

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS FOR 2012

HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED
AGENCIES

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

MIKE RINGLER, STEPHANIE MYERS, LESLIE ALBRIGHT,
DIANA SIMPSON, and COLIN SAMPLES,
Subcommittee Staff

PART 9 STATEMENTS OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS



Printed for the use of the Committee on Appropriations

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

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER
INTERESTED INDIVIDUALS AND ORGANIZATIONS

FRIDAY, MARCH 11, 2011.

REGIONAL INFORMATION SHARING SYSTEMS (RISS)

WITNESS

GERALD P. LYNCH, CHIEF EXECUTIVE OFFICER, REGIONAL INFORMATION SHARING SYSTEMS (RISS)

Mr. WOLF. So many people from around the country and people have plans. And so if you really can, when the light comes on, please, please, you know, if you can.

All the statements will appear in the record and all the statements will be read, so I would just say that.

With regard to that, let me just say the first witness, Regional Information Sharing Systems, chief executive officer, Gerald Lynch.

Mr. Lynch, or, Mr. Fattah, do you have any comments?

Mr. FATTAH. I yield my time to help us move through the witness list.

Mr. WOLF. Okay. Thank you.

Go ahead, sir.

Mr. LYNCH. Chairman Wolf, Ranking Member Fattah, Members of the subcommittee, I appreciate the opportunity to appear before you to discuss the Regional Information Sharing System or the RISS Program.

RISS is a nationwide program consisting of six regional centers that provide services to local, state, federal, and tribal law enforcement agencies and criminal justice agencies in all 50 states, the District of Columbia, Australia, Canada, England, U.S. Territories, and New Zealand.

More than 8,700 agencies and hundreds of thousands of offices utilize the RISS resources and services. RISS enhances the ability of criminal justice agencies to identify a target and remove criminal conspiracies and activities while promoting officer safety.

RISS offers access to a multiple intelligence database, connects disparate systems, and provides essential investigative services including analytical, investigative research equipment, training, field support, and technical assistance.

There are more than 600 resources available via the RISS secure intranet known as RISSNET. The owners of these resources rely on RISSNET for its proven and secure infrastructure. RISS enhances officer safety through its RISS Safe Program and offers extensive gang resources. In many cases, these are services that agencies would not otherwise receive.

Utilizing RISSNET's existing infrastructure as a connection backbone eliminates develop costs for new systems. Almost 100 systems are connected or pending connection to RISSNET including 31 HIDTAS, 38 state agencies, and 22 federal and other systems.

The Interagency Policy Committee which was formed within the jurisdiction of the executive office of the President identified RISSNET as one of the four SBU/CUI networks necessary to be involved in the SBU Interoperability Initiative.

RISS represents the voice of local and state law enforcement in this initiative which will enable a simplified sign-on capability. RISS also supports the National Nationwide StAR Initiative, the National Virtual Pointer System, the National White Collar Crime Center, and the National Gang Intelligence Center.

The 2012 President's budget addresses the need to support state, local, and law enforcement efforts and national security, yet the budget includes RISS, a central component to support these initiatives at \$17 and a half million, a reduction of \$27 and a half million from 2010.

If a reduction of this magnitude occurs, it will have profound effects on our criminal justice community and will cripple RISS' ability to provide its vital services. A reduction would result in the inability to maintain RISSNET and its applications such as RISSIntel and RISSafe, RISSGang, RISS ATIX.

It would revert back to the pre-9/11 days. Cases that would have been resolved effectively and efficiently using RISS services may not be solved timely if at all. It is imperative that RISS' funding for 2012 be restored to its 2010 level of \$45 million.

RISS is an outstanding investment in our Nation's security. Since 2000, Congress has invested \$353 million in RISS. In return, RISS gave back \$857 million in narcotics, currency, and property seized. This is a 142 percent increase on the return on the investment.

Over the last ten years, RISS trained more than 600,000 officers and produced more than 250,000 analytical products which are essential in identifying and prosecuting offenders. Since 2000, there were 42,000 individuals arrested using RISS services. RISS also has 300,000 operations entered into the Officers Safety Event Deconfliction System resulting in 100 conflicts.

So we are just asking the committee if they would just fund us at the \$45 million level.

[The information follows:]

Regional Information Sharing Systems (RISS) Program

Fiscal Year 2012 Testimony to the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations, United States House of Representatives
Submitted by Gerard P. Lynch, Esquire, RISS Chief Executive Officer

The **Regional Information Sharing Systems (RISS) Program** was established more than 30 years ago by the law enforcement community for law enforcement agencies and officers to close the gap on information sharing and to serve as a force multiplier in the areas of secure communications, intelligence sharing, and investigative support. RISS is a proven and cost-effective program that leverages funding to support thousands of local, state, federal, and tribal law enforcement agencies across the nation. **It is respectfully requested that Congress appropriate \$45 million to RISS for FY2012.** This amount is level with FY2010 funding.

RISS consists of six regional centers that tailor their services to meet the needs of their unique regions while working together on nationwide initiatives. The RISS Centers provide investigative services to more than **8,700** law enforcement and criminal justice agencies in all 50 states, the District of Columbia, U.S. territories, Australia, Canada, England, and New Zealand. **Hundreds of thousands of officers** utilize RISS resources and services each year. RISS supports efforts against organized and violent crime, gang activity, drug activity, terrorism, human trafficking, identity theft, and other regional priorities, while promoting officer safety.

Through RISS's timely and accurate intelligence information and critical investigative support services, law enforcement and criminal justice agencies have increased their success exponentially. These results are measured in the number of career criminals that are removed from our communities and the reduction of illicit drugs available on our streets. With level funding, RISS will continue to maintain the following critical services and programs:

- Operate the six RISS Centers and the RISS Technology Support Center
- Provide investigative support services, including analytical services, equipment loans, and research assistance
- Operate and maintain the RISS Secure Intranet (RISSNET)
- Operate, maintain, and enhance the RISS Criminal Intelligence Databases (RISSIntel) and the RISS National Gang Intelligence Database (RISSGang)
- Operate and maintain the RISS Officer Safety Event Deconfliction System (RISSafe)
- Participate in and implement goals of the sensitive but unclassified(SBU)/controlled unclassified information (CUI) Interoperability Initiative (SII)
- Operate and maintain the RISS Automated Trusted Information Exchange (ATIX)
- Operate the Pawnshop Database and identify strategies to expand the application
- Continue to support partnerships with fusion centers

The Bureau of Justice Assistance (BJA), Office of Justice Programs, U.S. Department of Justice, provides oversight and program management for the RISS Program. The RISS Centers have adopted appropriate operational policies as well as a privacy policy that fully complies with the Criminal Intelligence Systems Operating Policies (28 Code of Federal Regulations [CFR] Part 23). RISS firmly recognizes the need to ensure that an individual's constitutional rights, civil liberties, civil rights, and privacy interests are protected throughout the intelligence process.

RISSNET is an existing and proven infrastructure that connects disparate systems and enables users to query connected systems simultaneously. RISSNET resources include RISSIntel, RISSafe, RISSGang, RISS ATIX, the RISS Investigative Leads Bulletin Board (RISSLeads), a data-visualization and link-analysis tool (RISSLinks), the RISS Search Engine (RISSearch), the RISS Center websites, and secure e-mail. More than **600 resources** from a variety of sources are available to authorized users via RISSNET. The owners of these resources rely on RISS for its secure infrastructure and communications.

In FY2010, more than **3.4 million records** were available in RISSIntel. In addition, RISS experienced more than **4 million inquiries** to RISS resources. Users query RISSIntel to obtain information on subjects, weapons, and addresses. Users select one or all connected systems and conduct a federated search. In addition to RISSIntel, member agencies have access to various state, regional, federal, and specialized criminal justice intelligence systems connected to RISSNET. Almost **100** agencies are connected or pending connection to RISSNET, including **31** High Intensity Drug Trafficking Areas (HIDTAs), **38** state agency systems, and **22** federal and other systems, such as the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF); the Federal Bureau of Investigation (FBI) Law Enforcement Online; the FBI National Gang Intelligence Center; the National Virtual Pointer System; Nlets—The International Justice and Public Safety Network; and many others. RISS continually strives to maximize information sharing among these systems and increase the number of systems connected to RISSNET. By connecting agencies and systems to RISSNET, rather than funding the build-out of infrastructure for new stand-alone information systems, hundreds of millions of dollars are saved and millions of data records are easily and quickly accessed by law enforcement at little or no cost to the user.

RISSafe stores and maintains data on planned law enforcement events, with the goal of identifying and alerting affected agencies and officers of potential conflicts impacting law enforcement efforts. RISSafe helps prevent undercover and other operations from conflicting and prevents officer injuries and deaths that might otherwise have occurred. RISSafe was honored as one of ten 2010 Honorable Mention winners at the 23rd Annual Government Computer News Awards for “Outstanding Information Technology Achievement in Government.” In addition, in February 2011, RISSafe achieved a milestone with the **300,000th operation** being entered into the application. Since RISSafe’s inception, close to **100,000 conflicts** have been identified.

The **RISS Officer Safety Website** serves as a nationwide repository for issues related to officer safety, such as concealments, hidden weapons, armed and dangerous threats, officer safety videos, special reports, and training opportunities. At the recent International Association of Chiefs of Police conference, the U.S. Attorney General addressed officer safety, specifically announcing the VALOR Program, which is designed to promote officer safety and prevent injuries and deaths to law enforcement officers in the line of duty. RISSafe and the RISS Officer Safety Web site are two RISS resources available to support the VALOR Program’s efforts.

The **RISSGang Program** consists of a criminal intelligence database, a website, informational resources, and secure communications to aid and support gang-related investigations. The RISSGang database provides access to gang information, including suspects, organizations, weapons, photographs of gang members, and graffiti. Like RISSIntel, the RISSGang database

provides for a federated search, including the CalGang database. RISS is working to connect other gang intelligence databases to RISSNET, such as the ATF GangNet.

RISS ATIX is available to thousands of law enforcement and public safety agencies. RISS ATIX resources include **Web pages** that contain general and community-specific information. The RISS ATIX **Bulletin Board** provides secure online conferences for users to collaborate and post information. The **Document Library** provides informational and educational materials. ATIX **secure e-mail** enables the distribution of alerts, SBU/CUI, and other information.

In addition to its information sharing resources, RISS offers a full complement of investigative support services and resources to criminal justice agencies, setting RISS apart from other information sharing programs. The following summarizes RISS's investigative support services.

- **Analysis**—RISS analysts developed **37,832 analytical products** in FY2010 for investigators and prosecutors to help increase their ability to identify, detect, and apprehend suspects as well as enhance prosecutorial success in court. These products include link-analysis charts, crime scene diagrams, telephone toll analysis and financial analysis reports, digital forensics analysis, and audio and video enhancement services.
- **Investigative Support**—RISS intelligence research staff responded to **102,761 requests** in FY2010 to conduct database searches and research numerous resources.
- **Equipment Loans**—Pools of highly specialized investigative and surveillance equipment are available for loan to member agencies for use in support of multijurisdictional investigations. In FY2010, **4,992 pieces of equipment** were borrowed by member agencies.
- **Confidential Funds**—RISS provides funds to purchase contraband, stolen property, and other items of an evidentiary nature or to provide for other investigative expenses. RISS provided **\$393,186 in confidential funds** in FY2010.
- **Training**—RISS Centers sponsor or cosponsor training classes, meetings, and conferences that build investigative expertise for member-agency personnel. In FY2010, **80,204 criminal justice professionals** received RISS training.
- **Publications**—Each center develops and distributes numerous publications, bulletins, and reports focusing on local and nationwide issues. In FY2010, the RISS Centers developed **317 documents** and distributed thousands of copies of each to law enforcement personnel.
- **Field Services Support**—The integration of field services is unique to RISS, whereby individuals regularly contact law enforcement and public safety agencies to ensure that RISS is meeting their needs. RISS field staff conducted **25,653 on-site visits** in FY2010 to train, support, and help integrate RISS services. This one-on-one support has resulted in trusted relationships and a program prized among its members.

All criminal justice entities throughout the country are facing tightened budgets and limited resources. RISS's structure and diverse services help augment their efforts. With the assistance of RISS services, agencies arrested 4,563 individuals during FY2010. In addition, agencies seized or recovered more than **\$23 million in narcotics, property, and currency**.

RISS seeks new and strengthens existing partnerships with other law enforcement entities and participates on regional and national committees to further expand and enhance information sharing. One critical initiative involving RISS is the **SBU/CUI Interoperability Initiative**.

RISSNET is one of four SBU/CUI networks/systems participating in the initiative under the auspices of the White House and the Office of the Program Manager, Information Sharing Environment. The goal of this initiative is to provide single sign-on and access to a variety of system-to-system enhancements within an interoperable and protected SBU/CUI network/system environment for local, state, federal, and tribal law enforcement, regardless of agency ownership of the individual network/system.

RISS also supports a number of other programs and initiatives and provides the secure infrastructure for law enforcement to share information, including the **Nationwide Suspicious Activity Reporting (SAR) Initiative**, the National Center for Missing & Exploited Children, the National Motor Vehicle Title Information System, the United States Attorneys' Offices, and the FBI's National Gang Intelligence Center. In addition, information is shared on threats against elected officials and dignitaries through the **U.S. Secret Service Targeted Violence Information Sharing System**. RISS is supported by all national law enforcement organizations, such as the International Association of Chiefs of Police, the National Sheriffs' Association, and the National Narcotic Officers' Associations' Coalition, as well as numerous state associations.

Each RISS Center has developed partnerships and programs to meet the needs of its unique region. Some examples include the Project Safe Neighborhoods Mapping and Analysis Program, the National Identity Crimes Law Enforcement Network, the Cold Case Locator System, the Metals Theft Initiative, the Master Telephone Index, the Pawnshop Database, the Combat Meth Project, and the Cold Hit Outcome Project.

RISS is recognized in the *National Criminal Intelligence Sharing Plan* and the Law Enforcement Information Sharing Program Strategy as a mechanism to facilitate secure information sharing. RISS has become the program of choice for law enforcement and criminal justice agencies from across the nation.

It is respectfully requested that Congress appropriate \$45 million for FY2012 to enable RISS to continue to serve the law enforcement community by providing resources, services, and programs they have come to rely on. It would be counterproductive to require local and state RISS members to self-fund match requirements, as well as to reduce the amount of BJA discretionary funding. Local and state agencies require more, not less, funding to fight the nation's crime problem. RISS is unable to make up the decrease in funding that a match would cause, and it has no revenue source of its own. Cutting the RISS appropriation by requiring a match should not be imposed on the program.

RISS provides resources and capabilities to share critical information nationwide, serves as a secure platform for other criminal justice entities to share and exchange their information, and provides investigative support services that, in many cases, agencies would not otherwise receive. RISS is essential in promoting officer safety and creating a safer work environment for our nation's law enforcement. Appropriate funding and support will enable RISS to continue its programs while effectively serving the criminal justice community. For additional information on the RISS Program, visit www.riss.net. RISS appreciates the support this committee has continuously provided to the RISS Program and is grateful to provide this testimony.

Mr. WOLF. Well, thank you for your testimony.
I have visited the RISS center up in Bucks County a while back.
Thank you.

Mr. FATTAH. It is a great program and I intend to work with the chairman in trying to be responsive to your request.

Mr. LYNCH. That would be greatly appreciated and we do appreciate all this committee has done in the past.

Mr. WOLF. Thank you.

The next witness is SEARCH, Kelly Harbitter.

And let me thank you, too, for keeping to the time. I appreciate that too.

Mr. FATTAH. That bodes well for your request too.

Ms. HARBITTER. I am going to talk fast.

Mr. WOLF. Go ahead.

FRIDAY, MARCH 11, 2011.

SEARCH

WITNESS

KELLY J. HARBITTER, PROGRAM AND POLICY ADVISOR, SEARCH

Ms. HARBITTER. Good morning. I am Kelly Harbitter, programs and policy advisor for SEARCH.

Thank you, Chairman Wolf and Members of the subcommittee, for the opportunity to appear before you today.

SEARCH is a state justice support organization comprised of one gubernatorial appointee from each of the 50 states and territories. Its mission is to promote the effective use of information and identification technology by justice agencies nationwide.

The organization has a long-standing partnership, over 40 years, with the Department of Justice to promote information sharing while protecting the privacy of the individuals that are subject to such information sharing.

On behalf of SEARCH, I am here to support some of the important DoJ programs that facilitate nationwide justice information sharing efforts.

As Attorney General Eric Holder testified before this subcommittee just last week, DoJ recognizes its responsibility to offer financial assistance to its state and local partners to enhance the Nation's criminal justice capabilities. One such critical program is the National Criminal History Improvement Program, the NCHIP Program, administered by BJS at Department of Justice.

