 15 percent and whatever additional increment to set the fees at a level that presumes that that will be the budget sufficient for the Agency to eliminate the backlog, et cetera?

In other words is what you will be aiming for with a 15 percent increase and whatever fee increases and however they are scaled on top of that to arrive at a fee level that would make the Agency self-sustaining in this downward backlog reduction trajectory without having the necessity of the appropriation of any funds on top of fees, but at the same time using all the fees that are collected?

Mr. KAPPOS. Yes, that is correct.

FEE SCALING FOR MULTIPLE USERS

Mr. SCHIFF. Okay. And what do you think about scaling the fees for the numbers of applications?

Mr. KAPPOS. Right. So for multiple users, we are actually working on something that is similar to that, and I want to use an approach when we get to fee setting, if we get Agency fee setting authority, that would be very, very similar, which is to charge differentially, based on the number of pages that are submitted in the application based on the number of claims that are submitted more so than we do now.

We currently have some level of additional charge for additional claims, but it needs to be substantially higher for additional claims.

So you get very close to the same place by charging based on the amount of work that we have to do in order to handle the application, which is a function of the number of claims and the number of pages of specification.

Mr. SCHIFF. How will you handle a situation where we have organizations that acquire patents from others where you would need to pierce the veil to see who the patent owners are to know how many applications they are making and how do you deal with that situation?

Mr. KAPPOS. Well that is a significant problem, and that is one of the reasons that I think the way to get at the issue that we are talking about here, which is to differentially charge those who are requiring more of the offices resources, the way to do it is on a per page and per claim basis, because then you don't have to ask the

real party in interest or piercing the veil kind of question, you cut through that, just look at the individual application and say how much resource are we going to have to put into this as a function of the number of claims and the number of pages of specification and charge on that basis?

Mr. SCHIFF. Are there other policy reasons though why you might want to know what the patent owners are in terms of the utilization, the system, the transparency of the system?

Mr. KAPPOS. Well there certainly are in my view some good reasons.

We currently get information on, of course, the inventors, and the true and correct inventors have to be disclosed, right? And then we get information on whoever the patent application is assigned to, if the assignee wants to have all the legal rights that you get from being transparently listed as an assignee.

But to your point, applicants are able right now to form any kind of company they want, including shell companies, and list those as the assignees on applications. And in my view that indeed does create some transparency challenges. Because then, once a patent issues, and even when the application publishes, a member of the public can't tell who is truly the owner of the patent or patent application by looking at the assignment records.

OUTCOMES

Mr. SCHIFF. And can you comment briefly, because I am probably running out of time, what should give us more confidence that with the resources that you are contemplating we will see a different track record than your predecessors?

Mr. KAPPOS. Right. So look, we are doing everything differently, okay?

There were many problems that have come up in the past starting with skating to where the puck is rather than where the puck is going, and we are trying to skate to where the puck is going rather than where the puck is.

Putting it more specifically, there were terrifically high attrition rate of examiners who had been hired within the last two to four years. Those are the examiners that we have invested a tremendous amount of money into training and they were the people who we had gotten the least pay back from, if you will, in terms of production and work.

By changing our hiring demographic, just one example, to trying to hire experienced IP professionals, former examiners, and people who at least have some life experience with the IP system, we hope to get a much more mature workforce demographic that will require a less training aggregate and will have lower short range attrition. So that is just one example that can have a tremendous impact on the Agency.

Mr. SCHIFF. Does the top end of the pay scale pose a real limit on the quality of the applicants you can hire and your ability to retain them? Is that something that needs to be looked at as well?

Mr. KAPPOS. I believe that our pay structure is okay. It is not as much as people make in the private sector, and we do lose employees to the private sector, but I have plenty of examiners who are telling me we feel like the pay isn't the issue at the Agency.

They are issues like the work mix, like the management, and the structure of the management, and the incentives that we have been giving to management, the IT tools which are terrible, I commented on those before. Those are the issues that our examiners rightly complain about.

I truly believe that while our pay is not what the private sector is, that is not the issue that is holding us back.

Mr. SCHIFF. Thank you, Mr. Chairman.

Mr. MOLLOHAN. Mr. Ruppertsberger.

CYBER SECURITY

Mr. RUPPERSBERGER. I know Mr. Wolf raised the issue about the cyber security issue, and because your mission is fostering innovation through technology and capital investment and whatever, do you have a security team that is working with Homeland Security or whatever?

Because we know China, Russia, other—we are getting a lot of cyber attacks. Are you working—because the information that you have and gets in the hands, and we know it has, especially to China, millions of dollars worth of intellectual property is gone.

Where are you as it relates to your security? Are you just starting, have you identified anything, where are you there?

Mr. KAPPOS. Okay. So thank you for that question.

We do have a security team at the USPTO. We also are working with our colleagues at the Department of Commerce which has a significant focus on cyber security related issues, and working to ensure that the USPTO is not vulnerable to those kinds of attacks.

Mr. RUPPERSBERGER. All right. Well, I think hopefully you will be very aggressive in that regard, because we are just—Homeland Security is taking a little while to step up, but I think your area should be made a priority, and if you have any issues there if you could contact me in my office we would like to deal with you on that.

And I will take this to another level. On the attachés embassies throughout the world that are there to help us to work with us to make sure we are protecting our American business and as far as their trade secrets or whatever, just discuss that program a little bit, and how are we also protecting them from the cyber attacks or any other intelligence gathering countries or people that are trying to get in fact.

Mr. KAPPOS. Okay. So yeah, our attaché program is relatively new still, I believe we started it in 2006. We have USPTO employees in several important countries, including China and Brazil and several other places, southeast Asia, India.

When they go overseas they are typically housed in the U.S. government embassy and are put on information technology systems that are the same ones that foreign commercial service employees are put on.

And so our view is that they have good security by virtue of being on the same secure systems that the foreign commercial service folks are on.

Mr. RUPPERSBERGER. Okay, good. Thank you.

Mr. KAPPOS. Okay, thank you.

Mr. MOLLOHAN. Mr. Wolf. I anticipate this being a last round.

EXAMINERS

Mr. WOLF. Thank you, Mr. Chairman.

Given the PTO's backlog of patent applications, how many additional examiners and how much more of an operative budget and how long will the PTO need to meet the one year processing goal? So really how many more examiners? You said 1,000, but you said some are retiring. So how many more, how many more operating budget to become any chance of the one-year processing?

Mr. KAPPOS. Okay. So as to examiners, our plan would be to hire 1,000 in fiscal year 2011 and then 1,000 again in fiscal year 2012. But of course there is attrition, so if you factor in retirements and other attrition you would be netting somewhere over 500 examiners each year. So we would have a net increase of workforce of somewhere over 1,000 examiners after the end of the second year.

Mr. WOLF. So each year they are retiring you would have retirees, so that counts. And then the following year retiring and the following year? I mean as you get—each year more people are going to retire from there, so that is counting—that would get you up on a permanent basis to the level.

Mr. KAPPOS. Correct, right.

INCREASE IN FEES AND INDUSTRY SUPPORT

Mr. WOLF. And how high would you need to raise fees in order to fund the one-year processing, and how would that be reacted to by the industry?

Mr. KAPPOS. So in terms of the increase on fees, we are working on formulating those numbers and haven't gotten them completed yet. We will be getting a lot of input from the IP community to insure that the IP community is together with us in whatever we propose.

Mr. WOLF. Do you have any rough idea?

Mr. KAPPOS. It actually depends on the fee. There will be some fees frankly where we might either reduce them or don't change them at all. There will be other fees that will go up very substantially, and there will be other fees that we'll raise incrementally.

Mr. WOLF. Okay. So you're feeling that the industry would still support that?

Mr. KAPPOS. Yes, I actually believe that. Because they will be getting something for their money, which is reduced pendency, very substantially.

INTELLECTUAL PROPERTY THEFT ESTIMATE

Mr. WOLF. Do you have an estimate of the level of revenue lost by U.S. businesses from intellectual property theft each year?

Mr. KAPPOS. I don't know. I certainly don't have an estimate of that.

Mr. WOLF. Is there any way that you could look at that?

Mr. KAPPOS. We certainly can take a look. It may be a hard thing to estimate, but be happy to try. We have a new chief economist and that would be a good project for him to look at.

Mr. WOLF. And if you would also estimate who is responsible for it, what countries would that be that may be responsible for that loss.

Mr. KAPPOS. We would be happy to take a look at that.

INTELLECTUAL PROPERTY RIGHTS

Mr. WOLF. Does the Patent Office work on promoting intellectual property rights internationally?

Mr. KAPPOS. Yes, we do. And we have a number of programs that are very centrally directed to international IP rights, including the IP attaché program that we were talking about before, and very significantly including our external affairs mission just focused on U.S. global leadership of intellectual property rights.