Criminal History records provide key information to federal, state, and local decision-makers regarding law enforcement investigations, sentencing, reentry, homeland security, and anti-terrorism, non-criminal justice purposes such as security clearances and employment suitability and many others.

NCHIP funds state governments to improve the accuracy, completeness, and timeliness of criminal history records. These state records provide key information to the federal record systems including the FBI criminal history files. Without adequate funding to improve the state records, the quality and quantity of records submitted to the FBI will be compromised.

Aging infrastructure must be updated and new technologies that improve information sharing must be implemented. Basically without funding, the information sharing roads are not maintained and we're not leveraging the latest and greatest technology to help us do our jobs better.

In recent years, NCHIP has been significantly under-funded. Some states no longer receive any allocation from the NCHIP grants.

The President's budget provides \$12 million for NCHIP. While this is one of the few increases in the budget over fiscal year 2010, when this amount is divided among the 50 states, it is not enough.

Second, I would like to talk about the National Instant Criminal Background Check System or NICBCS. The system allows retailers to determine whether a prospective buyer is eligible to buy firearms or explosives. Again, the states supply the records to be searched during the NICBCS criminal background check.

NICBCS funding has enhanced the ability of states to contribute these records, but there is still much more work to be done. States see the clear value of improving their records and are willing to do so. That is why funding is so important to the end game. Without a comprehensive, complete, and accurate background check, dangerous individuals could be allowed to purchase firearms and put the public at risk.

In light of recent and high-profile tragedies at Virginia Tech and Arizona, NCHIP and NICBCS help keep weapons out of the hands of people who should not have them.

The proposed budget funds NICBCS at \$12 million, a reduction from fiscal year 2010 and far below the authorized appropriations level of \$200 million. States need at least \$200 million annually to effectively participate in NICBCS.

I would also quickly like to share SEARCH's support for the Byrne Discretionary and the Competitive Grant programs. Both of these programs have helped state and local justice agencies implement mission critical information sharing systems over the years.

The Byrne Discretionary Program is not funded in the current budget. We urge Congress to restore the program. The Competitive Program has been reduced to \$25 million. We believe \$65 million is an appropriate amount to allow for these programs that help leverage federal funding to the states and locals by funding programs to prevent crime, improve the administration of justice, and assist victims of crime.

So in closing, congressional support for the state criminal history repositories and justice information sharing is vital. By strengthening a state criminal history record, we improve critical decisions such as those about handgun purchases across the country.

And on behalf of SEARCH, I would like to thank you for the opportunity to testify here today.

[The information follows:]

SEARCH*The National Consortium for Justice Information and Statistics*Francis X. Aumand III
ChairmanRonald P. Hawley
Executive Director

Prepared Testimony of Kelly Harbitter, Programs and Policy Advisor
 SEARCH, The National Consortium for Justice Information and Statistics

I. Introduction

I am Kelly Harbitter, Programs and Policy Advisor for SEARCH. Thank you, Mr. Chairman and members of the Subcommittee for the opportunity to speak to you today on the Department of Justice (DOJ) funding to be provided for in the FY12 Commerce, Justice, Science, and Related Agencies appropriations bill. I would like to take this opportunity to address criminal justice funding for DOJ; justice assistance funding; and the states' criminal justice efforts in the President's proposed budget released on February 14, 2011.

SEARCH is a state criminal justice support organization created by the states and comprised of governors' appointees from each state. Each state pays dues annually. SEARCH's mission is to promote the effective use of information and identification technology by criminal justice agencies nationwide. SEARCH has been a long-standing partnership with DOJ to promote information sharing as well as to protect personal privacy within the criminal justice community.

II. National Criminal History Improvement Program (NCHIP)

The National Criminal History Improvement Program (NCHIP) is administered by the Department of Justice (DOJ), Office of Justice Programs (OJP), Bureau of Justice Statistics (BJS). The NCHIP program responds to a DOJ objective to enhance the criminal justice capabilities of state governments by improving the accuracy, completeness and timeliness of criminal history records. These state systems support federal records systems, including the Federal Bureau of Investigation (FBI) criminal history files.

The NCHIP program has been extraordinarily successful in helping States to improve the accuracy, reliability and completeness of their automated, criminal history record systems. The goal of the NCHIP grant program is to improve the nation's safety and security by enhancing the quality, completeness, and accessibility of criminal history record information. Without an adequate level of funding for the states, the quality of criminal records available nationwide will be negatively impacted.

The President's FY12 budget would provide \$12 million dollars for NCHIP. While this is one of the few increases in the budget over the FY10 funding levels, this is still not a sufficient amount to ensure the program's success. In recent years the NCHIP program has been

significantly under-funded, to the point that some states no longer receive any allocation from the NCHIP grants.

BJS, with limited funding, has been widely recognized for its extraordinary efficiency, effectiveness and accomplishments in the NCHIP program. The States, including the state repositories, have devoted massive efforts and resources over many years toward building automated, criminal history record databases that are accurate, complete and reliable. Notwithstanding the efforts of BJS and the States, there continue to be significant shortfalls in arrest reporting; in disposition reporting; and, as well, in accuracy and data quality.

The accuracy, completeness and reliability of the nation's criminal history record system has a more important and comprehensive impact today than ever before, including for law enforcement investigations; for officer safety; for sentencing and other criminal justice purposes; for expungement and other reentry strategies; for homeland security and anti-terrorism purposes; for public non-criminal justice purposes, including security clearances and employment suitability; for private sector risk management purposes; and for research and statistical programs that provide critical guidance for justice assistance decisions and for shaping law and policy.

III. National Instant Criminal Background Check System (NICS)

The National Instant Criminal Background Check System (NICS) was established under the Brady Handgun Violence Prevention Act, Public Law 103-159. The system allows retailers to determine whether a prospective buyer is eligible to buy firearms or explosives. The FBI developed the system through a cooperative effort with the Bureau of Alcohol, Tobacco, Firearms and Explosives and local and state law enforcement agencies. Although the NICS system is housed at the FBI's Criminal Justice Information Services (CJIS) Division, NICS relies on the participation of the states to supply the records to be searched during a NICS criminal history background check. States which process a transaction must also respond to requests by individuals who are denied the purchase of a firearm as part of the NICS appeals process.

SEARCH has been a longstanding and steadfast supporter of NICS. Since the program was founded, SEARCH has partnered with the relevant federal agencies on the development and implementation of NICS. We support strengthening the program to include all relevant and appropriate records, including conviction records relating to a crime punishable by imprisonment for a term exceeding one year; records of persons adjudicated mentally defective or committed to a mental institution; relevant domestic violence records and protection orders; and records of persons who are unlawful users of, or addicted to, controlled substance as demonstrated by arrests, convictions or adjudications.

The President's proposed budget provides \$12 million for the NICS program, a reduction from FY10 and far below the authorized appropriations level of \$200 million. This amount is insufficient to assist each of the fifty states' efforts. Federal grant funds to the states in an amount of at least \$400 million dollars annually would be more appropriate to assist the states in strengthening their NICS participation.

Providing funds to the states to perform these critical functions is a necessary and integral part of an efficient and robust NICS system. Without an adequate level of funding for the states, the quality and quantity of the criminal records submitted to the FBI by the states may be negatively impacted. Without a comprehensive background check, dangerous individuals could be allowed to purchase firearms and put the public safety at risk. In light of recent and high-profile tragedies, SEARCH urges the Congress to provide federal funds to further expand NICS.

IV. Other Department of Justice Programs in the President's FY 2012 Budget

a. Byrne Discretionary Grant Program

The President's proposed budget provides no funds for the Byrne Discretionary Grant Program. Important state criminal justice needs have been funded by this program in past years. SEARCH urges the Congress to restore the funding to this program to adequate levels.

b. Byrne Competitive Grant Program

SEARCH also supports enhanced funding for the Byrne Competitive Grant Program. The program was established in the FY08 Omnibus Appropriations Act to fund programs of national significance to prevent crime, improve the administration of justice, and assist victims of crime. The process is administered by OJP, and the funds are distributed to national program organizations that have been selected according to congressional objectives.

However, the total amount of grant funding provided to all of the competing national programs has never exceeded \$40 million and would be reduced to only \$25 million under the President's proposed budget. The program has never been able to fund even half of the worthy proposals that DOJ has received in response to grant solicitations. We believe that funding in the range of at least \$65 million is the minimum necessary to permit a workable and effective competitive grant program on a national scale. Otherwise, the under-funded program greatly reduces its chance for success.

c. Justice Information Sharing and Technology

Finally, I want to call your attention to a fledgling program for state and local law enforcement assistance. This program, "*Justice Information Sharing and Technology*," was created last year with the intent to support critical information sharing activities among DOJ and its Global partners. SEARCH is encouraged to see the recognition for this program need and encourages continued funding for the program at the proposed level of \$12 million. SEARCH believes the program will be extremely valuable to justice information sharing nationwide.

V. Conclusion

Congressional support for the state criminal history repositories is vital. The federal investment can be leveraged many times over by contributing to the ability of state and local criminal justice agencies to provide timely, accurate and compatible information to federal programs such as NICS.

On behalf of SEARCH, its governors' appointees, and the thousands of criminal justice officials who participate in the SEARCH network and who benefit from SEARCH's efforts, I thank you for your time. It has been a pleasure appearing here today.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. Thank you.

And it might be helpful if you could have the 50 governors send the chairman a letter asking that we, even though there is an increase, that we still need to do more because a lot of these governors out there are telling the public that the Federal Government needs to be cutting spending.

Ms. HARBITTER. Uh-huh.

Mr. FATTAH. So it is somewhat inconsistent.

Ms. HARBITTER. Yes.

Mr. FATTAH. And so if we could hear from the appointees—

Ms. HARBITTER. Right.

Mr. FATTAH [continuing]. In these 50 states that this is a program that they find to be vitally important and that would be helpful. Thank you.

Ms. HARBITTER. Yes, sir. That is an excellent point and actually one that we want to put together some metrics to share with you all as well. So I will take that back for us to do.

Mr. WOLF. Thank you.

Next witness, Independent Review Team, Elbridge Coochise, the chief justice retired.

FRIDAY, MARCH 11, 2011.

FUNDING OF TRIBAL COURTS

WITNESS

ELBRIDGE COOCHISE, CHIEF JUSTICE RETIRED, INDEPENDENT REVIEW TEAM

Mr. COOCHISE. Thank you, Chairman.

Good morning, Chairman Wolf, and thanks for the opportunity to come before this subcommittee regarding funding of Tribal Courts.

First of all, we do want to thank you very much for the \$10 million additional funding in fiscal year 2010 that went out for Tribal Courts. It was very welcome news for the court systems.

As I mentioned before, there are about 300 Tribal Court systems including CFR courts run by the BIA in the Lower 48 and then in Alaska about another 45 that are developing.

And our request is an additional \$10 million. One of the main reasons is the New Law and Order Act that was passed by Congress. If the tribes are going to do the extended sentencing beyond the one year and \$5,000, it requires attorneys who are barred both as judges, prosecutors, and public defenders. And there is no money with the Tribal Law and Order Act as of today.

So our team has been reviewing a number of courts, and I gave a report last year, so you can have it. On the last two pages, there is a list of 79 courts that we have reviewed thus far and also the breakdown of what courts we reviewed last year in 2010.

And OMB's specification to look at speedy trial issues are all in there and the statutes and whether there is violations or not.

So with the courts, also are funding, there are currently 184 that get federal funding out of the 300. And the federal funding amounts to about 26 percent of the total court budgets in Indian

Country. So our request is again to appropriate dollars on the Indian Tribal Justice Act Congress passed a number of years ago that has not been funded yet with the additional things as listed in the first pages, the salaries and trying to get technology in the court systems.

We were in Oklahoma last week and found out that one tribe got \$6,500 out of that \$10 million, so now they can get a recording system instead of using those cassette recorders that they have been using in court.

And so our courts need assistance in Indian Country and we appreciate what you can do to add more money into the budget for the court systems.

And the reports in front of you have the listing and the charts and the coloring that we couldn't put in the testimony.

[The information follows:]

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**ORAL TESTIMONY OF ELBRIDGE COOCHISE, CHIEF JUSTICE, RETIRED
INDEPENDENT TRIBAL COURTS REVIEW TEAM
BEFORE THE HOUSE COMMERCE, JUSTICE, SCIENCE
AND RELATED AGENCIES APPROPRIATIONS
SUBCOMMITTEE FOR THE FISCAL YEAR 2012
DEPARTMENT OF JUSTICE – TRIBAL COURTS
March 11, 2011**

Thank you for the opportunity to testify today and to address the serious funding needs that have limited and continue to hinder the operations of Tribal judicial systems in Indian Country. I am the Lead Judge representing the Independent Tribal Court Review Team. I am here today to provide justification for increased funding for Tribal Courts in the Department of Justice, Office of Justice Programs for the Tribal Courts Assistance Program. We thank this Committee for the additional \$10.0 million funding in FY 2010. These funds were a blessing to Tribes. Even minimal increases were put to good use. It is the strong recommendation of the Independent Tribal Courts Review Team that the Federal Tribal Courts budget be substantially increased in FY 2012 to support the needs of Tribal judicial systems.

Budget Priorities, Requests and Recommendations

1. **+\$10 Million Increase for Tribal Courts above the FY 2010 enacted level**
2. **+\$58.4 Million authorized under the Indian Tribal Justice Act of 1993, P.L. 103-176, 25 USC 3601 and re-authorized in year 2000 P.L. 106-559 (no funds have been appropriated to date)**

The increase will support:

1. **Hiring and Training of Court Personnel**
2. **Compliance with the 2010 Tribal Law and Order Act**
3. **Salary Increases for Existing Judges and Court Personnel**
4. **State-of-the-Art Technology for Tribal Courts**
5. **Security and Security Systems to Protect Court Records and Privacy of Case Information**
6. **Tribal Court Code Development**
7. **Financial Code Development**

Background:

The Department of Justice (DOJ) provides funding to state, local and Tribal governments to supplement their justice systems for a broad array of activities including courts. Tribal courts play a "vital role" in Tribal self-determination and self-governance as cited in long-standing federal policy and acts of Congress. Funding levels from DOJ to support Tribal justice systems have not met the Federal obligations.

For the past 5 years, the Independent Court Review Team has been traveling throughout Indian Country assessing how Tribal Courts are operating. During this time, we have completed approximately 73 court reviews. There is no one with more hands-on experience and knowledge regarding the current status of Tribal Courts than our Review Team.

We have come into contact with every imaginable composition of Tribe; large and small, urban and rural, wealthy and poor. What we have NOT come into contact with is any Tribe whose Court system is operating with financial resources comparable to other local and State jurisdictions.

Justification for Request:

1. **Hiring and Training of Court Personnel** - Tribal Courts make do with underpaid staff, under-experienced staff and minimal training. (We have determined that hiring Tribal members limits the inclination of staff to move away; a poor excuse to underpay staff.)
2. **Compliance with the 2010 Tribal Law & Order Act** – To provide Judges, Prosecutors, Public Defenders, who are attorneys and who are bared to do "enhanced sentencing" in Tribal courts
3. **Salary Increases for Existing Judges and Court Personnel** – Salaries should be comparable to local and State Court personnel to keep pace with the non-Tribal judicial systems and be competitive to maintain existing personnel.
4. **Tribal Courts Need State-of-the-Art Technology** - (software, computers, phone systems, tape recording machines.) Many Tribes cannot afford to purchase or upgrade existing court equipment unless they get a grant. This is accompanied by training expenses and licensing fees which do not last after the grant ends.
5. **Security and Security Systems to Protect Court Records and Privacy of Case Information** - Most Tribal Courts do not even have a full time Bailiff, much less a State-of-the-Art security system that uses locked doors and camera surveillance. This is a tragedy waiting to happen.
6. **Tribal Court Code Development** - Tribes cannot afford legal consultation. A small number of Tribes hire on-site staff attorneys. These staff attorneys generally become enmeshed in economic development and code development does not take priority. Tribes make do with under-developed Codes. The Adam Walsh Act created a hardship for Tribes who were forced to develop codes, without funding, or have the state assume jurisdiction. (States have never properly overseen law enforcement in a Tribal jurisdiction.)
7. **Financial Code Development** - We have rarely seen Tribes with developed financial policies. The process of paying a bond, for example, varies greatly from Tribe to Tribe. The usual

process of who collects it, where it is collected and how much it is, is never consistent among Tribes.

Tribal Courts Review:

There are many positive aspects about Tribal Courts. It is clear that Tribal Courts and justice systems are vital and important to the communities where they are located. Tribes value and want to be proud of their Court systems. Tribes with even modest resources tend to allocate funding to Courts before other costs. After decades of existence, many Tribal Courts, despite minimal funding, have achieved a level of experience and sophistication approaching, and in some cases surpassing, local non-Indian Courts.