Mr. WOLF. How closely do you work with the FBI and Homeland Security to prevent and investigate intellectual property rights crimes?

Mr. KAPPOS. Well of course we support the FBI and Homeland Security and other enforcement agencies, and we work closely with the IP enforcement coordinator at the White House in order to support them.

Mr. WOLF. Who is the IP coordinator at the White House?

Mr. KAPPOS. That is Victoria Espinel.

Mr. WOLF. And who is she under? Is she on the National Security Council or who is she under?

Mr. KAPPOS. I believe she is in the office of the Vice President in OMB.

Mr. WOLF. Oh, it is OMB. Is that a new position?

Mr. KAPPOS. Yes, it is.

Mr. WOLF. As of when? Is she a Czar or is it a different area? No, I meant that, that was a serious question. Was this by authorization a statute or was it—

Mr. KAPPOS. By statute.

Mr. WOLF. She was authorized by statute. And she is the first one?

Mr. KAPPOS. Correct.

Mr. WOLF. Could you ask her, we would like to have the opportunity to just talk to her some time, maybe she could—I don't always get my calls returned from the White House, so if you could maybe—

Mr. KAPPOS. I would be happy to speak with Victoria.

JOB CREATION AND PATENT PENDENCY

Mr. WOLF. I appreciate that. I think that is pretty much it.

Just one additional question. What is the relationship between patent pendency and job creation? Have you ever looked at that? Is there a connectively to it? I mean there is, but I mean have you ever looked at how it is—

Mr. KAPPOS. Yes, I believe there is a relationship, and I believe it is a directly correlated relationship. Meaning that the longer patent pendency is, the worse we are doing at job creation, and I believe there is actually a strong relationship between getting patents out of the USPTO and creating jobs for Americans.

Mr. WOLF. Well that was a next question. How harmful is it to the U.S. economy that it takes a patent application almost three years? Has anyone ever done a study with regard to the length and the economy?

Like one of the questions when you were testifying earlier I wrote when, when was the best year ever?

Mr. KAPPOS. For patent pendency?

Mr. WOLF. For patent pendency.

Mr. KAPPOS. Well without looking back to the time of our founding fathers, recently I believe—

Mr. WOLF. In modern times.

Mr. KAPPOS. In modern times I believe there was a time in the 1980's when pendency was very favorable.

Mr. WOLF. What were the conditions then insofar as the numbers, insofar as the spending? Why was it favorable then and not now?

I am sure there is no—I mean there must be some connection as to was it—

Mr. KAPPOS. Well there were a lot fewer patent applications.

Mr. WOLF. Well then that is not a good reason. I mean when was the best year that you were doing very well? Not you, but the Patent and Trademark Office, when the number was still relatively high?

Mr. KAPPOS. I don't believe in really recent history. In the last ten years the backlog has just gone monotonically up.

Mr. WOLF. If you were to reduce that the way you want to do you think—is there any study showing what impact that would actually have on the economy?

Mr. KAPPOS. Well, we do have some information, in fact a new study that we are just in the process of completing and anxiously want to share with the Subcommittee, does not go, Ranking Member Wolf, all the way to showing a direct correlation between patent output and jobs, but that is one of the projects that our new chief economist is focusing on, because we are very concerned about exactly the point you are raising, and we want to know exactly what the relationship is between patent output and job creation. We are in the process of studying that now.

Mr. WOLF. So now basically you understand and believe that, but you don't have any proof, but what you are working on is a study?

Mr. KAPPOS. Correct.

Mr. WOLF. Okay. Well thank you very much. If we can chat with you some time with regards to the economic security issue, I guess you would have to determine what the standard was with regard to economic security. But when I see the loss of jobs and America has taken a leadership in so many areas and knowing how people are cherry picking and taken away I think it is something hopefully we can work out an argument to give you that opportunity to look at economic security as well as national security.

Thank you for your testimony.

Mr. KAPPOS. Okay, thank you.

PENDENCY REDUCTION TIMELINE

Mr. MOLLOHAN. Okay, thank you.

Mr. Kappos, we talked about reducing pendency in terms of time and we are at 35 months and optimum is 20 months for final determination, which is your testimony. And under this budget request for fiscal year 2011, if everything worked well, if you got all your

fee and surcharge approvals wherever you got them, you would reach the 20-month period in what time frame?

Mr. KAPPOS. Okay, this is where I need to actually correct what I mentioned before, because I was reversing the dates.

We would reach the 20-month period in 2015, and the 10-month first action period in 2014. So I apologize for reversing those dates.

Mr. MOLLOHAN. Well that makes sense actually, which is a good thing. Okay.

So this is really a multi-year effort to get to that, and that speaks to the question that Mr. Fattah was getting to. How do you modulate the employment or potential employment bubble? And I guess it is by not doing it three years earlier.

Mr. KAPPOS. Right. Exactly right.

Theoretically we could hire 1,500 or 2,000 people next year, but it would then cause us in somewhere around 2014 to go down a cliff in pendency and overshoot the ideal pendency level, which by the way is about 320,000 applications in the Office at any one time.

The reason I say that is because we are operating a large work flow engine like a production environment similar to a factory in many ways, and you need to have inventory at all stages of the production system.

Three hundred and twenty thousand applications ensure that at any one time there are about 70 dockets on the workload of each examiner, which ensures that each examiner has cases at all stages. Brand new cases, cases in the amendment process, older cases. They all move on their own time cycles, but it enables each examiner to have a very steady workflow.

If you take the docket load down much below 70 you literally can risk examiners running out of work, and I don't want that to happen.

Mr. MOLLOHAN. Well, I want to talk about strategies of achieving what Mr. Fattah was speaking to in avoiding that bubble that we were just eluding to.

But first I would like to get some absolute numbers with regard to your backlog. Right now what is your backlog?

Mr. KAPPOS. About 750,000 unexamined applications. And if you include the number that some are in examination the total number is about 1.2 million. So that means 750,000 that we haven't even picked up to look at yet, and an additional 450,000 or so that we are currently looking at, but we haven't made a final decision.

BACKLOG REDUCTION WITH AND WITHOUT SURCHARGE

Mr. MOLLOHAN. Well let me ask you this. How do you define backlog?

Mr. KAPPOS. The backlog is the total number of pending, meaning filed, but unexamined applications.

Mr. MOLLOHAN. Unexamined meaning not even looked at initially.

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. So backlog is unexamined. Then what do you call those that are in the examination process but are processing through over that two-year period?

Mr. KAPPOS. We refer to those as in process applications.

Mr. MOLLOHAN. Okay. So right now today you have 750,000 backlog.

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. You have not looked at 750,000 applications?

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. And in process you have how many?

Mr. KAPPOS. In process, again doing this out of memory.

Mr. MOLLOHAN. And that doesn't count the 750-. I am looking for the number that you have first looked at and are now being processed.

Mr. KAPPOS. Correct. Somewhere around 450,000. That is why you get to—1.2 million as the total number of cases that are in the Office that haven't had a patent granted or denied yet.

Mr. MOLLOHAN. Okay. You are effecting efficiencies and trying to do things right now within your fiscal year 2010 budget to achieve some reduction in the backlog.

So first, at the end of this fiscal year by October 1st of 2010 do you have a projection for a reduction hopefully in your backlog, and what would that be?

Mr. KAPPOS. I am going to have to refer to my notes on that. I do have some information. Current course and speed, at the end of this year, because we are not hiring enough people to counter for attrition—

Mr. MOLLOHAN. Because your 2010 budget won't allow you to do that.

Mr. KAPPOS. Correct.

Mr. MOLLOHAN. Okay.

Mr. KAPPOS. So this is showing slightly different numbers, but it is showing that the end of year—I will give you the number here, but I would like to actually confirm this if it is okay. It is showing an end of year backlog at the end of 2010 of 692,350 applications.

Mr. MOLLOHAN. And 350 applications, what does that mean? In process?

Mr. KAPPOS. No, backlog. Unexamined. So 692,350.

Mr. MOLLOHAN. Okay.

Just taking the backlog numbers, at the end if you were to get everything you are asking for in your budget request for 2011 to what number I am assuming you would reduce the backlog?

Mr. KAPPOS. Right. We would be taking it down to a little over 668,000 in 2011.

Mr. MOLLOHAN. At the end of 2011 you would go from 92 to 68? I tell you what, instead of doing it this way submit this for the record.

Mr. KAPPOS. Sure.

[The information follows:]

BACKLOG NUMBERS WITH OR WITHOUT SURCHARGE

See below chart detailing projected backlog numbers under the two requested scenarios for Fiscal Year 2009–Fiscal Year 2015. Note that the backlog numbers below are consistent with the President's FY2011 budget and were premised on hiring 600 new examiners. Given USPTO that these hires were not made, the estimates for at least FY2011 and 2012 may at the end of these years be slightly higher.