Tribal Courts, through the Indian Child Welfare Act, have mostly stopped the wholesale removal of Indian children from their families. Indian and Non-Indian Courts have developed formal and informal agreements regarding jurisdiction. Tribal governments have recognized the benefit of having law-trained Judges, without doing away with Judges who have cultural/traditional experience. Tribal Court systems have Appellate Courts, jury trials, well-cared-for Courthouses (even the poorer Tribes), and Tribal Bar listings and fees. Perhaps most importantly, Tribes recognize the benefit of an independent judiciary and have taken steps to insulate Courts and Judges from political pressure. No longer in Indian country are Judges automatically fired for decisions against the legislature.

Our research indicates Tribal Courts are at a critical stage in terms of need. Nationwide, there are 184 Tribes with Courts that received \$24.7 million in Federal funding in 2010. Assessments have indicated that the Bureau of Indian Affairs only funds Tribal Courts at 26% of the funding needed to operate. Tribes who have economic development generally subsidize their Tribal Courts. On the flip side, Tribes who cannot afford to assist in the financial operations of the Court are tasked with doing the best they can with what they have even at the expense of decreasing or eliminating services elsewhere. This while operating at a disadvantage with already overstrained resources and underserved needs of the Tribal citizens. The assessment suggests that the smaller Courts are both the busiest and most underfunded.

The grant funding in the DOJ is intended to be temporary, but instead it is used for permanent needs; such as funding a Drug Court Clerk who then is used as a Court Clerk with Drug Court duties. When the funding runs out, so does the permanent position. We have witnessed many failed Drug Courts, failed Court management software projects (due to training costs) and incomplete Code development projects. When the Justice funding runs out, so does the Project.

As a directive from the Office of Management and Budget, our Reviews specifically examined how Tribes were using Federal funding. In the last five fiscal years through FY2010 there were only two isolated incidents of a questionable expenditure of Federal funds. It is speculated that because of our limited resources, we compromise one's due process and invoke "speedy trials" violations to save Tribal Courts money. Everyone who is processed through the Tribal judicial system is afforded their Constitutional civil liberties and civil rights.

We do not wish to leave an entirely negative impression about Tribal Courts. Tribal Courts need an immediate, sustained and increased level of funding. True. However, there are strong indications that the Courts will put such funding to good use.

There are Tribes like the Fort Belknap Tribe of Montana whose Chief Judge manages both offices and holds Court in an old dormitory that can't be used when it rains because water leaks into the building and the mold has consumed one wall. ***Their need exceeds 100%.***

There are several courts where the roofs leak when it rains and those court houses cannot be fixed due to lack of sufficient funds. The Team took pictures of those damaged ceilings for the BIA hoping to have additional funds for the Tribes to fix the damaged ceilings.

Tribal Courts have other serious needs. Tribal Appellate Court Judges are mostly Attorneys who dedicate their services for modest fees that barely cover costs for copying and transcription fees. Tribal Courts offer Jury Trials. In many Courts, one sustained Jury Trial will deplete the available budget. The only place to minimize expenses is to fire staff. Many Tribal Courts have Defense Advocates. These advocates are generally not law trained and do a good job protecting an individual's rights (including assuring speedy trial limitations are not violated.) However, this is a large item in Court budgets and if the defense advocate, or Prosecutor, should leave, the replacement process is slow.

I come here today to tell Congress these things. We feel it is our duty to come here on behalf of Tribes to advocate for better funding. Tribes ask us to tell their stories. They open their files and records to us and say, "We have nothing to hide". Tell Congress we need better facilities, more law enforcement, more detention facilities, more legal advice, better codes... the list goes on and on. But, as we have indicated, it all involves more funding. This Congress and this Administration can do something great. Put your money where your promises have been.

National Requests:

We support the requests and recommendations of the National Congress of American Indians.

On behalf of the Independent Tribal Court Review Team; Charles D. Robertson Jr., Honorable Philip D. Lujan, Ralph E. Gonzales, Myrna R. Rivera and myself, Thank you.

Mr. WOLF. Thank you, sir. Chief Justice, thank you for your testimony. We appreciate it very much.

Mr. Fattah.

Mr. FATTAH. Thank you.

And we want to work and see how we can be even more helpful than we have been to date.

Thank you.

Mr. COOCHISE. Well, thank you very much for this opportunity.

Mr. WOLF. Thank you.

Next witness will be National Crime Prevention Council, Ann Harkins.

FRIDAY, MARCH 11, 2011.

NATIONAL CRIME PREVENTION COUNCIL

WITNESS

ANN M. HARKINS, CHIEF EXECUTIVE OFFICER, NATIONAL CRIME PREVENTION COUNCIL

Ms. HARKINS. Thank you, Chairman Wolf, Ranking Member Fattah, and Members of the subcommittee, for the opportunity to testify this morning and for holding these public hearings.

I am Ann Harkins, President of the National Crime Prevention Council, home of McGruff the Crime Dog.

For more than 28 years NCPC has provided practical research-based information on proven and cost-effective crime prevention practices to citizens, law enforcement, and community leaders across the country.

NCPC strongly supports the Byrne Competitive Grant Program and encourages the subcommittee to appropriate \$40 million for it in fiscal year 2012, the same as fiscal year 2010, although we would be delighted to support our colleagues from SEARCH in their request for an increase to \$65 million.

We respectfully urge you to sustain funding for the successful program even in tough economic times because it is a solid investment in the safety of all Americans.

Importantly, the Byrne Competitive Program supports Byrne JAG and state and local law enforcement. They provide training and evidence-based practices to the field, thus enhancing and leveraging grant funding.

The National Crime Prevention Council respectfully requests that the subcommittee also fund two essential crime prevention functions in fiscal year 2012. The first is an independent non-governmental national repository and clearinghouse on best practices. Local law enforcement deserves the best materials on effective crime prevention practices to get the best possible outcomes from your substantial investments in Byrne JAG and other local and state assistance programs.

The second essential function is a strong national advertising campaign to reach citizens with evidence-based crime prevention messages. It has tremendous impact in changing individual and collective behavior to prevent crime which is the most cost-effective way to address criminal justice issues.

In the early 1980s, the Department of Justice and others formed the National Crime Prevention Council, a public/private partnership to establish a crime prevention public education campaign. The most visible portion of the campaign features McGruff and his signature message that inspires all Americans to take a bite out of crime.

Prior to that campaign, Americans thought that crime prevention was the sole responsibility of law enforcement. Then we focused on encouraging people to utilize lights, locks, and alarms to help keep themselves safe.

Over 30 years, the campaign generated \$1.5 billion in donated media at extremely low cost. I am proud to report that today citizens and community groups realize that crime prevention is everyone's business and we at the National Crime Prevention Council are addressing problems from cyber bullying to intellectual property theft while still encouraging people to keep themselves safe at home and in their communities.

NCPC is proud of the work we did with you, Mr. Chairman, to address anti-gang issues and prevention and also the Safer Cities Project which we worked on in Philadelphia.

Let me share two quick ideas. The crime prevention techniques of watching out and helping out, keeping alert and becoming engaged in your community work equally well for homeland security and we hope that the subcommittee will support us in our effort to use those techniques that are proven to help us protect the Nation as well.

We also have a new program for 18 to 24-year-olds, the largest cohort of victims of crime. We call it First Timers. The first time you rent an apartment, the first time you buy a car, the first time you perhaps go to a party on your own, we want to help these young people make that first time not the first time they become a victim of crime.

In closing, an ongoing crime prevention campaign is essential to maintaining years of progress and commitment from this subcommittee and the Congress. We hope you will work with us to continue that effort.

[The information follows:]

Testimony of Ann Harkins
 Chief Executive Officer
 National Crime Prevention Council

Thank you, Chairman Wolf and Ranking Member Fattah, for the opportunity to testify before the Subcommittee today regarding FY12 funding for the Justice Department's Bureau of Justice Assistance in the Office of Justice Programs, and especially for a \$40 million funding level for the Byrne Competitive Grant program. I am Ann Harkins, President and CEO of the National Crime Prevention Council (NCPC), an organization providing practical information on proven and cost-effective crime prevention practices to local law enforcement, community leaders and citizens for almost thirty years. I am here, as I was last year, to express NCPC's strong support for the Edward Byrne Memorial Competitive Grant program. We realize, of course, that in the present budget climate this Subcommittee, like everyone else in Congress, is looking for places to trim budgets and reduce spending. As you undertake this important task, we urge you to consider not only the importance of the work done through the Byrne program, but also the cost savings in the long run that support for Byrne funded prevention initiatives will realize.

Therefore, we respectfully urge the Subcommittee to continue to appropriate \$40 million for this program in FY12, the same level of funding this Subcommittee provided in FY10. That level of funding, of course, remains in place for FY11 under the present Continuing Resolution. We also respectfully suggest that the Subcommittee provide a direct appropriation of \$1 million, from the Byrne Discretionary fund, for the purpose of evaluation and dissemination of evidence-based best practices for crime prevention.

Equally important, I respectfully request that the Subcommittee provide specific guidance to the Office of Justice Programs to ensure that two essential crime prevention functions, ones this Subcommittee has supported in the past, are funded within Byrne Competitive in FY12. The first is ensuring the existence of an independent, non-governmental national repository and clearinghouse on best practices and evidence-based crime prevention. This function has been intended to ensure that state and local law enforcement have access to the best materials on effective crime prevention practices--to get the best possible outcomes from the Subcommittee's substantial investments in Byrne Justice Assistance Grants and other state and local assistance programs. The second essential function is a strong national public service advertising campaign to reach the general public with evidence-based crime prevention messages. The Subcommittee has supported this function in the past because such a campaign has been shown to have tremendous impact in changing individual and collective behavior to prevent crime.

Finally, we request that the Subcommittee include language in its Report instructing the Office of Justice Programs to give priority consideration to applicants for Byrne Competitive Grant funding who are best able to leverage in-kind funds and thus secure a higher return on investment for the government's money.

This Subcommittee has historically made significant investments in a number of important crime prevention programs. On behalf of the NCPC Board of Directors, its staff, and the thousands of crime prevention practitioners across the country whom we represent, I want to thank you for that support. I also want to thank the Department of Justice, especially the Bureau of Justice Assistance and everyone at the Office of Justice Programs, who have been our main funders and strong partners from the beginning.

NCPC is a private, non-profit, tax exempt 501(c) (3) organization, whose primary mission is to be the nation's leader in helping people keep themselves, their families and their communities safe from crime. We are funded through grants and contracts from the federal government and from various private sources. Through a variety of materials, programs, advertising campaigns, training, curricula, and websites, NCPC enables communities and law enforcement to work together to create safe environments, especially for children and youth.

Established in 1980 by officials from nine states, the Department of Justice and other federal agencies, and private sources, the NCPC-led National Citizens' Crime Prevention Campaign and related initiatives have featured our beloved icon McGruff the Crime Dog ® and his signature message that beckons all Americans to "Take a Bite Out of Crime ®." Recent survey data reveal that McGruff and his message have an aided recognition rate of 83% of adult Americans and that more than 80% of kids would follow his advice on crime prevention. Over 90% of adults describe McGruff as informative, trustworthy and effective. Federal resources invested in the National Citizens' Crime Prevention Campaign have been well spent. For every dollar of federal investment, the Campaign generated \$100 or more worth of public service advertising. Over its history, the Campaign has produced \$1.5 billion worth of free advertising at very modest cost.

Since the inception of the Campaign, NCPC has maintained a close partnership with the Department of Justice (DOJ) and local law enforcement in creating cost-effective and award-winning public service advertising, launching groundbreaking and comprehensive support initiatives for crime-besieged cities, providing technical assistance, producing and distributing hundreds of ready-to-use publications filled with practical tips, expanding the reach of crime prevention tools through online resources, conducting conferences and training, and more.

Along with our partners in DOJ, NCPC has administered such programs as "Be Safe and Sound in Schools" and "McGruff Neighborhood" (including McGruff Club) and developed "Community Works" curricula for after school programs. Working with the National Sheriffs' Association, NCPC has helped create safe neighborhoods by partnering with local law enforcement, communities and citizens through the Celebrate Safe Communities initiative. Since the inception of this initiative in 2008, more than 300 communities in 38 states and the District of Columbia have brought law enforcement and communities together through their participation in CSC during Crime Prevention Month in October and throughout the year. Through the Safe Cities program we have helped local law enforcement agencies and their community partners in Philadelphia, Baltimore and Washington, D.C. design, implement and assess comprehensive crime prevention strategies.

NCPC administers two membership organizations. The Crime Prevention Coalition of America (CPCA) is an association of more than 400 local, state and federal crime prevention-related organizations representing thousands of constituents. The National Crime Prevention Association (NCPA) is a membership organization of approximately 1,400 individual crime prevention practitioners, mostly from law enforcement. This year, through Byrne Competitive Grant funding, NCPA is implementing a program under which, for the first time on a national level, qualified crime prevention practitioners can be certified as experts in the field. Both organizations provide resources, information on lessons learned and best practices, training, networking opportunities and other crime prevention-related services.

NCPC works closely with state and local law enforcement and their national organizations to anticipate and respond to persistent crime challenges, emerging crime trends, and the changing crime prevention needs of communities and states nationwide. Through a Byrne Competitive grant, NCPC is working with DOJ and a number of other partners to conduct a crime prevention awareness campaign to address the dangerous and costly problem of intellectual property crime such as pirating and counterfeiting.

NCPC is also implementing Byrne grants to make crime prevention information available to “first timers,” the often overlooked population of young people ages 18-24; provide practical, ready-to-use resources on such emerging crimes as mortgage and foreclosure fraud and vacant property crime; and help keep senior citizens safe from abuse and telemarketing and other forms of fraud.

A traditional concept in crime prevention is the crime prevention “triangle.” Simply stated, in order for crime to occur, three elements must exist: desire, ability, and opportunity. Removing one element will prevent the crime. NCPC’s newest initiative, the Circle of Respect, is about reducing desire. Two years ago NCPC set out to work on a new crime prevention initiative that would “inspire us to live in ways that embody respect ... where we live, learn, work and play.” That is our vision for the Circle of Respect. Lack of respect is contributing to online aggression and a new class of crime often called cyberbullying. A lack of respect is also contributing to traditional crimes like school violence and property theft among teens. At the end of the cyberbullying spectrum is “sexting”—the sending of inappropriate sexual images through electronic devices. Sexting and cyberbullying have demonstrated tragic consequences.

The Circle of Respect is a national initiative that will engage and challenge children, young people, adults, families, and communities to promote a culture of respect that transcends what has been a traditional tolerance of unacceptable behavior. Although the initial focus of the Circle of Respect will be on cyberbullying and bullying, as the initiative expands we will address such crimes as gang violence, vandalism, child abuse, workplace violence, abuse and fraud aimed at seniors, dating violence, and substance abuse. As the circle expands from respect for self to respect in other aspects of our lives, we will be reducing the opportunity for crime to occur and we will be promoting productivity at school and work in the process.

When McGruff and NCPC came on the scene 30 years ago, community groups and individual citizens thought that crime prevention was the sole responsibility of law enforcement. Since then, working together with the DOJ, local law enforcement and communities all across the nation, we have “moved the needle” such that today community groups and members realize that crime prevention is everyone’s business. McGruff has carried the message that all people—whether they are 7 or 107—can do their part to prevent crime and make America safer. Now, 9 out of 10 adults describe themselves as responsible for helping to keep their communities safe from crime.

We have all seen recent surveys and reports indicating that crime, including serious, violent crime, is down all across the country and has been decreasing since the early 1990s. To be sure, many communities large and small have made terrific progress in combating crime. We can take solace in this encouraging news but this is no time to become complacent and let our guard down. For one thing, these data can be misleading. New forms of crime are emerging, such as identity theft; mortgage and foreclosure fraud; and cyberbullying, sexting and other on-line crimes that are not captured in traditional surveys. New types of gangs and new forms of drug

abuse are spreading. New technology has spawned new forms of intellectual property crimes that are not reflected in traditional crime statistics.

Although crime is down nationally and in notable large cities such as New York City and Los Angeles, there are still cities, towns, suburbs and rural communities where this is not the case. Talk to people in various parts of the country and they will tell you that crime is not down in their communities. A 2009 Gallup poll found that 74% of Americans believe there is more crime in the United States than there was a year ago. In addition, 51% say there is more crime in their areas now than a year ago. That perception causes people to alter their lives in undesirable ways.

There are several factors that portend an increase in crime rates for the foreseeable future. Crime has traditionally increased during times of recession or economic downturns. According to a January 2009 study by the Police Executive Research Foundation (PERF), 44% of law enforcement agencies reported crime increases linked to the economy. The “baby boomlet” effect will produce more young people between the ages of 15 and 24, the age cohort that tends to commit the majority of crimes and be most victimized by crime. Many of the under-educated, unskilled and economically disadvantaged among them can be expected to turn to lives of crime. Scarce law enforcement resources are increasingly being devoted to anti-terrorism at the expense of traditional crime. Shrinking budgets have led to downsized police departments and will continue to do so.