	2009	2010	2011	2012	2013	2014	2015
2011 President's Budget:							
Average First Action Pendency	25.8	25.4	25.8	19.1	10.7	10.9	10.8
Backlog	718,835	705,010	614,392	496,334	378,799	343,029	335,538
No Surcharge/Fee Setting Authority:							
Average First Action Pendency	25.8	25.8	26.0	26.6	28.0	30.1	33.0
Backlog	718,835	719,077	724,908	750,038	803,559	888,034	1,003,369

Mr. MOLLOHAN. And what I would be interested in saying is this is what I would like to get at. Given your budget request what would you get to and in each of the next let us say four years?

Mr. KAPPOS. Okay, sure.

BACKLOG, OPTIMUM

Mr. MOLLOHAN. And we got to the pendency that you wanted, optimum pendency. What is your, if this is the right way to ask it, optimum backlog level at any one time?

Mr. KAPPOS. About 325,000 total applications.

Mr. MOLLOHAN. Why wouldn't zero be your backlog goal or your optimum backlog goal?

Mr. KAPPOS. If you had zero, that would mean you would be picking up applications to examine them immediately when they arrived at the Agency.

Mr. MOLLOHAN. Yes.

Mr. KAPPOS. Right. Which would mean you wouldn't have access to the prior art, because there is lots of prior art that takes months to get access to, which would not enable us to—

Mr. MOLLOHAN. No, because that assumes—getting access to prior art assumes you have touched the paper and it is no longer backlog, right, it is in process?

Mr. KAPPOS. No, the prior art are all those documents out there that constitute work that was done before that can affect the patentability of the invention, and much of it isn't available to us when the application is filed.

Mr. MOLLOHAN. Okay, well would you just submit an assessment—a discussion of this for the record, please?

Mr. KAPPOS. Sure.

[The information follows:]

FACTORS CONSIDERED IN FORMULATING OPTIMAL BACKLOG LEVEL

[NOTE: ALSO ADDRESSED IN USPTO'S SUBMITTED QFR'S (SEE MOLLOHAN, Q6)]

Given USPTO's current workload and budget, the agency currently expects that with its FY2011 request, it can to reduce average pendency for first action on patent applications to 10 months by FY2014 and reduce average total pendency time to 20 months by FY2015. USPTO is targeting a patent inventory backlog level of 10 months (approximately 379,000 applications). Factors that were considered in formulating USPTO's aggressive pendency reduction goals included an analysis of international filings, patent term adjustment considerations, publication of patent applications, patent application docket management and international best practices—all of which were considered with the overall objective of providing *optimal*

service for our innovators. The resources provided by the FY2011 Budget are crucial to achieving these goals.

REDUCTIONS NECESSARY WITHOUT AUTHORIZED SURCHARGE

Mr. MOLLOHAN. With regard to the surcharge. We have already talked a little bit about your authorization. We would prefer that you have an authorization, that you go to the Senate and the House and get authorization. You said you are talking to the Senate and the House and that that is being considered.

If you don't get an authorization for your budget request you are going to request this Committee to actually include this; is that correct?

Mr. KAPPOS. Yes, correct.

Mr. MOLLOHAN. In the budget. What if you weren't approved? What expenditures would you expect to curtail to insure that your operations would not exceed the revenue collected from the current fee structure?

Mr. KAPPOS. Well, we would have to limit our hiring of course. We would be hiring about to the attrition level.

We would be not able to undertake our IT improvements which are critical to improving the Agency.

We would be at a lower level of overtime than optimal and a lower level than we are at this year. And as I mentioned, overtime is the most efficient way for us to run the Agency. In fact, it produces more income than it costs in terms of training the examiners.

And we wouldn't be able to fund the PCT treaty work that keeps overseas work off of the plates of our examiners.

Mr. MOLLOHAN. So you spent a lot of time developing this and you have thought through the fee structure you want, and if you don't get it nothing gets better over there, and if they are approved through the authorization process or through the appropriation process you really have a way forward here to achieve the long-standing goals of getting these pendency periods and number of applications that are involved to an expectable business accommodating level.

Mr. KAPPOS. I think we really do, yes.

Mr. MOLLOHAN. Well, I had no more questions.

Mr. WOLF. Mr. Chairman, if I could just—

Mr. MOLLOHAN. Sure.

TELEWORK—LONG DISTANCE

Mr. WOLF. Okay. The staff had met with your people and years ago we authorized the telework program that you are using. We were told that you are interested in creating a long distance telework program which would increase the recruitment.

Can you explain how the program would work and are you seeking legislative language in this report or this bill to give that you ability on a pilot, or do you have ability to have a pilot or do you need some language that gives you the ability to have a pilot?

Mr. KAPPOS. Well, thank you for those questions.

We are working, in fact, earnestly on putting together what I call a nationwide workforce program which will enable the USPTO to set up satellite offices in cities and states very distant from Washington, D.C.

The plan that we are working on will use existing facilities, including already available government facilities, so very well-controlled real estate costs. It will include hiring obviously employees from the local workforce with preference to people who have deep experience in the IP system, again, so that we don't have to invest tremendous amounts of money. It will take advantage of good cost of living areas of the country in order to bring these people in. And it will have to manage within our IT infrastructure capabilities.

Right now we have the ability to bring on, I believe it is something like 350 more remote workers onto our current IT infrastructures, so we have got all of that in the plan.

Mr. WOLF. And have you shared that language with your authorizers?

Mr. KAPPOS. So there is language that is pending that will enable us to effect that plan most efficiently in a couple of bills, including Senate 515.

There is another bill that is pending, and I forget the number of it right now, but another bill that also has nationwide workforce or distant teleworker language in it which would get us the authorization that we need.

Mr. WOLF. Now there was a question. Do you expect there to be a bill this year? Do you expect to have a bill this year and authorizing this year?

Mr. KAPPOS. Well that is a difficult question.

Mr. WOLF. Was there any sense that there is? Or I wondered if there isn't then maybe you should share with the Chairman language that would enable you to move ahead certainly on a pilot. Because if you don't get one this year then you are into the following year, and pretty soon you just push this thing farther and farther behind.

And I am looking at the numbers here, I mean, you have one of the better percent of eligible positions at the PTO that are teleworking; 81.85 percent of the eligible patent positions that are teleworking 82.52. That is pretty impressive. And I think you have demonstrated that is a less expensive way, office space and every other way.

But if you don't think you are going to get it maybe you can share it with the Chairman and it would give you the ability to move ahead on that. Obviously check in with the authorizers first.

Mr. KAPPOS. Well thank you, we will certainly do that.

[The information follows:]

PROPOSED TELEWORK LEGISLATION THAT WOULD SUPPORT USPTO'S PROGRAM

(NOTE: USPTO ALSO RESPONDED TO A QUESTION ON TELEWORK IN ITS SUBMITTED QFRS
(SEE RESPONSE TO REP. WOLF, Q1 & Q2))

As requested, the following bills addressing telework have been provided to the committee:

- H.R. 1722 (as reported out of Committee 5/4/2010)
- S. 707 (as passed by the Senate on 5/24/2010)
- S. 515, Section 13 (as reported out of Committee 4/9/2009)

Mr. WOLF. Tell me how bad things would be, because it was actually my idea, so I want to hear, tell how bad things would be seriously if you could not have telework at PTO.

Mr. KAPPOS. We would have much higher attrition, we would have gotten nothing done during the recent snowstorms where we operated the Agency at nearly full capacity despite the fact that nobody could come into work for four days.

I believe it would multiply our pendency problems and exacerbate all of the other issues we have had at the Agency, because telework is such a huge employee benefit.

Mr. WOLF. Yeah, I mean there is nothing, Mr. Chairman, to locking yourself into a metal box and driving from beautiful West Virginia driving downtown when you could just stay in West Virginia, and I think it has been one of the most successful. We have had great resistance, the agencies that now use it love it. So hopefully if they don't get the authorization we would give them the ability so they can move ahead. Thank you.

Thank you, Mr. Chairman.

Mr. KAPPOS. Right. We will make sure the to send the language to the Chairman.

CLOSING REMARKS

Mr. MOLLOHAN. That is also probably one of the strategies to use to avoid this bubble—to avoid a hiring bubble as you get experienced people on telework.

Thank you, Director Kappos for your testimony here today and for your good work with the Agency. We look forward to working with you and being as responsive as possible to your requests.

Mr. KAPPOS. Okay, thank you very much.

Mr. MOLLOHAN. Thank you.