Crime, of course, extracts a high cost from its victims. Crime also has a significant financial cost—approximately \$430 billion per year—borne by victims and their families, employers, insurers, communities and taxpayers. In 2005, governments at all levels spent more than \$200 billion for police, corrections and legal activities associated with crime—corrections alone costs \$68 billion annually. That same year crime victims incurred more than \$17 billion in costs. In 2007, consumers lost an estimated \$1.2 billion to fraud. There is also an unknowable opportunity cost both financial and social. All these costs have been trending upward and in the present economy we can ill afford them.

Common sense, therefore, leads to the conclusion that investment in crime prevention has never been more critical. We know that crime prevention works; it makes individuals and communities safer. There is no doubt that when individuals, community groups, and businesses work closely with law enforcement to help keep watch over their communities, crime is prevented. Basic crime prevention techniques also help individuals and communities improve homeland security and keep themselves safe from terrorist attacks.

Crime prevention also saves money. Money spent on prevention initiatives reduces the need for government spending on intervention, treatment, enforcement, and incarceration. Credible studies conclude that crime prevention initiatives are cost effective; we can pay modest costs now or exorbitant ones later. Investments in crime prevention should be welcome in an era of tightening budgets at all levels of government.

The federal government sets the tone by promoting crime prevention strategies that work. It provides leadership through funding, education, technical assistance and support for state and local programs. Research and identification of what works, and translation and transmission of evidence-based best practices and lessons learned to and among the field, are important functions for national programmatic leadership.

Appropriations of \$40 million in FY12 for the Byrne Competitive Grant program will provide BJA resources to fund important crime prevention programs along with the other authorized criminal justice programs. This will allow NCPC and other non-profits to submit a variety of grant proposals for funding of proven and cost-effective crime prevention programs. For example, in FY11 NCPC hopes to submit competitive applications for grants, among others, to:

- Provide tools, publications, training, and other resources and services tailored to each community's needs, to enhance state and local partners' crime prevention work;
- Introduce McGruff and his message to a new generation of children teaching Internet safety, gang and drug abuse avoidance and cyberbullying prevention;
- Help Americans of all ages learn how to protect themselves from identity theft;
- Bring essential crime prevention information to college campuses through basic and advanced training classes for campus law enforcement and students;
- Enhance the accessibility to parents, law enforcement, and teens of crime prevention information available through NCPC's Internet and social media;

NCPC is committed to promoting and advancing evidence-based crime prevention practices. To the greatest extent possible, NCPC designs messages and trains law enforcement, community leaders and other individuals on crime prevention practices with proven outcomes based on the highest standards of research. NCPC's commitment to promoting the most effective crime prevention tools and messages is based on the organization's capacity to monitor crime prevention research and translate that research into practice.

To that end, in Fiscal Year 2012, NCPC respectfully requests that \$1,000,000 be directed from appropriations within the Bureau of Justice Assistance-Byrne Discretionary program to evaluate best practices in crime prevention. If provided, these resources will allow NCPC to: conduct and disseminate findings of a meta-analysis of research on crime prevention practices; survey the crime prevention field to develop recommendations for crime prevention research questions; publish materials for practitioners on evidence-based crime prevention practices and messages; design and implement new evaluations of crime prevention documents, programs, and training; determine trends in crime to predict where the agency and other organizations should focus its efforts; and produce logic models for crime prevention.

A well-funded national repository and clearinghouse for best practices is essential to identify and publicize the most effective forms of crime prevention and ensure this Subcommittee, and American taxpayers, that the investment in prevention has been worthwhile. We suggest, therefore, that the Subcommittee include report language directing OJP to fund—within the \$40 million appropriated for Byrne Competitive—the activities of a national clearinghouse on best practices in crime prevention.

Thank you again for allowing me to appear today and for your ongoing commitment to state and local crime prevention programs. NCPC is proud to have worked with Congress, DOJ, state and local law enforcement and other agencies, and the private sector in the past, and we believe we can be competitive going forward. As Congress works to prevent crime, please consider NCPC and McGruff as your active partners in empowering citizens and working with local law enforcement to build safer communities.

Mr. WOLF. Great. Thank you very much for your testimony.
 Mr. Fattah.
 Mr. FATTAH. No, thank you.
 Mr. WOLF. Okay. Next witness will be Fight Crime: Invest in Kids, Gabriel A. Morgan.
 Welcome.

FRIDAY, MARCH 11, 2011.

FIGHT CRIME: INVEST IN KIDS

WITNESS

GABRIEL A. MORGAN, SR., SHERIFF, NEWPORT NEWS CITY SHERIFF'S OFFICE, FIGHT CRIME: INVEST IN KIDS

Mr. MORGAN. Good morning, Mr. Chairman, Members of the committee. Thank you for the opportunity to testify before you today.

I have more than 35 years in law enforcement at the federal, state, and local level. I currently serve on the board of directors of a number of professional organizations including Alternatives, Girls, Inc., Boys and Girls Club, Big Brothers, Big Sisters. And I do not just talk about youth development. I live it.

I speak before you today as a member of Fight Crime: Invest in Kids, a national organization of more than 5,000 law enforcement leaders who have come together to take a hard-nosed look at research about what really works to keep kids from becoming criminals including interventions on how to get them back on the right track.

It is interesting to note that Fight Crime: Invest in Kids takes no federal, state, or local money and does not run any of the programs we advocate for.

Tough law enforcement will always be necessary to keep the streets safe. However, the numbers tell us that punishment alone is not always enough. Take, for example, that among second-time offenders age 14 or younger, a shocking 77 percent will come back for a third court appearance.

I know from my experience and from the research that targeted investment can help reduce recidivism, increase public safety, and save valuable taxpayers' dollars.

I am not talking about feel-good social programs or hug a thug. I am talking about scientifically tested approaches that help keep kids away from crime and reduce recidivism and which makes fiscal sense in these difficult times.

The Federal Government is an instrumental player in advancing a proactive crime reduction approach through evidence-based approaches. Title 2 and 5 of the Juvenile Justice Delinquency Prevention Act and the Juvenile Accountability Block Grant, juvenile mentoring programs, and funding on the Second Chance Act all provide needed support for evidence-based prevention and intervention strategy.

How do we keep kids away from crime? The Title 5 Local Delinquency Prevention Grants are the only federally-funded source dedicated solely to the prevention of youth crime and violence.

Fourteen million children lack proper adult supervision between the hours of three and six p.m., commonly referred to as prime time for juvenile crime. Research shows that these are the hours children are most likely to become a victim of crime, smoke tobacco, drink alcohol, or use drugs. Programs such as the Boys and Girls clubs connect children to caring adults and constructive activities during these hours.

I say this not as a member of the board of directors but as a law enforcement professional who has seen the research. We know that these programs work. One study found housing projects without Boys and Girls Club had 50 percent more vandalism and scored 27 percent worse on drug activities than those served by this program.

A number of funding streams can help reduce crime, therapeutic intervention for kids who have already gotten into trouble. One such intervention is multi-systemic therapy. I will not go deeply into that because that is in the packet. Just this program alone, multi-systemic therapy, saved the public an average of \$17,000 for every juvenile treated.

The new proposed Byrne Criminal——
[The information follows:]

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U.S. House of Representatives

Committee on Appropriations

Subcommittee on Commerce, Justice, Science, and Related Agencies

Hearing on FY 2012 Appropriations
March 11, 2011

Written Testimony of:

Gabriel A. Morgan, Sr.
Sheriff
Newport News City Sheriff's Office

On Behalf of:
FIGHT CRIME: INVEST IN KIDS

The ensuing testimony requests the following funding for programs within the Department of Justice's Office of Justice Programs:

- *\$75 million for the JJDP Title II State Formula Grants;*
- *\$65 million for the JJDP Title V Local Delinquency Prevention Grants;*
- *\$55 million for the Juvenile Accountability Block Grant;*
- *\$100 million for Youth Mentoring;*
- *\$100 million for the Second Chance Act; and*
- *\$30 million for the Byrne Criminal Justice Innovation Program.*

Mr. Chairman and Members of the Subcommittee on Commerce, Justice, Science, and Related Agencies:

Thank you for the opportunity to testify before you today. My name is Gabriel Morgan and I am a Sheriff in Newport News, Virginia. I have more than 35 years in law enforcement at the federal, state and local levels. I currently serve on the board of directors of a number of professional organizations; and I am most proud of the fact that I serve on the boards of Alternative, Girls Inc, Boys and Girls Club, Big Brothers and Big Sisters, and my local Foodbank. I don't just talk about youth development. I live it! I am also a member of Fight Crime: Invest in Kids, a national anti-crime organization of over 5,000 police chiefs, sheriffs, prosecutors, attorneys general, other law enforcement leaders, and victims of violence who have come together to take a hard-nosed look at the research about what really works to keep kids from becoming criminals.

As a Sheriff, I know that there is no substitute for tough law enforcement when it comes to keeping our communities safe. Across the country, law enforcement is busy arresting and prosecuting juvenile offenders, and the most dangerous of these youth are being locked up. The good news is that 60 percent of juveniles coming before a court for their first offense will not return to juvenile court again. Research tells us, however, that punishment alone is not always enough: among second-time offenders age 14 or younger, 77 percent will come back for a third court appearance.

Such high rates of recidivism are troubling. Our country needs to do more, particularly in these challenging economic times, to ensure kids grow up to be productive members of our society. Fortunately, our experiences—and research—show that making targeted investments in kids can help by intervening effectively to prevent recidivism or by keeping them away from crime in the first place. This approach is not only practical for public safety, but fiscally responsible as well—research shows that these investments save taxpayers far more than they cost. Title II and Title V of the Juvenile Justice and Delinquency Prevention Act, the Juvenile Accountability Block Grant (JABG), Juvenile Mentoring programs, funding under the Second Chance Act and the Byrne Criminal Justice Innovation Program can provide needed support for such evidence-based prevention and intervention strategies to reduce crime.

Keeping Kids Away From Crime

Funding made available under Title V Local Delinquency Prevention Grants is the only federal funding source dedicated solely to the prevention of youth crime and violence. Communities can use these grants to fund a wide range of prevention programs including after-school activities, mentoring, tutoring, as well as initiatives to prevent school drop-outs, substance abuse, and gang activity. These grants are competitive, and require localities to match at least 50 percent of the grant funds with cash or in-kind contributions. To participate in the program, localities must engage in collaborative, comprehensive planning of needed community-based delinquency prevention efforts.

As mentioned before, Title V grants can fund after-school programs that help at-risk youth avoid criminal activity in the first place. The hours of 3:00pm – 6:00pm are the “prime time for juvenile crime,” and with good reason: 14 million children lack proper adult supervision after school. These are the hours when juvenile crime soars and children are most likely to become victims of crime, be in a car accident, smoke tobacco, drink alcohol, or use drugs. Programs such as Boys & Girls Clubs connect children to caring adults and constructive activities during these critical hours. These investments have been shown by research to be effective in reducing delinquent behavior. Specifically, a comparison study found that housing projects without Boys & Girls Clubs had 50 percent more vandalism and scored 37 percent worse on drug activity than those served by the programs.

Like after-school programs, high-quality Juvenile Mentoring programs have been shown to help at-risk youth avoid criminal activity in the first place. For example, a study of Big Brothers Big Sisters found that young people who were randomly assigned to a Big Brother or Big Sister mentor were about half as likely to begin illegal drug use and nearly one-third less likely to hit someone compared to those who were assigned to a waiting list.

Effective Interventions to Reduce Recidivism

JJDPA Title II State Formula Grants and the Juvenile Accountability Block Grant (JABG) can fund several proven crime-reducing therapeutic interventions for kids who have already gotten into trouble. One such intervention is Multisystemic Therapy (MST). MST targets kids who are serious juvenile offenders by addressing the multiple factors related to delinquency in their peer, school, neighborhood, and family environments. One study of MST found juvenile offenders who had not received MST were 62 percent more likely to have been arrested for an offense, and more than twice as likely to be arrested for a violent offense. MST also saved the public an average of \$17,000 for every juvenile treated. Another intervention, Functional Family Therapy (FFT), works to engage and motivate youth and their families to change behaviors that often lead to criminal activity. In one evaluation, youth whose families received FFT were found to be half as likely to be re-arrested as those whose families did not. Further, FFT was found to save the public \$50,000 per youth treated.

The newly proposed Byrne Criminal Justice Innovation Program can help fund place-based innovative, evidence-based approaches that help troubled youth stay on track. For example, a combination of intensive police supervision, expedited sanctions for repeated violence, community pressure, and expedited access to jobs, drug treatment, or other services—a carrot-and-stick approach—has shown in a number of cities that it can cut homicides by violent offenders in high crime neighborhoods. One study comparing two Chicago neighborhoods—one employing the carrot-and-stick approach and one that did not—found that in the carrot-and-stick area there was a 37 percent drop in quarterly homicide rates, while the decline in another similar neighborhood during the same period was only 18 percent.

Effective Reentry Approaches to Reduce Recidivism

Juveniles released from confinement still have their likely ‘prime crime years’ ahead of them, and unsuccessful transitions back into communities result in an alarmingly high recidivism rate of 55-75 percent for juvenile offenders. Effective reentry programs help reduce recidivism rates by providing support and resources to guide ex-offenders through a successful transition back to community life. One effective, research-based program with a strong reentry component is Multidimensional Treatment Foster Care (MTFC). MTFC provides services to youth and their families during and after a youth’s out-of-home placement, ongoing supervision by a program case manager, and frequent contact and coordination of services with the

youth's parole/probation officer, teachers, work supervisors, and other involved adults. In studies, MTFC has been shown to cut juvenile recidivism in half and saves the public an average of \$89,000 for every juvenile treated.

The bipartisan Second Chance Act can support effective reentry efforts, including programs like MTFC. The Second Chance Act authorizes assistance to states and localities to develop and implement strategic plans for comprehensive efforts to enable ex-offenders to successfully reenter their communities such as: family reunification, job training, education, housing, and substance abuse and mental health services.

Overwhelming Unmet Needs

Unfortunately, the evidence-based prevention and intervention programs for young people – which we know to be effective in reducing crime – remain woefully underfunded. For example, Title II State Formula Grants, Title V Local Delinquency Prevention grants, and JABG have yet to recover from funding cuts in the years since FY 2002. Currently, even if only half of the more than 300,000 juvenile offenders on probation and half of the 150,000 juvenile offenders in out-of-home placement are eligible for evidence-based intervention programs, the number of young offenders who could benefit from evidenced-based approaches would still be many times the total currently being served by MST, MTFC, and FFT. Juvenile Mentoring funds, which have seen increases in recent years, still fall far short of meeting the needs of at-risk and troubled youth.

It is important in these challenging economic times that Congress prioritizes investments in what works to reduce crime, improve public safety and provide a significant rate of return to the taxpayer. Therefore, I urge you to at least maintain funding at FY 2010 levels for the following crucial juvenile justice and reentry programs: the Title II State Formula Grants, the Title V Local Delinquency Prevention Grants, the Juvenile Accountability Block Grant, Youth Mentoring Grants, and the Second Chance Act.

In the interest of advancing evidence-based practices, I also urge Congress to fund the proposed Byrne Criminal Justice Innovation Program at \$30 million.

Youth-Focused Violence Prevention and Intervention Research

In addition to prioritizing and maintaining spending for programs funded under JJDP, JABG, and the Second Chance Act, I urge you to set aside at least 30 percent of NIJ research funding for rigorous scientific evaluation of youth-focused violence prevention and intervention approaches. This set-aside should fund randomized control trials and rigorous comparison group studies of youth-focused violence prevention and intervention approaches, with a specific focus on community-based approaches that serve the most at-risk populations.

A set-aside for NIJ-funded research that focuses on what works with youth is needed for four reasons. First, 18 to 21-year-olds account for a greater percentage of arrests than any other four-year age group. Therefore, we should increase research investments to identify programs that really work to help keep at-risk kids on the right track and to reduce recidivism among juvenile offenders before they hit the “prime crime years” of 18-21. Second, brain development research shows that adolescence is a crucial period in the development of one's reasoning and judgment. We need to better understand which interventions with troubled adolescents can best enable them to develop the reasoning and skills that will turn them away from criminal activity. Third, we also know from the research that there are programs and approaches that are effective with adults but not as effective with juveniles (e.g., drug courts), and vice versa; therefore, any research that does not

specifically focus on youth can not be presumed to be applicable to youth. Finally, there are many promising, but currently untested, approaches to youth and gang crime prevention and intervention. Increased federal attention on youth-focused violence prevention and intervention research would help us learn even more than we know now about how to effectively reduce juvenile crime.