Chairman Alan Mollohan
Questions for the Record

Fiscal Year 2011 Budget Request

USPTO's fiscal year 2011 budget request totals \$2.322 billion. This amount is comprised of two components: \$2.098 billion in revenue from current fee authorities and \$224 million in new interim fees. In total, the budget request represents an increase of \$435 million – a nearly 25 percent increase -- over last year's enacted level.

1. Why is an increase of this magnitude justified?

Answer: The size of the increase reflects a commitment to dramatically reduce unacceptably long patent pendency which negatively impacts economic growth in all sectors of the economy. This request seeks to recover the total actual cost of processing and examining the multiyear backlog of filings over the next 4 to 5 years which makes it necessary to hire additional examiners. USPTO needs to reduce patent pendency in addition to investing in our IT infrastructure as well as other investments that support operations of the Office as a whole.

In the past, USPTO has said that it must reduce the total average pendency for patent applications and reduce the patent inventory backlog by hiring new patent examiners, and investing in critical information technologies.

2. How many patent examiner FTEs are currently on board?

Answer: The USPTO has 6,144 (positions) patent examiners on board as of March 31st. By the end of the year, assuming the hires and attritions shown below, this will equate to approximately 6,150 patent examiner FTEs.

3. What assumptions has the Administration made for the number of patent examiners that will leave the agency in FY10? How many of those FTE does the agency expect to fill in FY10?

Answer: USPTO is forecasting approximately 300 patent examiners will leave the agency this fiscal year. Although our original hiring plans in the FY 2010 Budget called for 600 patent examiner hires, with currently available resources, the revised hiring target is now 250 patent examiners this fiscal year.

- 4. At the request level, how many FTEs does the agency expect to lose in FY11? How many new patent examiner FTEs will USPTO hire in fiscal year 2011 – the net increase?**

Answer: USPTO is forecasting approximately 481 patent examiners (or roughly 240 FTE) will leave the agency in FY 2011. The current hiring target is 1,000 patent examiners (440 FTE), for a net increase of 519 positions and 200 FTE.

USPTO expects to reduce average pendency for first action on patent applications to 10 months and reduce average total pendency time to 20 months by FY13.

- 5. Is that goal the ideal? What would be the optimum backlog? What resources would USPTO need to get to the ideal?**

Answer: Given our current workload and budget, USPTO currently expects that with its FY11 request, it can to reduce average pendency for first action on patent applications to 10 months by FY14 and reduce average total pendency time to 20 months by FY15.

Reducing patent pendency is one of Secretary Locke's High Priority Performance Goals. USPTO is targeting a patent inventory backlog level of 10 months (approximately 379,000 applications). Our aggressive pendency reduction goals are based on our analysis of factors related to international filings, patent term adjustment considerations, publication of patent applications, patent application docket management and international best practices, with an overall objective of providing optimal service for our innovators. The resources provided by the FY 2011 Budget are crucial to achieving these goals.

- 6. What is the current average pendency for first action, and what is the current total average pendency for patent applications?**

Answer: First action patent pendency at the end of March 2010 was 27.2 months with total pendency at 34.6 months.

- 7. What is the expected patent inventory backlog level at the end of FY10?**

Answer: USPTO is currently estimating the patent inventory to be approximately 698,000 applications at the end of FY 2010.

- 8. At the request level, what is the expected patent inventory backlog level at the end of FY11?**

Answer: USPTO is targeting to have a patent inventory of approximately 614,000 applications at the end of FY 2011.

9. At the request level, what IT investments will be made?

Answer: As detailed further in the FY11 Budget request, USPTO would make the following IT investments:

- Patent End-To-End Processing (\$50,000,000) – Funds are needed to transition the patent application process to one in which the majority of applications are submitted, handled and prosecuted electronically.
- Trademarks Next Generation (\$23,300,000)– Funds are requested to virtualize, improve, and physically separate trademark automated information systems (AISs) from other USPTO AISs.
- IT Infrastructure Stabilization and Maintenance (\$10,608,000)– – Funds are required to stabilize and maintain the USPTO's aging IT infrastructure while a new 21st Century system is designed and developed.
- IT Hardware Replacement (\$17,644,000)– – Funds are required for the Capital Hardware Replacement Program, which is an annual replacement and renewal of all IT assets based on hardware lifecycles.
- Business Projects (\$6,149,000) – Funds are required for systems related to our support organizations, CFO, CIO and PA.

10. Is this a one-time investment? Will the system be completed? If not, how much will the entire system cost?

Answer: As shown in the USPTO's FY 2011 President's Budget, these investments will require additional resources beyond FY11 for their completion. The specific requirements and dollar amounts anticipated through FY15 for the initiatives above are included the USPTO's budget submission at page 41.

Surcharge: Interim Fees

USPTO's budget proposes a temporary surcharge on patent fees that would make an additional \$224 million available for obligation in fiscal year 2011. The authority to impose these interim fees is proposed as appropriations language.

11. Did the Administration submit the proposal to the appropriate authorizing committee? Why was the surcharge submitted to this Committee?

Answer: Yes, a request for a 15 percent interim surcharge on patent fees and fee setting authority was requested in S. 515, the "Patent Reform Act of 2009." Our understanding is that the surcharge in S. 515 was removed from the legislation because this increase if implemented in an authorization bill would be

considered a “new fee” and may require a 25 percent offset to comply with scoring rules..

The USPTO is funded through off-setting fee collections. The request for a 15 percent surcharge applied to patent fees is necessary to generate the revenue beginning in FY11 to address the significant backlogs and unacceptably long pendency times.

12. These interim fees are to be derived by applying a 15 percent surcharge on certain fees. On which fees will the surcharge be imposed?

Answer: The surcharge will be applied to patent prosecution fees, namely: filing, search, examination, excess claims, application size, requests for continued examination, extensions of time, appeal, revival, issue and maintenance. These fees are charged or authorized by sections 41(a), (b), (d)(1) and 132(b) of title 35, United States Code, as administered under Public Law 108–447 and this Act.

13. Why is such an “interim” measure necessary at this time?

Answer: The interim patent fee increase is a first step in the overall plan to address a sustainable funding model for the USPTO. Authority to impose an immediate increase in the form of an interim 15 percent surcharge will allow time to address the appropriate realignment of fees through the rule making process, which is the USPTO’s preferred method for fee setting. To begin this process, USPTO requires authority to propose and set its fees as also requested in its FY11 Budget Request.

The USPTO needs to receive authority for an interim patent fee increase in FY 2011 to improve patent pendency and backlog and to replace antiquated IT systems over the next two to three years.

The USPTO does not currently have full fee setting authority. This “interim” surcharge – or bridge – to increase to patent fees is necessary while two things take place: (1) the USPTO obtains full fee setting authority to align fees with the cost of services via rule-making, and (2) the USPTO executes its rule-making authority by engaging the user community in setting a fee schedule that more appropriately aligns the cost of services with fees and also reflects their interests. Fee setting through rulemaking requires 18 – 24 months. The interim increase would be effective within 10 days of enactment to provide funding necessary to address patent pendency and critical information technology requirements as defined in the budget request.

14. For what period of time will these "interim" fees be charged?

Answer: The interim fee increase is expected to be necessary through FY11 and into FY12 or until the USPTO is able to establish a new fee structure through the rule-making process with involvement of stakeholders, Congress, the Public Advisory Committees, and the user community.

15. What is the reaction of USPTO's stakeholders to this proposal?

Answer: Overall, the reaction of USPTO's stakeholders to the interim surcharge has been favorable. Most practitioners and businesses recognize the relationship between a strong economic business climate and support for intellectual property. In turn, stakeholders are willing to support increases in fees to reduce pendency and the services that the USPTO provides in facilitating intellectual property rights as long as they have some assurance that those fees will be used to support USPTO.

16. Have the appropriate authorizing committees of the House and Senate taken a position with respect to these interim fees? If so, what are their observations or concerns?

Answer: In a letter dated March 4, 2010, addressed to the Chairman and Ranking Member of the House Budget Committee, submitting the views and estimates of the Judiciary Committee on the President's budget proposal for Fiscal Year 2011, Chairman Conyers and Ranking Member Smith indicated support for the USPTO's budget request. Specifically, the letter states "The Committee notes that the USPTO is a user fee funded agency and that due to the recent economic downturn, user fee collections have become less predictable leading to significant budget shortfalls in the short-term. In order to address these shortfalls, the Committee supports a temporary 15% surcharge on various patent fees as called for in the budget."

In addition, on May 18, 2010, Rep. Conyers, Chairman of the House Judiciary committee introduced H.R. 5322, Patent and Trademark Office Funding Stabilization Act which would, among other provisions, provide fee setting authority to the USPTO and impose a 15 percent surcharge on patent fees similar to the Administration's FY2011 Budget request. Members of the House and Senate Judiciary committees have in the past consistently and strongly supported sufficient funding for USPTO operations.

If the Committee were unable to include the authority to collect these interim fees in the fiscal year 2011 bill, USPTO would have \$224 million less than planned for its operations in the coming year.

17. What planned expenditures would USPTO expect to curtail to ensure that operations would not exceed the revenue collected from the current fee structure?

Answer: USPTO funds would have to curtail the following planned activities:

- a. Reduce patent examiner hires by 520 positions/200 FTE;
- b. Reduce examiner overtime to work on production by 519,000 hours;
- c. Reduce funding for Patent Cooperation Treaty (PCT) contracts to meet minimum contract requirements. This is the equivalent of 14,100 search reports;
- d. IT Investments - Eliminate funding for Patent End-to-End/TM Next Generation/Infrastructure and reduce funding for OM; and
- e. Investment in reserve fund.

18. How would the performance benchmarks related to total average pendency for applications and the patent inventory backlog that were cited earlier be affected?

Answer: The Agency would be compromised in its ability to achieve the Administration's goals and the USPTO's strategic priorities.

First action patent pendency at the end of FY 2009 was 25.8 months with total pendency at 34.6 months. If action is not taken, by FY 2015 the patent backlog could grow to almost one million cases awaiting action by examiners, first action pendency will reach approximately 30 months and total pendency will reach almost 40 months. Action and the resources provided by the FY 2011 budget are crucial to address the current challenges at the USPTO, which include unacceptable patent pendency and inventory backlogs that are projected to increase without attention.

19. Would USPTO forego all planned IT investments? What would be the short-term effect of deferring these investments?

Answer: The USPTO has halted investment in modernizing its current patent automated information systems. USPTO patent automation systems are outdated, to the point where they regularly crash. These systems present an obstacle to virtually every improvement initiative undertaken by management. The short term effect of deferring these investments would be the continuation of this situation, as the USPTO would not be able to modernize the current patents examination environment. In lieu of making incremental improvements on the current system, USPTO intends to use its IT resources to maintain the current

system until a newer, modern IT system, able to handle patent processing from end to end, can be brought online.

Fee Setting Authority

The budget request similarly proposes appropriations language to provide the USPTO the authority to set or adjust, by rule, any fee established or charged by your office. This request, like the interim surcharge authority, is requested of the Appropriations Committee.

20. What would be the effect on USPTO's operations in fiscal year 2011 if this language were not adopted as part of the fiscal year 2011 appropriations Act?

Answer: Fee setting authority is necessary to efficiently align all fees with the costs of performing services. This authority has also been requested of the Authorizing committees. It is included in S.515, the "Patent Reform Act of 2009" and has been discussed in the House Judiciary committee as recently as May 5 during an USPTO Oversight Hearing. If fee setting authority is not provided in 2011 the USPTO would continue to be dependent on a mixture of regulatory and legislative methods of raising fees to achieve the performance commitments defined in the budget request. Fee setting authority is viewed as the long term strategy for ensuring a sustainable funding model that supports requirements necessary to improve the service the USPTO provides to the nation and by reducing patent pendency, and bringing information technology into the 21st Century.

Fee setting through the rule-making process is expected to take between 18 – 24 months to complete, including time for USPTO to reach out to stakeholders to begin a dialogue on the optimal rates of various fees. USPTO requested authority through the FY 2011 appropriations to begin this process while it continues to work with the authorizing committees to establish a sustainable funding model.

21. If there would be no effect on fiscal year 2011 operations, why then request such authority from this committee and not the appropriate committee of jurisdiction?

Answer: We understand the uniqueness of the request and the jurisdictional issue of requesting this authorization through appropriation language. We continue to work with the authorizers in parallel; however, given the relationship between adjusting fees to recover the cost of operations outlined in our budget requirements and the appropriation authority necessary to spend them, it would be beneficial for fee setting authority to be included in the same package as the interim fee increase and appropriations.

22. What comments have USPTO's stakeholders made with respect to this fee-setting authority?

Answer: The comments have been mixed. In general, stakeholders are supportive of fee setting authority because they understand the connection between charging the appropriate fee amounts and improving patent application processing. These same stakeholders voice concern about fees that are collected above the USPTO appropriation and, in part, condition their support for fee increases on ensuring that the Office has access to those increased resources. Other stakeholders are cautious about any change to USPTO's fees.

23. What is the total annual estimate of new fees USPTO would collect under this authority and why are these fees needed?

Answer: As detailed on Page 6 of the FY 2011 President's Budget, USPTO Patent business line FY 2011 Current Services Level is \$1,883 million. Including strategic initiatives, the FY 2011 Program Level budget is listed at \$2,081 million. However the FY 2011 Patent Fee collections under the existing fee structure are only \$1,886 million. Consequently, the patent fee increase is needed to support the Patent business line initiatives of \$197 million in FY 2011.

24. Which fees does USPTO anticipate increasing and by what increment?

Answer: The goal of a new USPTO fee structure will be to provide sufficient financial resources to facilitate the effective administration of the U.S. intellectual property system. Adjustments to particular fee rates are guided by the following objectives:

- Align fees with the cost of products and services;
- Set fees to facilitate the effective administration of the patent and trademark systems;
- Offer application processing options; and
- Promote the U. S. National Innovation Strategy by promoting competitive markets that spur productive entrepreneurship; fostering innovation that will lead to technologies of the future; and encouraging high-growth and innovation-based small business entrepreneurship.

Reserve Fund

The budget proposes a reserve fund of \$47 million to ensure the availability of adequate resources to address multi-year budget plans and fluctuations in revenues.

25. Is the establishment of such a reserve fund contingent on the collection of the proposed interim fees?

Answer: Yes, however, the desire to create an operating reserve is not the rationale for the interim patent fee increase. The purpose of the interim patent fee increase is to garner the resources necessary to fund our multi-year budget plan. Patent processing spans multiple years and reducing the unacceptably long backlog of unexamined patent applications requires a multi-year plan to manage staffing and resources necessary to achieve the goals of 10 months to first action and 20 months to final pendency.

We have sufficient experience to know that there are risks associated with plans based on one year budget cycles due to the unpredictability of fluctuations in filings and uncertainties associated with collections. The operating reserve is part of a multi-year strategy to reduce pendency and application backlogs. In FY 2011, the USPTO will begin funding the operating reserve with fees received from the interim patent fee increase. We have a plan to use these fees in FY 2013 to pay the full year salary of the patent examiners hired in FY 2011 and FY 2012. The operating reserve will ensure that sufficient resources are available to carryout the long-term decisions that come with staffing increases necessary to reduce patent pendency to goal levels.

26. Would the fund be further capitalized by fees collected using the fee-setting authority requested in this budget?

Answer: Yes. The fees collected under a new fee structure implemented with fee setting authority will continue to fund the operating reserve in accordance with multi-year requirements. Once fully implemented, fee setting authority will allow the USPTO to more closely match the level of current year fees with funds in the operating reserve and budgetary requirements.

27. What activities will be funded from the reserve fund?

Answer: The long term health of the USPTO is contingent on its ability to manage the funds received through fees in any given year over multiple years. Both the operating reserve and fee setting authority together will be used as tools to properly align operating requirements with funding. The operating reserve is designed to achieve the following:

- a. Capture “savings” from fees collected in excess of operating needs in one year that will be put to use in future years as part of a plan for implementing multi-year, long-term strategies;
- b. Provide any cash flow needed as the USPTO manages the delicate balance between the timing of daily fee collections and daily expenditures; and
- c. Provide a reasonable amount of cash reserves for unplanned contingency items such as significant damage to capital assets; legal damages or other contingent liabilities; and precipitous drops in operating funds to bridge a gap in annual fee collections due to unforeseen circumstances, such as those experienced in FY 2009. This bridge will keep the USPTO from losing ground on managing pendency while it recalibrates requirements and fees.

28. How do you intend to ensure that balances in the reserve fund will be available to cover fully the resource requirements of multi-year budget plans, like IT investments?

Answer: The USPTO’s budget plans, including IT investments, cover a five-year planning horizon. Requirements are developed by estimating the costs to carry out the five-year plan. The costs of Office requirements each year are compared to annual fee collections over the same five-year horizon. The USPTO ensures there are sufficient funds in the operating reserve to supplement annual fee collections if operating requirements exceed annual fee collections in a given year. At the same time, the USPTO will make management decisions to deposit funds into the operating reserve to fund known out-year requirements.

The operating reserve provides the ability to appropriately match the timing of fees with the timing of operating requirements. In addition, fee setting authority provides the office the ability to calibrate both the operating reserve and annual fee collections to ensure either (a) enough resources to achieve goals, or (b) a gradual reduction of funding to maintain a steady state operation once pendency goals are achieved.