Law enforcement leaders' commitment to putting dangerous criminals in jail must be matched by a commitment from Congress to protect investments in kids that help prevent them from becoming career criminals. On behalf of my fellow law enforcement leaders around the country who, like me, are members of FIGHT CRIME: INVEST IN KIDS, I urge you to stand with us to improve our public safety and save taxpayer dollars by prioritizing these proven, fiscally responsible crime-prevention strategies.

Thank you again for this opportunity to present this testimony.

Mr. WOLF. Well, thank you. These are all important issues and they all will be read. And I appreciate it very much, but thank you, Sheriff, for taking the time and coming here.

Mr. MORGAN. Thank you.

Mr. WOLF. Mr. Fattah.

Mr. FATTAH. The chairman and I will read the full statement and our staff will read it. And we appreciate the fact that these are not programs that you operate through your program but for which you are advocating.

Thank you.

Mr. MORGAN. Absolutely. Thank you.

Mr. WOLF. Thank you very much.

Next will be The Safer Foundation, Diane Williams.

FRIDAY, MARCH 11, 2011.

THE SAFER FOUNDATION

WITNESS

B. DIANE WILLIAMS, CHIEF EXECUTIVE OFFICER, THE SAFER FOUNDATION

Ms. WILLIAMS. Good morning, Chairman Wolf, Mr. Fattah, Mr. Austria. Thank you for this opportunity for The Safer Foundation to present fiscal year 2012 public witness testimony.

Safer Foundation is a not-for-profit organization headquartered in Chicago, Illinois, but operating through the State of Illinois and parts of Iowa.

Our work focuses on reducing the number of crime victims and improving public and community safety. We do this by supporting the efforts of people with criminal records to become productive, law-abiding members of their communities. We provide a full spectrum of services including education, employment, and retention-focused case management.

My written testimony offers information on the achievements of Safer Foundation and the Illinois Department of Corrections. In my oral remarks, I want to speak to the importance of your funding the Second Chance Act and initiatives like the Council of State Government's National Reentry Resource Center where I serve as the chairman of the Education and Employment Committee, as well as the justice reinvestment process.

In supporting crime reduction strategies through the Second Chance Act, you are reducing both the short and long-term costs to the American people of incarceration while also reducing the number of citizens who become victims. For that, we thank you.

The data-driven approach taken by CSG's justice reinvestment efforts to serve as a strong blueprint for policymakers tasked with determining how to spend limited funds on strategies and interventions that work, we can reduce recidivism and corrections spending without compromising public safety by reinvesting in high-risk communities and supporting community-based organizations that implement holistic strategies and best practices.

I think it is also important to note when we talk about justice reinvestment, though, that as those dollars are shifted to the community to ensure that people who are sent home, in fact, have an

opportunity for success, that we make those dollars stay in the community.

A big fear does exist today that we will start that way but not end that way. And so to send people home in a justice reinvestment model without the resources in the community to support their efforts simply means that we will repeat what we have already experienced. We do not want to see that happen.

As chair of the National Institute of Corrections Advisory Board, I would be remiss if I did not also make note of NIC's work to build the capacity of state correctional systems. In these tough economic times, NIC provides the training and technical assistance necessary to ensure that federal, state, and local corrections agencies are using evidence-based practices that are sure to have an impact.

Working with Safer's career services personnel, 2,700 clients were able to find unsubsidized employment and stay out of prison last year. This success demonstrates the strong link between employment and recidivism reduction and I urge the subcommittee to encourage collaboration between the Departments of Justice and Labor.

Efforts like the Cabinet-level Reentry Council convened by the attorney general focused on identifying and advancing effective public safety and prisoner reentry strategies are right on target. Reentry impacts not only those being released from prison but also their families and communities. This is especially troubling given that these communities are disproportionately home to low-income minority families, high rates of crime, and have few of the needed social services and support.

Communities, particularly families, need the tools and resources that help their loved ones succeed. Though the decisions that lead to success or failure fall most heavily on the returning individual, these individuals must be empowered to make the right decisions through clear pathways to success.

The critical funding authorized by the Second Chance Act and appropriated by this subcommittee provides assistance to states, local governments, and community-based organizations concerned with prisoner reentry.

On behalf of our clients, Safer Foundation sincerely thanks the subcommittee for its past leadership, strongly supports the President's request for \$100 million in fiscal year 2012, and hopes that Congress will provide the most robust funding level possible for fiscal year 2012.

In closing, I would like to take a moment to share a message we received from one of our employers. This actually came from the general manager of the south Chicago Dodge, Jeep, Chrysler Company last Friday.

He wrote us to thank us for offering high-caliber employees such as Lyndon Weir, and that is a quote. Lyndon has consistently been the best of the best in sales and recently when the dealership hired another employee through our program, that is the Safer Program, Lyndon took it upon himself to train him and to assist him in his professional development.

This employer like many of those that we work with is very pleased with the people that we give him to meet his labor needs.

Again, I want to thank and commend you, Chairman Wolf and Ranking Member Fattah, for your efforts to address the needs of the Lyndons of the world as they return to our communities and become nothing short of outstanding.
[The information follows:]

**TESTIMONY OF
DIANE WILLIAMS
PRESIDENT
SAFER FOUNDATION
571 W. JACKSON BLVD
CHICAGO, IL 60661**

**BEFORE
THE HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE**

MARCH 11, 2011

H-309 U.S. CAPITOL

Good day Mr. Chairman. I am pleased to have the opportunity to testify before the Subcommittee in support of Fiscal Year 2012 Department of Justice funding for the Second Chance Act.

My name is Diane Williams and I serve as the President and CEO of Safer Foundation. We are a not-for-profit organization based in Chicago. We work to improve public safety and the lives of our clients, as well as their families and communities, by supporting the efforts of people with criminal records to become productive, law-abiding and employed members of the community. Safer provides a full spectrum of services, including education, employment and retention-focused case-management. Safer is one of the nation's largest community-based providers of employment services for a clientele comprised exclusively of people with criminal records. While my testimony will offer information on the achievements of the Safer Foundation and the Illinois Department of Corrections, it is important to note that by funding the Second Chance Act and thereby initiatives such as the Council of State Governments' National Reentry Resource Center you are both reducing short-term and long-term costs to the American people and reducing the number of U.S. citizens who become victims.

For that we thank you.

We are also grateful for this Committee's interest in the "Justice Reinvestment" process which takes a data-driven approach to reducing recidivism and corrections spending without compromising public safety. This approach serves as a strong blueprint for policymakers tasked with determining how best to funnel spending towards the strategies and interventions that have been proven to work. Over a dozen states are now working with CSG's Justice Center to development and implement policies designed to manage their corrections system effectively through improved accountability and streamlined resources, while rebuilding the destabilized communities that have disproportionately impacted by incarceration. It is essential that as funding is being allocated, we continue to reinvest in high-risk communities and support community-based organizations that can help implement holistic strategies and best practices.

Over the past decade, Safer has seen the demand for its services grow as a result of the alarming increase in the number of individuals involved in the criminal justice system. In 2000, Safer provided services to 4,300 people with criminal records. By 2010, this number had increased to 10,000 and continues to increase dramatically. This rate of growth highlights the need for communities to adopt planned and coordinated support systems for people returning from prison.

In order to meet the need, and with the judicious assistance of Congress and the Departments of Justice and Labor, Safer has designed and implemented a number of successful, research-based programs. All of our services are aimed at providing the critical support that leads to self-sufficiency, measured by increased employment placement and retention rates, and decreased recidivism.

A few notable models are:

Prison to Community: Safer has helped shape the Sheridan Initiative, which is Illinois' model prison to community initiative. Sheridan, an 1100 bed prison, is geared towards providing in-

custody substance abuse treatment for drug offenders. Safer provides job readiness training throughout the prison stay and job placement and retention support for two years post-release throughout Illinois. Research on the first three years of Sheridan shows that those completing the Sheridan program had the lowest conviction rate among parolees in state history, a 23% reduction in arrests among the general parolee population, and a 40% reduction in repeat incarceration (May 2008). We also participated in the creation of the Prison to Community model developed by the Department of Justice's National Institute of Corrections which has generated significant improvements in state systems where implemented.

Community Corrections: Safer administers two minimum-security male residential transition centers on behalf of the Illinois Department of Corrections (IDOC), both located in North Lawndale on the near west side of Chicago. This is a community greatly impacted by the corrections system as 70% of the men residing in North Lawndale have a criminal record. Between the two Adult Transition Centers (ATC), Safer provides 24-hour housing, treatment, education, and job readiness/placement and retention services for 530 incarcerated men at any given time. Through these centers, Safer is able to help those incarcerated in IDOC gradually reenter their communities, while achieving benchmarks around educational advancement and job attainment.

Youth Empowerment Program: Safer designed its own approach to basic skills and GED completion years ago with an initiative called the Youth Empowerment Program. Through this eight-week model, youth who have criminal records are both students and teachers. Safer shaped the model to accept participants at any grade level and the results have been consistently strong. In 2010, over 300 individuals attained their GEDs and approximately 400 additional individuals increased their literacy proficiency by an average of two grade levels.

Through these and other similar programs, the Safer Foundation has successfully assisted an estimated 2,700 individuals with criminal records find consistent employment in the past year. These individuals worked with Safer's career-services personnel to find and maintain unsubsidized employment and stay out of prison. These successes demonstrate the strong link between employment and recidivism reduction, and I urge the Subcommittee to continue encouraging collaboration between the Departments of Justice and Labor. Such initiatives have community-wide implications and broad impact.

In 2004, a "Statewide Community Safety & Reentry Working Group" was launched in Illinois in response to the highest recidivism rates in state history (54.6 %) and the fact that over 80% of people released from Illinois prisons return to just 10 areas. The idea was that by focusing resources on the 10 key areas; the team would reach 84% of the state's entire reentering adult parole population and ultimately establish these regions as sentinels for statewide reform. Those 10 high impact regions included: Cook/Chicago, Collar County Region (with an emphasis on Aurora), St. Clair/Madison, Winnebago, Champaign/Vermilion, Macon, Peoria, Sangamon, Rock Island and Jefferson.

Reentry impacts not only those being released from prison, but also their families and entire communities. In 2010, across the State of Illinois, over 32,000 individuals were released from prison and returned home. Of that number, 51% returned to Chicago. Of those that came home

to Chicago, 34% returned to just six of Chicago's 77 communities. This reality is especially troubling, given that these communities are disproportionately home to low-income minority families, high rates of crime, and have few of the needed social services or support.

The average person on parole has been previously incarcerated at least once and continues to face significant barriers to a safe and successful reentry. These barriers include substance abuse problems, mental health issues, low education levels and poor job-preparation skills. All of which prevent him or her from garnering employment that pays a living wage. As a result, the majority of formerly incarcerated persons commit new crimes or violate the conditions of their release, resulting in a return to prison. As mentioned earlier, five years ago the State of Illinois was facing its highest recidivism rates in history (55%). Through some of the reentry initiatives that have been put in place, that number has come down to 51.3% but we still have more work to do – especially in the wake of the prison population surge that has occurred since the discontinuance of the Meritorious Good Time (MGT) Push program.

Communities, particularly families, need tools and resources to help their loved ones succeed. Though the decisions that lead to success or failure fall most heavily on the returning individual, these individuals must be empowered to make the right decisions through clear pathways to success. The spectrum of services must also be coordinated, or at least easily accessible to those that need them ~ they are currently disconnected and unable to meet the demand.

The critical funding authorized by the Second Chance Act and appropriated by this Committee provides assistance to states, local governments and community-based organizations concerned with prisoner reentry. It enables the field to begin to address some of the systemic barriers to breaking the cycle of incarceration – barriers such as employment, housing and substance abuse. On behalf of our clients, the Safer Foundation sincerely thanks the Committee for its past leadership and the \$100 million that was appropriated for Fiscal Year 2010. We strongly support the President's request for \$100 million in Fiscal Year 2012 and trust Congress will provide the most robust funding level possible for Fiscal Year 2011. Recognizing the current fiscal environment and the pressures of an increasingly large budget deficit, we remind you and your colleagues of the average cost of a year of incarceration. The cost of reentry is far offset by the savings achieved as a result of recidivism reduction.

In closing, I would like to thank the Committee for the invitation to testify today and commend Chairman Wolf and Ranking Member Fattah for their efforts on behalf of the needs of formerly incarcerated individuals as they return to our communities. I would also ask that you remind your colleagues that as budget crunches force tough decisions it is imperative that we not create short-term reductions that generate long-term disasters. Alternatives to incarceration can be more effective and less costly. Let's not incarcerate more people than we have to.

Mr. WOLF. Well, I know they are very important programs and the committee has been doing a lot in that area. We thank you for your testimony.

Mr. Fattah.

Ms. WILLIAMS. Thank you.

Mr. FATTAH. You should know that the chairman and I both worked with Danny Davis on getting the Second Chance Act, and the committee over the last couple of years has ramped up considerably our support for it. And we appreciate the work that you are doing.

Ms. WILLIAMS. Thank you.

Mr. WOLF. Thank you.

Our next witness will be Big Brothers and Big Sisters, and I think Mr. Fattah would like to introduce them.

Mr. FATTAH. I do. And I need to preface it with the fact that I have to run to the floor and speak for two minutes and I will be right back, Mr. Chairman.

But I am just proud that Big Brothers, Big Sisters is headquartered, unlike all of these other great organizations, this one is actually headquartered in my district and they do great work.

And I wanted to just introduce Paul Bliss, who heads the National Capitol Area affiliate. And I am going to let him testify. I need to run to the floor and speak and I will be rejoining you.

Thank you.

FRIDAY, MARCH 11, 2011.

**BIG BROTHERS BIG SISTERS OF AMERICA, NATIONAL
CAPITOL AREA**

WITNESS

**PAUL BLISS, EXECUTIVE DIRECTOR, BIG BROTHERS BIG SISTERS OF
AMERICA, NATIONAL CAPITOL AREA**

Mr. BLISS. Thank you, Congressman.

And a very special thanks to Chairman Wolf. It is great to see you once again.

As you know, my name is Paul Bliss, President and CEO of Big Brothers and Big Sisters, and I have worked in Washington, D.C. in the juvenile and adult correctional system for over 20 years prior to leading Big Brothers and Big Sisters.

Big Brothers Big Sisters is the most effective strategy to combat juvenile delinquency in the Nation. Thanks to an army of volunteer mentors, we are also the most cost effective.

Big Brothers Big Sisters is the Nation's only evidence-based mentoring program. Our mission is to help children achieve their full potential. Nearly 400 local agencies serve at-risk children in over 5,000 communities nationwide.

Founded over a century ago, our mission is to help change the odds for American youth one child at a time. In the past year, our national network has united over 240,000 high-risk youngsters in one-to-one mentoring relationships. Our Nation's youth face greater obstacles today than ever before. However, we have strong evidence that our program works.

With the support of Congress and the Department of Justice, we have achieved tremendous growth while maintaining our high standards of quality service. We are data driven. Independent research shows that we achieve positive and measurable results.

Federal funds appropriated or granted to Big Brothers and Big Sisters are used to: one, support the development of our service delivery model; two, evaluate our service delivery model with cutting-edge technology to measure youth impact; three, develop, train, and retain quality staff, but most importantly to reach hundreds of thousands of children in our Nation.

Big Brothers Big Sisters must express our concern with the President's proposed fiscal year 2012 budget. We know all too well the pressures our Nation is facing, but across-the-board reductions in juvenile justice funding will only produce short-term savings. We cannot afford the devastating impact such cuts will have on our country's at-risk youth.

We ask this subcommittee and your colleagues in Congress to prioritize investments in juvenile justice programs, in particular federal youth mentoring grants. Your investment will help divert at-risk children away from the criminal justice system. It may take \$80,000 a year to incarcerate a juvenile offender, but Big Brothers Big Sisters needs only \$1,200 to mentor a child in need.

We are leveraging hundreds of millions of dollars of public and private foundation investments multiplying your public investment. The private sector, nonprofit, and nonpartisan organization estimated that the hourly rate for a volunteer mentor's time is \$20.80. With over 240,000 mentors volunteering roughly four hours per week for 50 weeks, their estimated in-kind contribution to youth is well over \$700 million per year.

We urge the subcommittee to review mentoring as a cost-saving measure for investing in our Nation's economic social future. Big Brothers' brand of volunteer mentoring is cost effective and proven to break the cycle of crime and incarceration.

Thank you, Chairman.

[The information follows:]

**TESTIMONY OF
PAUL BLISS
ON BEHALF OF
BIG BROTHERS BIG SISTERS OF AMERICA
230 NORTH THIRTEENTH STREET
PHILADELPHIA, PA 19107**

**BEFORE
THE HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED
AGENCIES**

MARCH 11, 2011

H-218 U.S. CAPITOL

Mr. Chairman, I thank you and the subcommittee for permitting Big Brothers Big Sisters of America to testify in support of Fiscal Year 2012 funding for the Office of Juvenile Justice & Delinquency Prevention. Karen Mathis, President and CEO of Big Brothers Big Sisters of America, unfortunately is unavailable to be with you today. On behalf of our organization I am here to respectfully recommend \$100 million for the competitive Youth Mentoring Grants program.

My name is Paul Bliss and I am the Executive Director of Big Brothers Big Sisters of the National Capitol Area. Today I am here to represent Big Brothers Big Sisters of America and the entire Big Brothers Big Sisters network. Big Brothers Big Sisters is the nation's only evidence-based mentoring program focusing on proven outcomes in a scalable model across all 50 states. Our mission is to help children reach their potential through professionally supported, one-to-one relationships with measurable impact. We are a grassroots organization of 371 local BBBS agencies serving 5000 communities throughout the country. We began over a century ago to provide services to at-risk youth in need of additional support and guidance and last year as a national network we served over 240,000 children and youth in one-to-one mentoring relationships.

We know that our nation's children face greater obstacles today than ever before. The Office of Juvenile Justice and Delinquency Prevention's 2006 National Report on Juvenile Offenders and Victims indicates that:

- In 2002, one in twelve murders in the U.S. involved a juvenile offender.
- One of every four violent crime victims known to law enforcement is a juvenile.
- Thirty-two percent of youth ages 12 to 17 report recently using alcohol and marijuana
- The most serious charge in almost half of all juvenile arrests in 2003 was larceny-theft, simple assault, a drug abuse violation, disorderly conduct, or a liquor law violation.

According to two more recent OJJDP studies, police make approximately 2.1 million juvenile arrests each year, with 1.7 million youth referred to the court system and 200,000 youth prosecuted in the adult criminal justice system.¹ The average annual cost of incarcerating a youth in a juvenile facility is \$80,000 a year. In many states, the single highest budget expense behind Medicaid is Department of Corrections spending. After decades of ever-increasing numbers of incarcerated individuals, the United States now has the highest rate of incarceration of any county in the world. Nearly 1 in every 100 citizens is currently incarcerated.

Beyond the human cost, in such a strained fiscal environment mass incarceration is not fiscally viable. As a nation we need to take a hard look at how we spend and how we invest. We need

¹ Puzzanchera, C. (December 2009). Juvenile Arrests, 2008. Washington, DC, Juvenile Justice Bulletin, U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, available at: <http://www.ncjrs.gov/pdffiles1/ojjdp/228479.pdf>

Knoll, C. and Sickmund, M. (June 2010) Delinquency Cases in Juvenile Court, 2007. Washington, DC, U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, available at: <http://ncjrs.gov/pdffiles1/ojjdp/230168.pdf>

innovative responses that are evidence-based and that have real and long-term cost-saving benefits. At the adult offender level that may mean “justice reinvestment” and alternatives to incarceration, but if the nation, and Congress, are genuinely concerned about the financial success and stability of our children and grandchildren we also need to reduce the number of individuals entering the criminal justice system - and that means investing in youth development.

There is a difference between investment and spending. The President’s Fiscal Year 2012 Budget not only proposes a 34% cut to Juvenile Justice spending, it reduces or consolidates programs which support youth while increasing those that support investment in corrections spending. While we appreciate the President’s efforts to encourage innovation and make the juvenile corrections systems safer and more effective, Big Brothers Big Sisters urges Congress to recognize the shortsightedness of spending for incarceration, at the expense of investing in prevention.

Programs such as the OJJDP’s Youth Mentoring Grants are upfront and forward-thinking investments that divert at-risk youth away from the criminal justice system. Investing in youth mentoring could be considered insignificant when compared to the alternative downstream costs of arrest, prosecution and incarceration. While it may require \$80,000 a year to incarcerate a juvenile offender, Big Brothers Big Sisters needs just \$1,200 a year to mentor a child in a one-to-one relationship. Furthermore, while States bear the entire cost of incarcerating an individual, funds appropriated for youth mentoring can and should be used to leverage hundreds of millions in private and foundation donations – thereby multiplying the effect of public investment.

The Big Brothers Big Sisters program model is effective at producing positive youth outcomes. There is strong evidence that makes the case for placing a Big Brother or Big Sister in the life of an at-risk youth in order to prevent and respond to juvenile delinquency and victimization. Our program model works as an effective and efficient strategy for supporting at-risk youth. According to 1995 Public/Private Ventures’ (P/PV) landmark impact study², children who are matched with a Big Brother or Big Sister were:

- 46% less likely to begin using illegal drugs
- 27% less likely to begin using alcohol
- 52% less likely to skip school
- 37% less likely to skip a class
- more confident of their performance in schoolwork
- less likely to hit someone
- getting along better with their families

Intuitively we know that children with less drug or alcohol use, less truancy, better academic performance and strong family lives are less likely to be involved in the criminal justice system. However, Big Brothers Big Sisters is also incessant in our drive to develop hard data resources. Last year the network built its new Nationwide Strategic Direction and reinforced our dedication to expanding and improving the impact our mentoring programs have on the youth that are at the greatest risk of entering, or are already in, the juvenile justice system. This firm commitment to

² Tierney, J.P., Grossman, J.B., and Resch, N.L. (1995) Making a Difference: An Impact Study of Big Brothers Big Sisters. Philadelphia: Public/Private Ventures

averting youth away from juvenile delinquency has manifested itself in the creation of the Big Brothers Big Sisters Juvenile Justice Initiative.

With our competitively awarded Fiscal Year 2010 Youth Mentoring grant we committed to reducing the incidence of juvenile crime in 50 underserved communities across the country by our evidence-based mentoring services to more than 13,725 newly identified high-risk and at-risk youth. We also established ten pilot sites to direct our learning around a more intentional involvement with local juvenile justice courts. Outcome data and assessments from these ten locations will be reviewed and broadly applied to other Big Brothers Big Sisters affiliates serving communities with particularly high populations of high-risk delinquent youth, such as mine.

As you may know, OJJDP defines “at-risk youth” as youth exposed to high levels of risk in their families, homes, communities, and social environments to such a degree that it could lead to educational failure, dropping out of school, or involvement in juvenile delinquency. At the start of the Juvenile Justice Initiative, more than 75% of Big Brothers Big Sisters’ Littles were experiencing at least one of the following risk factors: living in poverty, having at least one incarcerated parent/guardian, and/or residing in single-parent households. These statistics demonstrate that Big Brothers Big Sisters mentoring programs are serving at-risk youth as a primary constituency.

OJJDP defines the term “high-risk” youth as youth with present or past involvement with the juvenile justice system. The Department of Justice’s investment in our Juvenile Justice Initiative represents confidence in the first phase of Big Brothers Big Sisters’ movement to increase the number of high-risk youth that our agencies serve across the country. Thanks to this investment, Big Brothers Big Sisters affiliates have already undertaken the initial steps to working with greater efficacy alongside local justice systems in the provision of positive supportive relationships to youth already in the system, reducing recidivism rates of high-risk youth, and ultimately lessening the costly burden high-risk youth have on justice systems, the economy and American society as a whole.

The first phase of the Juvenile Justice Initiative was designed to formalize high-risk referral sources, build resources for the larger mentoring and delinquency prevention field, and to set up the infrastructure to measure the specific diversionary impact Big Brothers Big Sisters mentoring programs have on at-risk and high-risk youth from juvenile delinquency, alcohol and drug use, truancy, and other problem behaviors. Aside from the number of youth the Juvenile Justice Initiative will deter from these behaviors during its first year, the significant FY10 investment represents the *initial step* in establishing Big Brothers Big Sisters mentoring programs as a cost-effective program for reducing juvenile delinquency and the demands juvenile delinquency has on the justice system.

The investment in the first phase of the Juvenile Justice Initiative will enable Big Brothers Big Sisters affiliates across the country to formalize referral-aimed partnerships with local juvenile justice settings. Specific settings where high-risk youth could benefit from Big Brothers Big Sisters mentoring programs have been identified for preferred partnerships including, but not limited to: delinquency and dependency courts, probation, youth courts, and detention and

correction centers. A minimum of 150 of these local partnerships will be in place by the end of the first phase of the Juvenile Justice Initiative.

Second, funding the first phase of the initiative will enable Big Brothers Big Sisters of America to develop resources and trainings to assist local organizations as they set up formal referral partnerships, understand the complex juvenile justice systems, and determine optimal timing for where mentoring programs can have the greatest impact. Many of the research-based practices that will inform these actions will be extracted from the ten pilot sites. In the first phase, these sites will act as the demonstration sites to produce critical learnings for the project as well as the mentoring and juvenile justice fields.

Lastly, OJJDP's investment in the first phase of the Juvenile Justice Initiative will enable Big Brothers Big Sisters of America to build into its mentoring programs the ability to track each youth's involvement in the justice system, recidivism rates, and the costs Big Brothers Big Sisters mentoring programs can save both local justice systems and the country. The impact that these three functions could have on the justice system will be lost if OJJDP is forced to cut its investment in the project going forward. A commonality of each of the aforementioned deliverables is the creation and building of the relationships, resources, and infrastructure that will enable Big Brothers Big Sisters affiliates to later become a key partner and leader in delinquency prevention. The maximum return on investment will be realized in the second two phases of the Juvenile Justice Initiative.

The second phase of the initiative, scheduled for Fiscal Year 2011, is aimed at expanding the reach of the Juvenile Justice Initiative and enhancing its impact with an increased focus on truant youth and youth living with military or deployed parents. The Juvenile Justice Initiative will also be greatly enhanced in the second phase through continued data collection and the research-based best practices extracted from the ten pilot sites.

The final phase of the Juvenile Justice Initiative, scheduled for Fiscal Year 2012, is aimed at the analysis of data, the formal publication of best practices, research, and resources, and the rollout of the project to the entire Big Brothers Big Sisters network. Ultimately, by the end of this three-phased initiative, Big Brothers Big Sisters of America will have the model, data, and means to expand the Juvenile Justice Initiative to all 371 Big Brothers Big Sisters agencies and the 38,000 youth on Big Brothers Big Sisters waiting lists to better substantiate the necessary role of mentoring in juvenile delinquency prevention and share with the larger community the practices, data, and research to maximize impact.

In closing, Big Brothers Big Sisters of America fully understands the legitimate pressure on Congress to reduce the scope, size and cost of government. However, we urge the Committee to view juvenile justice programs in general and youth mentoring grants in particular as small investments with big dividends. We ask you to keep in mind that the children we mentor today are the future parents of our grandchildren. If we are to be serious about the long-term fiscal and social success of our country, we need to ensure the success of our children today. Big Brothers Big Sisters of America sincerely thanks this Committee for its past leadership on behalf of youth-development and respectfully appeals for your continued support.

Mr. WOLF. Thank you very much. Thank you. I appreciate it.

Let me just comment. One, and I think this applies to all the testimony, one, I learned to swim in a Big Brothers swimming pool in inner city Philadelphia. And so I know it is a great program.

I think all of you ought to hear this other thing though. This Administration has failed to address the fundamental issue of entitlements and all the concerns. And I support literally every one of your programs, but they are going to be under great pressure until this Administration comes forward and works with the Congress in a bipartisan way, putting everything on the table, Medicare, Medicaid, and Social Security.

Willy Sutton, the bank robber who was in prison, I think in Philadelphia, said he robbed banks because that is where the money is. The money is in the entitlements. Until you deal with this issue, all these good programs are all going to be squeezed and squeezed and squeezed and squeezed.

Unfortunately, if the President does not come forward by the end of this year, it will not be done next year and we will kick this can down the road until 2013 and all of your programs are going to be squeezed.

It is a great program. All these programs are. But until the Administration deals with the entitlement issue—the President appointed the Erskine Bowles-Simpson Commission and then literally walked away from it.

So with regard to that, I thank you for your testimony and we will go to——

Mr. AUSTRIA. Mr. Chairman, can I just say I agree with you just really briefly, but I also want to thank you for the work you are doing in Ohio. I have seen it firsthand. Our office is part of that mentoring program. And I thank you for being here and testifying, but I also agree with what you are saying.

Mr. BLISS. Terrific. And, Congressman Wolf, I am glad to see that you are a world-class swimmer today.

Mr. WOLF. Well, I am sure that pool is closed.

And the next testimony will be Joseph Summerill, National Sheriffs' Association.

FRIDAY, MARCH 11, 2011.

HOUSING OF FEDERAL PRISONERS IN LOCAL JAILS

WITNESS

JOSEPH SUMMERILL, PRO-BONO COUNSEL, NATIONAL SHERIFFS' ASSOCIATION

Mr. SUMMERILL. Good morning, Chairman Wolf and Members of the subcommittee. I appreciate the opportunity to speak and appear before you today to discuss the housing of federal prisoners in local jails.

My name is Joseph Summerill and I have represented sheriffs who contract with the U.S. Marshals Service for housing federal prisoners in local jails. And I am also pro-bono counsel for the National Sheriff Association and a former commercial law attorney for the Federal Bureau of Prisons.

During fiscal year 2010, the U.S. Marshals Service housed federal prisoners in more than a thousand different facilities located throughout the United States. More than half of these U.S. Marshal prisoners were housed in a local jail operated by a local sheriff.

Historically sheriffs were reimbursed by the U.S. Marshals Service for the actual cost of housing a federal prisoner in a local jail under an intergovernmental agreement between the sheriff and the United States Government.

Each intergovernmental agreement listed a per diem rate which reimbursed the sheriff for the cost of housing one federal prisoner per day. These per diem rates could only include actual and allowable jail operating costs from the previous fiscal year. The process of calculating a per diem rate under this old system was complicated and sheriffs were susceptible to audits in which the Federal Government could retroactively demand reimbursement of monies already paid to the sheriff.

As a result, sheriffs erred on the side of under-counting and in turn resulted in inaccurately low per diem rates for housing federal prisoners.

In 2006, the Department of Justice Office of the Federal Detention Trustee revised the process by which U.S. Marshals contract with local sheriffs. OFDT created the Detention Services Network.

By November 2007, U.S. Marshals retired all the old system of negotiating IGAs and requested that sheriffs replace their old IGAs with electronic intergovernmental agreements or EIGAs.

Under this new system, U.S. Marshals can now enter into a firm fixed-price contract with the local government where the federal prisoner is being housed in their jail.

However, prior to the negotiations, sheriffs are required to submit jail operating expense information which includes information regarding the personnel, salaries and benefits, costs associated with feeding federal prisoners and medical expenses, facility expenses and the utilities and insurance and vehicle expenses such as maintenance and insurance.

The new Detention Network Services Program has improved the complexity and cumbersome process by which sheriffs were compensated for housing federal prisoners. However, the new process is not without obstacles.

As background, when United States Marshals negotiates with a local sheriff for a new per diem rate, the Federal Government now considers four factors: comparison of the proposed rate offered by the sheriff with a core rate established by the United States Marshals Service; comparison of the proposed rate with other state and local facilities; and a comparison of the proposed per diem rate with commercial contracts.

Unfortunately, each of these factors has problems. For example, the core rate used by the U.S. Marshals is never adequately defined for the sheriffs. Therefore, the local sheriffs are required to provide cost data to the United States Marshals and a proposed per diem rate for housing prisoners, but the U.S. Marshals is never required to reveal what the government believes is a fair and reasonable price for housing prisoners.

This represents an unprecedented inequality in the negotiation of intergovernmental agreement between two governmental bodies.

However, the largest problem or the most disturbing problem, I mean, is the length in which it takes to negotiate an EIGA. U.S. Marshal grants officers purport to negotiate these in 90 days. However, it is my experience that it takes 12 to 14 months from the time that the sheriff collects his data to the time that the EIGA is executed.

This subcommittee should encourage the OFDT and U.S. Marshals to reexamine how the Federal Government contracts with local sheriffs. A shorter application process, less cumbersome means of submitting data, and a more fair methodology for negotiating the IGAs would greatly improve how the local sheriffs are paid by the Federal Government.

Thank you very much.

[The information follows:]

STATEMENT OF
JOSEPH SUMMERILL
BEFORE THE
COMMITTEE ON APPROPRIATIONS
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES
“HOUSING FEDERAL PRISONERS IN LOCAL JAILS”
PRESENTED MARCH 11, 2011

Good morning Chairman Wolf, Ranking Member Fattah and Members of the Subcommittee. I appreciate the opportunity to appear before you today to discuss the housing of federal prisoners in local jails. My name is Joseph Summerill, and I have represented Sheriffs who contract with the U.S. Marshals Service for the housing of federal prisoners in local jails. I am also Pro Bono Counsel for the National Sheriffs Association and a former Commercial Law attorney for the Federal Bureau of Prisons. However, the opinions expressed today are my own and not the opinions of my clients.

During Fiscal Year 2010, the U.S. Marshals Service (USMS) housed federal prisoners in more than 1,000 different facilities located throughout the United States. More than half of these USMS prisoners were housed in a local jail operated by a local Sheriff. Historically, Sheriffs were reimbursed by USMS for the actual cost of housing a federal prisoner in a local jail under an Intergovernmental Agreements (IGA) executed by the Sheriff and the USMS. Each IGA listed a per diem rate which reimbursed the Sheriff for the costs of housing one federal prisoner per day.