29. Other than a reserve fund, what options has USPTO considered to provide sustainable long term financing to address continuing problems in staffing, patent pendency and backlogs?

Answer: The USPTO has explored three options as potential solutions to the structural deficiencies in our funding model. First, the most immediate need is to generate additional revenues to reduce our current backlog and make progress toward reaching an optimal inventory of patent applications to be examined. This first challenge is addressed by our request for an interim or legislative patent fee increase. Second, a longer term issue is ensuring that fees reflect costs which will be addressed by granting the USPTO fee setting authority which will allow us the ability to work with our user community to determine the appropriate cost structure considering the policy implications for how we assess fees. Third, the

USPTO considered and intends to establish and fund an operating reserve to account for the unpredictable nature of fees collected from filings and also provide for a source of funding for capital investments.

The USPTO believes that these tools, all of which are included in our FY11 Budget Request, provide the foundation for a sustainable funding model and address a practical financing solution.

Accuracy of Fee Collections

USPTO informed the House and Senate Committees on Appropriations last fall that the estimate of fee collections in fiscal year 2010 would be \$1.887 billion, and the Committees provided the authority to expend 100 percent of that estimate.

30. Today, what is the estimate of fee collections in fiscal year 2010?

Answer: Estimated fiscal year 2010 fee collections are expected to be between \$2.033 and \$2.119 billion, an increase of \$146 to \$232 million above the estimate provided last summer on which USPTO's FY10 spending level was set.

31. What accounts for the difference in the September 2009 and March 2010 estimates?

Answer: The differences are primarily attributable to assumptions and subsequent changes applied to forecasting patent issue and maintenance fee collections.

- Patent issue estimates are based on patent examiner production assumptions. These include staff level and experience by technology and production per examiner based on available resources, including efficiency initiatives and incentives. The assumptions used for the September 2009 estimate did not include efficiency improvements to optimize examination capacity which, in turn, increased the number of patents USPTO could issue and thus fees collected. These include compact prosecution, revision to the patent examiner production system and targeted patent examiner hiring that have led to increased examiner production in fiscal year 2010.

Regarding the FY 2010 fee collection projections developed in March with the low and high range, USPTO used the following assumptions:

Issue Fees:

- | | |
|------|--|
| Low | <ul style="list-style-type: none"> ▪ \$1.887 billion estimate is based on 164,411 issues and \$285 million issue/publication fee collections. |
| ↓ | |
| High | <ul style="list-style-type: none"> ▪ \$2.033 billion estimate is based on 196,650 issues and \$347 million issue/publication fee collections (increase of \$62 million over \$285 million). ▪ \$2.119 billion estimate is based on 206,014 issues and \$366 billion issue/publication fee collections (increase of \$81 million over \$285 million). |

- Maintenance fee estimates apply renewal rates to counts of patents eligible to renew within a given time period. Renewal rate forecasts are developed with historical and trend data, perceived economic environment and propensity for patent holders to

maintain patent rights assumptions, and anticipated adjustments to fees (timing and amount of fee adjustment). The assumptions used for the September 2009 estimate assumed that decreased renewal rates being experienced in the spring and summer of 2009 would continue in 2010 as the economy gradually recovered. Renewal payments significantly increased in the fall of 2009 with estimates revised accordingly.

FY 2010 fee collection projections and assumptions developed in March with the low and high range.

	<u>Maintenance Fees:</u>
Low	▪ \$1.887 billion estimate is based on \$569 million of maintenance fee collections.
↓	▪ \$2.033 billion estimate is based on \$661 million of maintenance fee collections (increase of \$92 million over \$569 million).
High	▪ \$2.119 billion estimate is based on \$699 million of maintenance fee collections (increase of \$130 over \$569).

32. How confident is the Administration in the most recent estimate given the fragile nature of our economy today?

Answer: The USPTO is confident that fiscal year 2010 fee collections will fall within the range of \$2.033 and \$2.119 billion (the most recent estimate) and will exceed the earlier estimate of \$1.887 billion.

Fee collections are monitored on a daily basis. Estimates are based on a number of variables and external influences which make them subject to change especially during periods of economic uncertainty. The economy appears to be improving based on a number of indicators, one of which we believe is the substantial increase in patent fees collected as compared to one year ago.

Given that there will continue to be uncertainty in the external and internal variables that influence fee collection estimates, the fiscal year 2011 budget request provision providing that, should USPTO's fee collections exceed the estimate, USPTO requests authority to spend not more than \$100 million of additional fee collections.

The USPTO is presenting a range of estimated fee collections to address the planning assumptions in an effort to better explain the basis for the estimates. We will continue to keep Congress informed of our fee receipts and planning assumptions as well as any changes that occur that would lead us to revise our estimated collections.

33. What actions or plans are in place to ensure that, should the fee collections not reach \$1.887 billion this year, USPTO will not require a reduction-in-force?

Answer: Fee collections will not be less than \$1.887 billion this year, based on \$1.024 billion collected through March 2010. Spending has been reduced to ensure that adequate resources are available to compensate the workforce. There is no risk that a reduction-in-force will be necessary this year.

USPTO stakeholders assert that fee collections in excess of the agency's annual budget authority are returned to the general fund of the Treasury.

34. Rather, are the "excess" fees not deposited in a special fund of the Treasury and available only to USPTO through appropriations by Congress?

Answer: The USPTO's unavailable funds of \$762.2 million are maintained in two different accounts at the U.S. Department of the Treasury. Without an appropriation, the USPTO does not have access to the unavailable funds.

The September 30, 2009 unavailable funds balances for the accounts are:

- \$233.5 million patent fees collected and withheld in accordance with the Omnibus Budget Reconciliation Act of 1990, deposited in the USPTO Special Fund Receipt Account number 135127, *Patent and Trademark Surcharge Fund*.
- \$528.7 million fees collected for patent and trademark goods and services which were not appropriated for spending. These funds remain in the USPTO General Fund Account number 13X1006, *Salaries and Expenses, Patent and Trademark Office*.

Accuracy of Fee Collection Estimates and "Swing" Language

The budget request includes a provision providing that, should USPTO's fee collections exceed the estimate, USPTO is able to spend not more than \$100 million of those additional fee collections.

35. Why is this language necessary at all if we are to have confidence in USPTO's estimating technique?

Answer: Fee collection estimates are developed 12 to 18 months prior to the start of a fiscal year. These estimates have been within 4.6 percent of actual collections over the past ten years with the exception of 2009 and 2010, which have been impacted by the unprecedented economic crisis.

The USPTO budget is funded through off-setting user fee collections which are authorized through the appropriation process. The provision for additional authority is recognition of the nature of source of the funding and the uncertainty of predicting an actual amount months in advance of a budget year.

While the USPTO continually aspires to provide greater accuracy, historically fee collection estimates have met industry and statistical forecasting confidence standards of 95.0 percent or greater, excepting years of significant unanticipated change.

We plan to work with Congress and other stakeholders to develop a sustainable funding model which will mitigate the impact of changing market conditions in formulating our annual budget request.

36. Prior to the current year, when was the last time USPTO's actual collections exceeded its patent fee collection estimate?

Answer: Fiscal year 2004 was the last time actual patent fee collections exceeded the patent fee collection estimate prepared for the President's Budget. Actual collections were \$1,147.0 million, while the President's Budget request was \$1,146.4 million (\$0.6 million less than actual) and enacted was \$1,112.4 million (\$34.6 million less than actual).

37. Is this provision an acknowledgement of the volatility of the economy and patent applications or of the weakness of your estimating technique?

Answer: This provision is an acknowledgement that fee collection estimates are based on the most valid and current information available at the time the estimates are derived, and are subject to variation, volatility, and uncertainty.

The USPTO's estimating technique is robust, and built on many variables that rely on market forces and are constantly changing. Understanding the variable components and translating anticipated changes into fee collection estimates is a challenging and ever evolving process.

The USPTO analyzes recent and current trends of demands for products and services through workload and fee data, and relates demand to information on global and economic activity; developments in potential patent and trademark legislation, regulations and/or judicial decisions; implementation of management processes and initiatives that affect production work flow and efficiency of prosecution processes; and levels of and distribution of resources. These demand-trend influences are then used for developing assumptions of future demand levels, and include external and internal forecasts of economic growth, expectations of activity and decisions affecting production and prosecution processes and anticipated resource requirements. The future demand levels are

then modeled against more than 200 patent and trademark products and services for which fees are charged to arrive at fee collection estimates.

38. Does USPTO traditionally “pad” the annual fee collection estimate?

Answer: No. Fee collection estimates are based on anticipated demand for products and services, involving assumptions of global and national economic activity; legislative, regulatory and judicial influences on the intellectual property environment; development and implementation of initiatives to increase efficiencies and meet strategic goals; and resource distribution and use.