These per diem rates could only include actual and allowable jail operating costs from the previous fiscal year. The process of calculating a per diem rate under this old system was complicated, and Sheriffs were susceptible to audits in which the federal government could retroactively demand reimbursement of monies already paid to the Sheriff. This situation created uncertainty and apprehension on the part of Sheriffs -- who erred on the side of undercounting costs, which in turn resulted in inaccurately low per diem rates for housing federal prisoners.

In 2006, the Department of Justice's Office of the Federal Detention Trustee (OFDT) revised the process by which USMS contracts with local Sheriffs. OFDT created the Detention Services Network (DSNetwork), an automated network which replaced the old, cumbersome process of calculating per diem rates. By November 2007, USMS retired the old system for negotiating IGAs and requested that Sheriffs replace their old IGAs with new "electronic Intergovernmental Agreements" (eIGA) under the DSNetwork.

Under the new DSNetwork system, USMS can now enter into a new firm fixed-price per diem rate contract with local governments for housing federal prisoners in local jails. However, prior to negotiations, sheriffs are required to submit Jail Operating Expense Information (JOEI) which includes such expenses as (1) jail/detention center personnel salary and benefits; (2) costs associated with inmate care such as food/kitchen supplies, medical supplies, and recreation services; (3) facility expenses such as utilities and insurance and (4) vehicle expenses such as maintenance and insurance.

The new DSNetwork System has improved the complex and cumbersome processes by which Sheriffs are compensated for housing federal prisoners in local jails. For example, under the old IGA system, Sheriffs could only submit costs from the previous fiscal year. Under the DSNetwork system, however, Sheriffs can now submit projected / future jail operating costs.

Additionally, Sheriffs can now seek an administrative fee for housing federal prisoners. In a March 2007 U.S. Department of Justice Office of the Inspector General Audit Division report,

the Office of the Inspector General and the OFDT agreed that “profit may be included in the calculation of the IGA rate” and that profit would be allowed under the eIGA program.

However, this new process is not without obstacles. As background, when USMS negotiates with a local Sheriff for a new per diem rate, the federal government now considers four factors: (1) comparison of proposed per diem rate with a “Core Rate” established by USMS; (2) comparison of the proposed per diem rate with rates of other state or local facilities; (3) comparison of proposed per diem rate with commercial contract rates; and (4) review of Sheriff JOEI cost data.

Unfortunately, the “Core Rate” used by the USMS is never adequately defined for the Sheriffs. Therefore, while the local Sheriff is required to provide cost data to USMS and a proposed per diem rate for housing a federal prisoner, USMS is never required to reveal what the government believes is a “fair and reasonable” price for housing a federal prisoner. This represents an unprecedented inequality in the negotiation of an intergovernmental agreement between the federal government and a local government. The problem is exacerbated by grants officers who conflate the concepts of a core rate and the prevailing econometric average rate in a region.

Second, the USMS comparison of the Sheriff’s proposed per diem rate with rates at other nearby local facilities ignores the fact that some local governments lack the understanding of the rules and regulations regarding the negotiation IGA rates. Therefore, disparities can exist between the federal per diem rates offered by neighboring Sheriffs.

Third, the preparation of JOEI Cost Data remains too cumbersome and burdensome for local Sheriffs compared to the value achieved through the eIGA negotiation process. For example, Sheriffs are required to submit detailed cost information in the JOEI form as a prerequisite to any negotiations with USMS, but USMS frequently refuses to accept this cost information as a basis for a new per diem rate, insisting instead on capping negotiations based on comparative rates.

However, most disturbing is the length of time which it takes to negotiate an eIGA. USMS grants officers purport to negotiate eIGAs in 90 days. However, my experience has been that most eIGAs take 12 – 14 months between the time the Sheriff begins collecting cost data to the effective date of the new eIGA. Further, once a new per diem rate is agreed upon, the Sheriff cannot seek retroactive compensation from USMS for the period of negotiations.

This Subcommittee should encourage OFDT and USMS to re-examine how the federal government contracts with local Sheriffs. A shorter application process, a less cumbersome means of submitting jail operating cost data, and a more fair methodology for negotiating eIGAs would greatly improve how local Sheriffs are paid for the federal government’s use of local jail space.

This concludes my statement. I thank you for your attention and will be happy to answer any of your questions.

Mr. WOLF. Well, thank you for your testimony.

Are you here in town?

Mr. SUMMERILL. I am.

Mr. WOLF. Maybe what you can do is get in touch with the staff and we will try to get you with the Marshals Service. I mean, 12 and 14 months is ridiculous.

Mr. SUMMERILL. It is and it is not retroactive, so the longer—

Mr. WOLF. Why don't you call the staff and we will get the Marshals Service up here and get you guys together.

Mr. SUMMERILL. Great. Thank you very much.

Mr. WOLF. Thank you very much.

Our next witness is the Animal Welfare Institute, Nancy Blaney.

FRIDAY, MARCH 11, 2011.

ANIMAL WELFARE INSTITUTE

WITNESS

NANCY BLANEY, SENIOR FEDERAL POLICY ADVISOR, ANIMAL WELFARE INSTITUTE

Ms. BLANEY. Thank you, Chairman.

Mr. Chairman and Mr. Austria, thank you for allowing me to testify today on behalf of the Animal Welfare Institute with regard to fiscal year 2012 funding for the Justice Department.

Specifically I will be addressing activities under the Office of Justice programs of DoJ. And I want to clarify that we do not receive funding under this program in DoJ under the Bureau of Justice Assistance, but we are supportive of a grant recipient, the Association of Prosecuting Attorneys, who has instituted a training program or a program of training, technical assistance, and other assistance for prosecutors, law enforcement, mental health professionals, and others who are involved in prosecuting animal crimes and prosecuting animal crimes also as a preventive measure for other crimes.

So we wish to commend the Office of Justice Programs for awarding through BJA with a grant to the Association of Prosecuting Attorneys for this program. This is a very exciting development and we are proud to have been a participant in the training programs that APA has offered so far.

And we respectfully urge the subcommittee to continue funding the National Animal Cruelty and Fighting Initiative under BJA and to encourage the department's ongoing interest in addressing animal-related crimes both because they are crimes in and of themselves, but they also offer an additional and creative tool for addressing other forms of violence against humans.

It will come as no surprise to anybody in this room that people who abuse animals will abuse people. And people who are violent towards others, particularly spouses and children who engage in spouse abuse and child abuse, will use pet abuse as a means of controlling and manipulating their victims.

Up to 71 percent of the victims who go to domestic violence shelters report that their abusers have abused the companion animals in their homes. Batterers will use threats of pet abuse against children whom they are abusing in order to silence them. Batterers

who also abuse animals are far more likely than batterers who do not to use more violence against their domestic violence victims.

I want to go off script a little bit to introduce you to the poster child for why animal abuse needs to be taken more seriously. This was a case in Kentucky, a gentleman named Russell Swigart who was up for parole. He had killed two cats owned by a former colleague and partner of his, a dating partner, and had e-mailed her tormenting her as he was killing the cats.

She was out of town. He went there presumably to kill her. And when she was not there, he killed her two cats. He had previously killed cats of previous partners and had also broken into someone's home using a duplicate key to abuse their animals as well.

The prosecuting attorney in that case said it is pretty well known that people who commit violence against animals end up committing violence against people. And I think it is very possible that Russell Swigart could be a serial killer.

The other connection that will not come as any surprise is the connection between animal fighting and gangs and all that goes along with gangs and drugs and illegal arms and gambling. Dog fighting and cock fighting are very big problems in the country.

In fact, in Virginia, Mr. Chairman, because Virginia has recently upgraded its penalties for cock fighting, the assistant, one of the assistant attorneys general has reported that she is seeing more cases and more requests from prosecutors for assistance.

So as we pursue more cases against dog fighters, cock fighters, and animal abusers in general, prosecutors are in need of more training for handling these cases.

And I thank you for your time.

[The information follows:]



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TESTIMONY BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

Nancy Blaney, Senior Policy Advisor
 Animal Welfare Institute
 March 11, 2011

Mr. Chairman and distinguished Members of the Subcommittee, thank you for allowing me to testify on behalf of the Animal Welfare Institute as you consider Fiscal Year 2012 funding priorities under the Commerce, Justice, Science and Related Agencies Appropriations Bill. My name is Nancy Blaney and I am a senior policy advisor at the Animal Welfare Institute. I will be addressing activities under the Office of Justice Programs (OJP) of the Department of Justice (DoJ).

We wish to commend the DoJ's OJP for awarding, through its Bureau of Justice Assistance, a grant to the Association of Prosecuting Attorneys for its new program of training, technical support, and other assistance for prosecutors, members of the law enforcement community, and other involved parties to enhance the prosecution of animal abuse and animal fighting crimes. This is a very exciting development and we are proud to support APA in this new effort and to have been active participants in the two training conferences it has run so far. We respectfully urge the subcommittee to continue funding the BJA's National Animal Cruelty and Fighting Initiative and to encourage the Department's ongoing interest in addressing animal-related crimes.

The connection between animal abuse and other forms of violence has been firmly established through experience and through scientific studies. Among the most well-documented relationships is that between animal cruelty and domestic violence, child abuse, and elder abuse. For example, up to 71 percent of victims entering domestic violence shelters have reported that their abusers threatened, injured, or killed the family pet; batterers do this to control, intimidate, and retaliate against their victims. Batterers threaten, harm, or kill their children's pets in order to coerce them into allowing sexual abuse or to force them into silence about abuse.ⁱ Criminals and troubled youth have high rates of animal cruelty during their childhoods, perpetrators were often victims of child abuse themselvesⁱⁱ, and animal abusers move on to other crimes. In 1997, the Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA) released the results of a review of animal cruelty cases it had prosecuted between 1975 and 1996. Seventy percent of the individuals involved in those cases had been involved in other crimes, and animal abusers were five times more likely to commit a violent offense against other people.

Another connection that is all too common is the one among animal fighting (which includes both dog fighting and cockfighting), gangs, and drugs, illegal guns, and other offenses.

The Animal Legal and Historical Center at the Michigan State University College of Law describes dog fighting in these stark terms: "The notion that dogfighting is simply an animal welfare issue is clearly erroneous. Until the past decade, few law enforcement officials or government agencies understood the scope or gravity of dogfighting. As these departments have become more educated about the epidemic of dogfighting and its nexus with gang activity, drug distribution rings, and gambling networks, many have implemented well designed, sophisticated task forces. The magnitude of criminal activity concurrently taking place at the average dogfight is of such a scope as to warrant the involvement of a wide range of agencies, including local, regional, and federal law enforcement agencies and their specialized divisions such as organized crime units, SWAT teams, and vice squads, as well as animal control agencies and child protective services."

It is also worth noting that, as part of its Initiative, BJA will be publishing a monograph on animal fighting that will address prosecutors' interest in animal fighting, and will report the results of two End Dogfighting programs run by the Humane Society of the U.S. Based on the premise that the early identification of and intervention in animal fighting can help prosecutors and law enforcement reduce crime and interrupt the cycle of violence, the End Dogfighting program seeks to identify and reduce animal fighting and gang influences in at-risk communities by fostering more positive relationships between at-risk youth, many of whom are already gang members, and their dogs.

Animal fighting, whether involving dogs, roosters, or other animals, is barbaric and is a violent crime in the truest sense of the term. It causes immense suffering to countless numbers of innocent animals and its presence threatens the safety of the entire community. It is illegal under both state and federal law, so it well serves the entire community for law enforcement to have the most powerful tools possible to eradicate it.

At the same time, it must be remembered that animal abuse is more than a "gateway" behavior. It is also a crime in its own right. It is a crime everywhere in the U.S., and certain egregious acts are felonies in 46 states and the District of Columbia. But not all laws are created equal; a felony in one state may still be a misdemeanor in another. In some states, cruelty rises to a felony only upon a second or third offense, or only if the animal dies; if he survives, no matter how severe his injuries, it is still a misdemeanor.

The key to offering animals the most protection possible, however weak or strong the statute, lies in vigorous enforcement of the law and prosecution of violators. While there are many in law enforcement and the courts who recognize animal abuse for the violent crime that it is and act accordingly, there are those who do not take it seriously, treating it as no more urgent than a parking infraction. Others genuinely want to act decisively but may lack the necessary resources, support, or expertise. Moreover, enforcement can be complicated by the laws themselves—weak laws are bad enough, but additional problems may arise from confusion over jurisdiction or limitations in coverage—or by pressure to dispose of cases quickly.

This is where BJA's National Animal Cruelty and Animal Fighting Initiative comes in offering recognition that animal cruelty and animal fighting crimes not only victimize some of the most innocent and vulnerable members of society, but also create a culture of violence—and a cadre of violent offenders—that affects children, families in general, and society at large. Therefore, preventing and prosecuting these crimes will benefit not only the animals, but the entire community by reducing the overall level of violence.

In order to support and enhance the effectiveness of prosecutors in their efforts to achieve this goal, the Association of Prosecuting Attorneys, with BJA's support, is implementing a program to provide the following: training conferences and webinars; publications; technical assistance; and online resources, including a library of briefs, motions, search warrants, legal memos, and state-by-state case law. It has assembled an advisory council composed of prosecutors, investigators, law enforcement, veterinarians, psychologists, members of the animal protection and domestic violence communities, and others, to identify issues, resource needs, and strategies. It brings these same professionals together to provide its multidisciplinary training, and also calls on them individually for topic-specific web-based training and materials.

All of this is directed towards two audiences: those who still need to be convinced of the importance of preventing and punishing animal-related crimes, for the sake both of the animals and of the larger community; and those who are dedicated to bringing strong and effective cases against animal abusers but may need assistance to do so.

OJP/BJA showed great vision in recognizing that by identifying precursor crimes, such as animal cruelty and animal fighting, and ensuring adequate adjudication of such cases, our criminal justice system can reduce the incidence of family and community violence and change the path of potential future violent offenders. The National Animal Cruelty and Animal fighting Initiative sends a very strong message to prosecutors and law enforcement that crimes involving animals are to be taken seriously and pursued vigorously, and offenders must be held accountable.

ⁱ The study "I'll only help you if you have two legs," or Why human services professional should pay attention to cases involving cruelty to animals, by Loar (1999), as cited on the website of the National Coalition Against Domestic Violence (www.ncadv.org)

ⁱⁱ "Woman's Best Friend: Pet Abuse and the Role of Companion Animals in the Lives of Battered Women," by Flynn (2000), as cited at www.ncadv.org

Mr. WOLF. Great. Well, thank you very much. I appreciate your testimony. I think you make a very powerful point and I do appreciate it.

Ms. BLANEY. Thank you, Mr. Chairman.

Mr. FATTAH. I concur with the chairman. Thank you.

Ms. BLANEY. Thank you.

Mr. WOLF. The next witness is National Council of EEOC Locals, Gabrielle Martin.

FRIDAY, MARCH 11, 2011.

**EQUAL EMPLOYMENT OPPORTUNITY COMMISSION
BUDGET**

WITNESS

**GABRIELLE MARTIN, PRESIDENT, NATIONAL COUNCIL OF EEOC
LOCALS NO. 215**

Ms. MARTIN. Good morning. I would like to thank the chair and the committee for allowing us this opportunity once again to testify before you regarding the budget of the EEOC.

As everyone knows, the EEOC investigates employment discrimination cases. That means pretty much EEOC will testify for every family at some point in their life.

EEOC has chronically been underfunded, but that trend was recently reversed when in 2009 at the behest of former President Bush the agency finally received an increase in funding and was able to hire some additional staff.

I provided you with a chart on page five of the testimony which demonstrates the trend of what happens when we are underfunded.

In fiscal year 2010, we ended the year with almost 87,000 cases. We took in almost 100,000 cases. People waited more than ten months to hear from the EEOC about a resolution to their claims.

So clearly additional funding is necessary. The President has requested \$385 million and we are asking the committee to support that.

We think that the agency, however, needs to look at what it does with its funding. We are appreciative of all the funding this committee has recommended and has come out of appropriations, but I think one parallel needs to be looked at.

The agency tends to ask for an increase in the number of investigators. And while over the past three years we have that responsibility for three additional laws, we have seen a 17 percent increase in our disability claims as a result.

Last year, in part due to the economy, in part due to the wait time, we had more than 33 percent of our total charge base was retaliation charges, meaning while all people were waiting, a number of them were subjected to additional or they claim they were subjected to additional instances of discrimination. That is not helpful to the claimants. That is not helpful to the employers who have this problem sort of percolating in their workplace and which they are trying to address.

So over a year ago, the union said to the agency we are willing to help fight get additional funding, but we have to use it wisely.