The USPTO does not practice deliberate over or under estimating fee collections. Overestimating fee collections will mean that we have insufficient funds to cover our planned staffing and requirement levels because USPTO can only spend up to the level it collects even if less than its appropriated level. Underestimating fee collections ensures insufficient authority to meet our resource requirements.

The USPTO continually examines the variables used to estimate demand for products and services, as well as analyze the estimates of production and collections against actual levels. The Department, OMB and Congress are notified when revisions to fee collection estimates are made.

Ranking Member Frank R. Wolf

Questions for the Record

Telework

I understand you are interested in creating a long-distance telework pilot program at the USPTO. Such a program could increase employee recruitment and retention while also reducing traffic congestion and pollution.

1. Can you explain how the program would work and why it is necessary?

Answer: The USPTO currently has a hoteling program in place whereby employees relinquish their office space on the USPTO campus and work from home. These employees are required to physically come to the Alexandria campus twice per bi-week to maintain their official duty station as the USPTO headquarters in Alexandria, Virginia to preclude agency expenses for employee travel and maintain locality pay for Washington D.C. The twice per bi-week requirement is in response to federal pay regulations and is required for the designation of the employees' duty station which affects locality pay and other location-based pay entitlements. There are approximately 2,300 USPTO employees who participate in this hoteling program.

The USPTO recently made a new program available to our hotelers who live within a 50-mile radius of the USPTO Alexandria campus after concluding agreements with NTEU 245, 243, and POPA. It permits participants to eliminate the bi-weekly commute to the office. While the employees' duty stations will be changed to their place of residence, because they are within the 50-mile local travel radius of the agency headquarters, the USPTO will not incur unplanned travel expenses on those rare occasions when an employee may need to come to the headquarters. This program will increase productivity and enhance employee retention.

However, the agency is unable to extend this program flexibility to those employees who currently reside outside of the 50-mile commuting radius without incurring potential travel expenses whenever an employee needed to come to the headquarters- an expense that we do not currently bear.

The Department of Commerce and USPTO support legislation to further enhance its telework program. Legislation currently in front of both the House and the Senate would enable USPTO to do so. For example, pending House legislation would permit the establishment of a pilot program at GSA. To address the 50-mile limitation described above, USPTO would propose a pilot to allow an employee to voluntarily participate in a hoteling program without having to make the bi-weekly visits. The proposed pilot would allow an exception to travel regulations that would waive the agency's travel expense obligations for an agreed upon number of visits to the headquarters campus each year. This

permits the employee to make a personal cost-benefit decision. A large number of USPTO hoteling employees currently live well beyond the 50-mile radius and still commute bi-weekly- reducing productivity, increasing commuter traffic, and increasing risk. The long-distance telework pilot would reduce commuting time for the hoteling employees and generate a greater positive impact on air quality, traffic congestion, and ultimately the recruitment and retention of valuable employees.

2. If you are seeking legislative language to create this pilot, could you share it with the Appropriations Committee in addition to the authorizing committees?

Answer: A provision in H.R.1722, as described above, would create a GSA pilot program which would provide USPTO with additional flexibility for its telework program. In early May, this bill failed to pass the House under suspension of the rules. We understand that the House may take up the bill again under regular order. Two provisions included in S. 707, the Telework Enhancement Act of 2009, currently pending in front of the Senate, would also provide more flexibility regarding travel requirements. One of these two provisions provides a specific fix for USPTO and is also contained in the current version of S. 515, the Patent Reform Act of 2009.¹ The other provision is similar to the GSA test pilot established in H.R.1722.

If any of these legislative options were enacted, a USPTO employee could eventually choose to live anywhere in the United States in exchange for a willingness to return, on a limited basis, to Alexandria at their own expense and on their own time. The USPTO fully supports having further flexibility as long as they can support nationwide telework both financially and through improvements to their information technology systems.

Operating Reserve

Over most of the past decade USPTO patent fee collections have grown substantially and the USPTO has historically tried to spend all of its available fee funding. However, when the economy declined last year and your fee collections fell, the USPTO was left having to implement a hiring freeze and other spending reductions to live within your available resources. In order to address the issue of providing a sustainable level of funding over the course of several years, the budget proposes establishing a \$47 million reserve.

¹ Sec. 14 of the Proposed Managers Amendment to S.515 (circulated Feb. 2010, GRA10057)

3. How did you determine that a \$47 million reserve is the appropriate level of reserve to ensure you have stable resources in future years?

Answer: In this budget, the USPTO is building an operating reserve during FY 2011 and FY 2012 which will be used to fund the increase in hiring patent examiners through FY 2013 when costs are planned to subside as the targeted patent inventory level is reached and the number of patent examiners is reduced through attrition. The \$47 million planned for 2011 is the minimal reserve level necessary to be able to establish funds to cover our requirements through 2013 when the amount of operating reserve begins to decline.

4. Why not \$30 million or \$60 million?

Answer: \$47 million beginning in 2011 was the minimal amount necessary to cover the multi-year plan to increase the patent examination staff to achieve the high priority performance goals by 2013.

We continue to work to identify the optimal level of the operating reserve. Once defined, a new fee structure implemented with fee setting authority will allow us to calibrate the appropriate level of the operating reserve to ensure a stable level of resources beyond FY 2013.

IT Modernization

Your fiscal year 2011 budget request includes \$50 million to improve IT infrastructure and tools, and proposes continued investments of \$30 to \$40 million per year through fiscal year 2015. Historically the Federal government has difficulty developing new complex information technology projects such as the IRS's Business System Modernization program, the FBI's failed case management system, and the Census Bureau's failures to develop a handheld computer device for enumerators to use for the 2010 census.

5. Why is such a significant investment needed for so many years?

Answer: The USPTO believes that intelligent investment in our IT infrastructure holds the potential to dramatically lower the amount of time needed to review patents and trademarks.

In 2010, the USPTO will be funding the stabilization and continued operations and maintenance of existing IT systems, and will additionally bring in an outside vendor to assist OCIO in completing the documentation of the business requirements of processing a patent. The current list of roughly 50,000 business requirements will be both scrubbed and supplemented, which will then allow strategic investment and architecture decisions for 2011 to be made.

For 2011, the Office has asked for funding which will allow the continued maintenance and operations of our current IT infrastructure, while developing and implementing a new 21st century end-to-end processing platform and architecture for Trademarks and Patents.

The scope of this project will involve reengineering everything from workflow engines to search and examination systems to fee calculators. Appropriate funding is critical to succeeding in these efforts.

6. Do you have the right staff with the necessary information technology, and program and contract management expertise?

Answer: The USPTO CIO has spent the last two years undertaking a staff improvement program. Contract management expertise is higher than it has been inside the office than it has been in the last 10 years. The USPTO CIO organization is down more than 80 positions from authorized levels, most of which are technical in nature. The technical expertise of the staff is increasing through training, however, the funding requested for 2011 to hire the missing technical resources in the software development, architecture and engineering disciplines will greatly increase the success of this investment.

7. What are you doing to make sure this program will be successful and not another failed government IT system?

Answer: The USPTO has studied past failures within its own organization and other government agencies. The USPTO CIO is working closely with the Federal CIO and OMB to explore the best architecture and contracting methods to build and monitor the application development. By utilizing industry best practices methodology of small and iterative delivery cycles, the USPTO will be able to monitor and measure progress instead of waiting for large deliverables. The contracting method provides for incentives for fixed price deliverables, and the iterative model allows for the flexibility of adding functionality as priorities may change.

Patent Count System

Last fall you reached an agreement with the patent union to update the USPTO's "count system" which is the methodology used for determining the time a patent examiner has to complete a patent examination and how much credit is given to examiners at each stage of an examination. I understand that the "count system" had not been updated since 1976.

8. Can you describe the changes to the “count system”?

Answer: The changes to the count system are designed to place emphasis on complete and thorough initial examination. They are expected to reduce unnecessary rework and encourage quicker resolution of issues in the patent application process. The key changes include more time for examination overall, more time for a first action on the merits, time for examiner-initiated interviews, decreased work-credits for work on requests for continued examination (RCEs), and consistent work-credits for work done on applications that are transferred from one examiner to another during prosecution.

9. How does the new system benefit examiners?

Answer: The changes increase the time examiners have overall for examination which increases their ability to do a quality job. The new system provides incentives and modified work-credits which provide more time up-front for the first action to enable all issues to be addressed early in the examination process, resulting in improved quality and a reduction of the number of Office actions needed to complete examination. The need for rework will be reduced, which helps make the process more efficient.

The changes include a shift of resources from examiner recertification via review of end products, to front-end quality improvements. This will allow resources to be devoted to training and support to examiners earlier in the examination process.

The revised system provides appropriate and standardized work-credit to examiners that take over transferred applications from other examiners, which provides more work-credit certainty to examiners.

10. How does it benefit the agency?

Answer: The changes benefit the Agency and applicants in a number of ways. The new count system should result in earlier identification of patentable subject matter, which will benefit applicants while enabling the USPTO to function more efficiently. The improved processing efficiencies gained by incentives for quality work at the beginning of the examination process, along with rebalanced incentives both internally and externally to decrease rework, will set the foundation for long-term pendency improvements. Increased customer satisfaction should result from providing incentives for examiners to be more proactive in reaching out and working with applicants to resolve issues and identify allowable subject matter earlier in the examination process. As a result of the benefits to examiners, we anticipate increased examiner morale and reduced attrition, which will lead to improved performance.

11. Will the new system require additional resources to complete the same amount of work?

Answer: The USPTO does not expect the new count system to require greater resources to complete the same work. It is true that giving examiners more time to examine, assuming no other changes in the how examiners examine or in how applications are prosecuted, could lead to less applications being worked on in a given amount of time. This could lead to higher pendency.

However, this comprehensive set of initiatives is intended to change how applications are prosecuted and improve the efficiency by: improving up-front examination to avoid rework, diminishing RCE credits to better align with the examiner time needed and encourage examiners to resolve issues earlier in prosecution, and encouraging examiners to reach out to applicants and identify allowable subject matter earlier in prosecution.

Overall, we expect to see more efficient prosecution and applications allowed earlier in prosecution, which will set the foundation for long-term pendency improvements.

12. Are you planning additional changes?

Answer: Since these are the first significant changes to the count system in more than 30 years, the Agency intends for this to be an iterative process. Over the course of FY2010 the Task Force, comprised of both USPTO management officials and POPA officials, will be closely monitoring specific evaluation criteria and gathering internal and public feedback on the effects of these changes. The Task Force then will make a recommendation as to whether the new system should be maintained or modified as warranted should the changes not yield the anticipated results.

Post-Grant Review

The proposed new post-grant review procedures in the Senate version of the patent reform legislation mandates that the USPTO issue a final determination not later than one year after the date on which the post-grant review proceeding is instituted, except that the Director may extend the 1-year period by not more than six months in extraordinary instances.

13. Given the USPTO's large and rapidly growing backlog of post-grant reexaminations, how many additional personnel, how much more of an operating budget, and how long will the USPTO need to meet this "one-year processing" goal?

Answer: In 2009, CBO estimated that for inter partes patent challenges, USPTO would ultimately need 80 additional administrative patent judges and patent attorneys. We expect a like number would be required for post-grant review under chapter 32. For these reviews, CBO in 2009 estimated an initial year cost of about \$11 million.

Given the statutory ramp up provided for, we expect to receive the first review requests at the one year mark after enactment, and be hitting the one-year decision goal two years after enactment. For Inter Partes, Chapter 31, Section 319 (c) 2 A states "the amendments shall take effect on the date that is 1 year after the date of the enactment of this Act and with a graduated implementation in Section 319 (c) 2 C that ramps up the caseload "during each of the first 4 years following the effective date of section (a). For Post Grant Review, Chapter 32, Section 329 (f)(2) "the amendments made by subsection (d) shall take effect on the date that is 1 year after the date of the enactment of this Act,..." and "the Director may impose a limit on the number of post-grant reviews that may be instituted during each of the 4 years following the effective date of subsection (d)".

14. How high would you need to raise fees in order to fund "one-year processing" and how would industry react to these new fees?

Answer: If the Office was provided fee setting authority, as requested in either the FY11 Budget Request or in S.515, the Director would use that authority to propose and set the appropriate fee after receiving comments from its patent public advisory committee, industry and others in its stakeholder community. Current fees for the proceedings cover only a fraction of the cost, a fact appreciated by many of our users. We believe industry would react favorably to a proceeding that provided timely and reliable reexamination decisions and would be willing to pay a reasonable fee.

Many experienced patent users predict that the Post-Grant Review and First-to-File changes included in the proposed patent legislation will trigger major increases in both Re-Examination Petitions and Patent Applications.

15. Are you concerned about the impact on your workload of this legislation?

Answer: Yes, but with a four year graduated ramp up of the implementation of the new post grant review proceeding and resources to hire and train additional personnel, we believe the Office will be able to handle the new workload. The Office has also worked with both House and Senate authorizing staff to provide technical assistance on proposed patent reform legislation to limit opportunities for abuse and ensure that thresholds to initiate review proceedings are meaningful.

Representative Robert B. Aderholt

Questions for the Record

- 1. Patent Reform has been an issue in Congress for some time now. Many small firms and research universities fear that patent reform legislation in Congress unfairly favors a few large corporations. Already, I hear stories of individual inventors and research institutes having to challenge large corporations to protect their patents. Where does the Administration stand in regards to patent reform? What is USPTO doing to ensure that patents held by individual inventors, research universities, and others are protected?**

Answer: The Administration supports patent reform legislation that fosters innovation by fairly balancing the interests of innovators across all industries and technologies. Recently, the Administration submitted a views letter supporting the Managers amendment to S.515, the Patent Reform Act of 2009. We understand that both House and Senate staff have continued to discuss final changes to the legislation that might allow passage of a bill this year.

Individual inventors and research institutes may have less legal resources than large corporations to obtain and defend their rights and may be challenged by any change in the law. One way USPTO can protect the rights of patent holders by providing timely reexamination options to allow inventors and research institutes to proceed to the marketplace quickly with reliable patents that will withstand legal challenge. We believe the current legislation attempts to address some of these concerns, for example, by limiting opportunities for abuse in the expanded patent reexamination and post grant review proceedings and, in general, clarifying legal standards invoked in often costly litigation. USPTO has provided technical assistance to House and Senate staff over the last four Congresses on a number of provisions incorporated into pending legislation with these applicants in mind.

In addition, by focusing on its core function of promptly issuing high quality patents while avoiding making improper rejections, the USPTO best ensures that the intellectual property rights of individual inventors, research universities and others are protected.

- 2. For years, China has been infringing on the copyrights and trademarks of American companies. What is the USPTO doing to ensure that China does not use United States patented technology without permission? Please describe your efforts to protect American copyrights and trademarks overseas.**

Answer: The USPTO is involved on a number of fronts to help American intellectual property rights holders overseas, and to ensure that China does not use US patented technology without permission. The USPTO has a "China team" dedicated to this important task. The China team consists of six attorneys from the Office of External Affairs, with specific expertise on China's patent, trademark, copyright, and enforcement system; an in country team of three attorney-IP Attachés (the third will join by mid-2010); and five Chinese educated and trained IP lawyers.

The USPTO team has three main focuses:

- (1) Participation in and formulation of IP issues in the Joint Commission on Commerce and Trade IP Working Group (IPR WG). USPTO Under Secretary David Kappos is co-chair of the IPR WG, and Deputy Director Sharon Barner has worked extensively on China IP issues and is involved in formulation and implementation of strategic IP issues related to China. The IPR WG provides USPTO's China IP experts, and their colleagues at USTR, ITA, etc. with the opportunity to hold frank and open discussions about specific IP topics, with the intent that these discussions will lead to incremental improvement to China's IP system;
- (2) Bilateral relationship: the USPTO has an excellent relationship with the State Intellectual Property Office (SIPO) and an improving relationship with the China Trademark Office (CTMO) and the National Copyright Administration (NCAC); these relationships were formalized when USPTO signed a Memoranda of Understanding with its counterpart offices in fall 2008; and
- (3) Public outreach: since 2005, the China team has been running the "China Road Shows."

Through various activities in conjunction with the established mechanism of the JCCT IPR Working group, or directly, through joint programs with USPTO's counterparts in China, the USPTO China team has conducted extensive training and other outreach programs to help protect US IP interests in China. The following are examples of such activities:

- (1) USPTO-SIPO joint programs to educate US and foreign rights holders in China on how to protect/enforce their patents in China;
- (2) USPTO has provided several SIPO patent examiners with extensive training on how to more efficiently and effectively examine patent applications;
- (3) USPTO, in conjunction with China's copyright office, has conducted well received copyright piracy on the internet programs, particularly important now that China has the most number of internet users of any country in the world;
- (4) USPTO has provided the China trademark office with trademark examiner and IT training to help the examiner examine applications more efficiently, to the benefit of US rights holders; and

USPTO has an extensive public outreach program: it has conducted numerous "China Road Shows" to educate U.S. rights holders in cities throughout the U.S. on how to protect and enforce their IP in China, and held annual China IP programs at PTO's Global IP Academy to educate U.S. government officials on China's IP environment.

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