And we think instead of just adding additional investigators, we need to look at a plan where we have a right sized group of staff typically at lower levels to do the entry level work.

And what I would like to say is think about this committee. If all of the Members of this committee were responsible for fending the calls about when this hearing will take place, writing all the letters about this is the process, this is what you need to do, if you were responsible for greeting us at the door, I think, although you have planned today and you have given us a short time frame, this hearing would take probably weeks. But that is the way EEOC has traditionally managed its work.

Our plea is to support the funding request at \$385 million and to do a lot of oversight and ask the commission why they refuse to change processes and use that money more cost effectively and more cost efficiently.

We free up the investigators who are now spending upwards sometimes of 50 percent of their time on administrative and clerical tasks. We think the public, the employers, everyone would get a better job because the investigators could investigate cases and work on reducing the backlog.

It does not make a lot of sense to just say we are going to keep hiring the chiefs and nobody is really getting the work done and no one is served.

I would like to thank you again for the time for listening to us, for your past support, and, again, our number one ask is that the money be there because this Administration has said jobs are critical for this Nation.

Thank you.

[The information follows:]

**STATEMENT OF GABRIELLE MARTIN, NATIONAL PRESIDENT
NATIONAL COUNCIL OF EEOC LOCALS, NO. 216, AFGE/AFL-CIO
TO
THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES
ON
FY12 APPROPRIATION FOR EEOC,
INCLUDING SUPPORTING THE FY12 BUDGET FOR EEOC,
IN ORDER TO PREVENT JOB DESTROYING DISCRIMINATION AND REDUCE
THE EEOC'S 86,338 CASE BACKLOG
March 11, 2011**

Chairman Wolf, Ranking Member Fattah, and members of the Subcommittee, my name is Gabrielle Martin and I am the President of the National Council of EEOC Locals, No. 216, AFGE/AFL-CIO. The Council is the exclusive representative of the bargaining unit employees at the Equal Employment Opportunity Commission (EEOC), including investigators, attorneys, administrative judges, mediators, paralegals, and support staff located in offices in 53 cities around the country. I want to thank you for the opportunity to express our views today to the Subcommittee on the proposed FY12 budget for the EEOC. Our number one "ask" is that this Subcommittee support the FY12 budget request of \$385 million for EEOC, which is the same as the FY11 budget request. FY10 funding was \$367 million. We understand that this is an immensely challenging budget year. Nevertheless, the Council can confirm from the perspective of EEOC's frontline workers that the modest increase is absolutely necessary and justified. The Council requests this Subcommittee's continued support to ensure that EEOC can effectively enforce workplace discrimination laws that help Americans get and keep jobs, by including bill and report language in the FY12 funding measure which: (1) adopts the FY12 budget request for EEOC at \$385 million, but in no event cuts civil rights funding; (2) directs EEOC to focus available hiring, up to the staff ceiling, on frontline staff to prevent job-destroying discrimination; (3) directs EEOC to implement the Cost-Efficient Intake Plan to provide real help to the public; (4) maintains oversight of headquarters and field restructuring, including the Office of Federal Operations; and (5) requires EEOC to finally pay its debt to employees for willfully violating overtime laws since 2006, pursuant to a Federal arbitrator's final decision dated March 23, 2009.

Introduction:

The EEOC was created by the Civil Rights Act of 1964. The EEOC's mission is to enforce this nation's laws, which protect against discrimination in employment based on race, color, religion, sex, national origin, age, and disability. As of 2009, EEOC is also responsible for three new laws, including the Americans with Disabilities Act Amendments Act (ADAAA) and Genetics Information Nondiscrimination Act (GINA), which were both passed with wide bipartisan support. Unfortunately, discrimination still costs jobs and disrupts families' livelihoods. In FY10, EEOC received a record 999,992 charges of discrimination due to the struggling economy and enforcement of the new laws. Still impacted by six years of level funding and the loss of 25% of its workforce, EEOC ended FY10 with an 86,338 case backlog and an average case processing delay of 10 months. Significantly, in 2008, President Bush requested a much-needed

increase to EEOC's budget and staffing for FY09. The Council thanks this Subcommittee for increasing EEOC's FY09 and FY10 budgets and adopting the FY11 budget request of \$385M. EEOC's budget justification confirms that record high discrimination charge filings will continue and even exceed 100,000 in FY12, mirrored by a similarly high backlog. The FY12 budget request is needed so that EEOC's dedicated employees have the resources to keep discrimination out of the workplace, so Americans can stay on the job.

Adopt the FY12 Budget Request to Fund EEOC at \$385M:

EEOC's workload has never been higher, even though staffing levels remain inadequate. The FY10 record high 99,992 charges of discrimination include a record high number of retaliation charges, as well as a 17% increase in disability charge filings. FY10 represents the EEOC's third straight year of historically high charge filings. Record charge filings will not drop anytime soon. EEOC predicts 105,917 charges in FY11 and 108,036 charges in FY12.

The chart included with this testimony illustrates EEOC's troubling customer service trends from FY01 through FY10. If EEOC is to break these trends it needs to be funded at no less than the FY12 budget request. Therefore, the Council respectfully requests that this Subcommittee adopt the request of \$385 million.

Do Not Slash EEOC to FY08 Level When Workload is Up and Discrimination Costs Jobs:

The Council, which is aware of intentions to enact across the board cuts to FY08 levels, wishes to address the specific concerns this raises with regard to the EEOC. The EEOC is in a unique position that makes it inappropriate to cut its funding to FY08 levels.

EEOC's workload is up since FY08. Since 2008, EEOC has three new laws to enforce. The struggling economy also has impacted charge filing. Whereas unemployment was at 5.8% in 2008, in December 2010 it had climbed to 9.4%. EEOC projects that charge filings will continue to exceed FY08 levels.

Given that FY08 was the sixth year of level funding for EEOC, it would be extremely difficult to address EEOC's current problems with that level of funding. A hiring freeze dating back to 2001, along with attrition, had caused the loss of over 25% of EEOC's workforce. In FY08, the staffing crisis resulted in EEOC's backlog mushrooming 35% in one year.

A 2008 survey of public callers to the EEOC garnered the following illustrative comments: "I have not gotten any answers because they are backlogged;" "Give them a smaller caseload so they can call back their charging parties." "[T]hey need more staff to get these things done faster, it's been 10 months;" "I do not feel that they are acting on it and I am being harassed at work;" "My suggestion would be the EEOC needs more workers;" and "They could hire more employees to help out around this place."

Undisputedly, EEOC did not have the resources to serve the public in 2008. It was in this context, that President Bush requested a budget and staffing increase for EEOC for FY09.

To go backwards now and cut EEOC will prevent the agency from helping Americans get and keep jobs. Discrimination costs jobs, e.g., racial harassment/nooses displayed at the workplace,

“young and energetic” want- ads, failure to accommodate a diabetic needing insulin breaks, and refusal to hire an applicant who has the breast cancer gene. Delays at EEOC resulting from cuts also will increase constituent complaints to Congressional offices seeking assistance.

EEOC Should Shift Resources to the Frontline to Tackle Backlogs and Help Workers:

EEOC must manage an anticipated net hiring freeze by creating a presumption in favor of filling frontline slots. The Bush and Obama administrations, Congress, and EEOC have agreed that more frontline staff is needed to tackle an 86,338 case backlog and reduce dismal 10 month case processing delays. Delayed resolution of discrimination complaints costs jobs and causes employer uncertainty.

More frontline staff is needed to actually reduce the backlog. According to EEOC’s FY12 Budget Justification, “hiring frontline investigators is crucial to bring the backlog down to an acceptable level.” Recent limited frontline hiring helped EEOC hold the backlog to only a .7% increase in FY10, which can be compared to the 35% increase in FY08. Specifically, in FY08 EEOC employed only 646 investigators nationwide. In FY10, the number had increased slightly to approximately 800 investigators.¹

Unfortunately, EEOC’s FY12 budget justification anticipates that under the FY11 continuing resolution there will be a projected loss of investigators and mediator positions. “This sharp decline in front-line staff will impede our ability to address the growing inventory, particularly in light of the projected increase in receipts.”

EEOC’s FY12 budget request calls for the minimal addition of 30 frontline investigators, as well as other frontline staff. However, the justification recognizes that:

Under our projections, even with the additional 30 FTE frontline investigators provided in the 2012 Budget, **the pending inventory is expected to reach nearly 100,834 charges at the end of fiscal year 2012 and rise to 144,217 charges at the end of fiscal year 2016.** Our charge data projections also show that in 2012 our investigators will carry an average caseload of 128. This caseload will lead to an average resolution time far exceeding a 180 day average – affecting all parties to the investigation.

These depressing projections demonstrate how critical it is to at least get frontline staff on board. Of course, cutting EEOC’s budget would make these projections exponentially worse.

There are also budget neutral ways to add frontline staff. EEOC must manage an anticipated net hiring freeze by creating a presumption in favor of filling frontline slots, e.g., when two middle managers retire, frontline staff could be added at a savings. Likewise, EEOC should keep its promise that the 2006 field restructuring would reduce supervisor to employee ratio to 1:10. Redeploying redundant layers of management and supervisors to the frontline is a budget neutral means to increase resources that directly serve the public.

¹ Investigator staffing, even with recent modest additions, is still below FY00’s high of 917 investigators.

Direct EEOC To Implement Cost-Saving Intake Plan To Help Public and Reduce Backlog:

EEOC's current backlogs and poor customer service starts with a bottleneck at the charge intake phase. Currently, mostly senior GS-12 investigators are pulled away from investigating their cases, as much as 30 to 50% of the time, to conduct intake on a rotational basis. An in-house call center directs the public to a downloadable intake questionnaire. These questionnaires are returned not to call center staff, but to overwhelmed investigators to conduct intake interviews and draft charges.

Council 216 submitted a comprehensive plan for a national Full-Service Intake Plan over a year ago, which is languishing with EEOC's leadership. The cost-saving plan calls for staffing each field office with a compliment of positions and grades (GS-5 through GS-9) able to advance the intake process from pre-charge counseling through charge filing, handling the backlogged flood of downloadable intake questionnaires and calls and responding to over 5,000 backlogged e-mails.² The plan contains sufficient career levels of work to help EEOC avoid the high rates of turnover. The plan also produces costs savings by not pushing the intake work to GS-12 investigators. It implements part of EEOC's backlog reduction plan, which includes a renewed emphasis on pre-charge counseling, as well. In turn, Investigators would be relieved from many of these intake responsibilities and could focus on investigating cases and reducing the backlog.

The Council respectfully requests that report language direct EEOC to implement the Full Service Intake Plan. Both staffing efficiencies and working smarter need to be part of an effective plan to reduce backlog.

Bill Language Should Retain Oversight of EEOC Restructuring:

On January 1, 2006, EEOC unilaterally implemented a controversial field restructuring. The restructuring added bureaucratic layers, but no frontline staff. EEOC should revisit the restructuring to fix its worst inefficiencies, such as states that were split between two districts. The final phase of EEOC's repositioning is the delayed restructuring of headquarters. Also, there have been proposals to reorganize the EEOC's Office of Federal Operations (OFO), which would have added additional layers of high levels of management at the expense of frontline administrative judges. The intent of HQ and OFO restructuring should be to maximize aid to the frontline work in the field offices while reducing redundancies and layers of management. The Council urges the Subcommittee to retain bill language regarding oversight of restructuring, since this remains a topical concern. Additionally, Congress should assure a transparent process for public and internal stakeholders to have an opportunity to provide feedback to a draft plan.

Federal Employees Must Have Rights to Discovery and Full and Fair Hearings before AJs:

For several years, EEOC has been internally debating controversial changes to the hearing process, called "fast track," which would direct Administrative Judges (AJs) to cut off discovery and deny hearings for many Federal employees who claim discrimination in certain employment actions. In these fast-tracked cases, the EEOC AJ is forced to accept the investigative record submitted by the Federal agency alleged to have committed discrimination. The Council represents these AJs, who oppose to mandatory tracking because it re-writes the regulations to remove judicial independence and interferes with fair hearings. In addition, pilot programs

² The units would be comprised of some new staff and current staff, including training and converting in-house call staff to investigator supporter assistants.

allowing variances to Federal agencies from EEO regulations must provide for complete, timely, impartial investigations, and opt-out rights. Before such radical changes are undertaken, outside stakeholders must also be given an opportunity to weigh in. Therefore, the Council supports maintaining FY09 House Appropriations Committee report language requiring oversight before implementation.

Require EEOC to Compensate Its Workers for Willful Overtime Violations:

A Federal Arbitrator determined that between 2006 and 2009, EEOC willfully violated overtime laws and that the remedy was liquidated damages for employees who worked overtime. The time for appeal passed without action by EEOC. EEOC should be directed to pay its employees. Payment of the debt and addressing its inefficiencies is the right thing to do.

Conclusion:

In closing, I want to again thank the Chairman, Ranking Member and the Subcommittee for inviting me to testify. I hope my statement will give you insight into the difficult challenges facing EEOC. I urge the Subcommittee to include bill and report language in the FY12 funding measure which: (1) adopts the FY12 budget request to increase EEOC funding to \$385 million, but in no event cuts civil rights funding; (2) directs EEOC to focus available hiring, up to the staff ceiling, on frontline staff to prevent job-destroying discrimination; (3) directs EEOC to implement the Cost-Efficient Intake Plan to provide real help to the public; (4) maintains oversight of headquarters and field restructuring, including the Office of Federal Operations; and (5) requires EEOC to finally pay its debt to employees for willfully violating overtime laws since 2006, pursuant to a Federal arbitrator's final decision dated March 23, 2009.

CHART: EEOC'S TROUBLING CUSTOMER SERVICE TRENDS

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
1 Full Time Employees	2,924	2,787	2,617	2,462	2,349	2,250	2,137	2,174	2,192	2,385
2 Backlog	32,481	29,041	29,368	29,966	33,562	39,946	54,970	73,941	85,768	86,338
% Backlog increase	N/A	-10%	1%	2%	12%	19%	38%	34.5%	16%	.7%
3 Charges	80,840	84,442	81,293	79,432	75,428	75,768	82,792	95,402	93,277	99,922
4 Resolutions	90,106	95,222	87,755	85,259	77,352	74,308	72,442	81,081	85,980	104,999
5 Avg. Charge Processing	182	171	160	165	171	193	199	229	294	313

Mr. WOLF. Thank you.

Maybe what we will do is have the staff talk to the EEOC. Maybe we should ask that the National Academy of Public Administration do an in-depth analysis. We have used NAPA for reforming the FBI, for reforming a number of agencies. They are non-partisan, nonpolitical, you know, they are not involved in politics, but can come in with fresh eyes on the target, if you will. So maybe we will ask them to take a look at it and meet with EEOC and NAPA to see if that may be appropriate.

Mr. Fattah.

Mr. FATTAH. I want to thank you.

I know that you testified before and you made this point. And I think that it is incumbent upon us to try to follow-up. And I agree with the chairman that we may want to have a review done so that to the degree the dollars are being added pursuant to the President's request that it does cover support staff and not just investigators.

Thank you very much.

Ms. MARTIN. Okay.

Mr. WOLF. Thank you.

The next witness will be Trimble Navigation Limited. We are going to ask Mr. Austria to introduce them.

Mr. AUSTRIA. Thank you, Mr. Chairman.

I would like to introduce Mr. Kirkland from Trimble. And I think they do good work and they have a very good case they are going to make today as far as the navigation GPS systems.

So with that, I would like to introduce—

FRIDAY, MARCH 11, 2011.

GLOBAL POSITIONING SYSTEM

WITNESS

JIM KIRKLAND, VICE PRESIDENT AND GENERAL COUNCIL, TRIMBLE NAVIGATION LIMITED

Mr. KIRKLAND. Thank you, Congressman Austria.

Mr. Chairman, Ranking Member Fattah, Congressman Austria, I am before the committee to discuss an issue of importance not from a funding standpoint but one which potentially may have major budgetary implications due to the Federal Government's multibillion dollar investment in GPS over the last 30 years.

GPS, I think, is very similar to the internet and that a relatively modest investment by government was ultimately made available to the commercial sector and that investment now has produced economic benefits and jobs many, many times over the Federal Government investment. And I think GPS is one of the great technology success stories in this country.

Mr. FATTAH. I know it has helped my golf game.

Mr. KIRKLAND. It has probably helped your golf game and saved you from getting lost many times among other things.

So the issue comes up because of a decision by the Federal Communications Commission a month ago to grant a waiver to a company called LightSquared to invest in broadband wireless facilities that operate at extremely high power in the spectrum band that is

immediately adjacent to the GPS band. And they did this by granting a waiver of their normal rules.

Now, I think this was in pursuit of laudable goals. The FCC has a long-standing priority to create new broadband competition to drive down prices and also to free up more spectrum for wireless data uses for things like iPads. And that is a very good thing to do, but it needs to be done as part of a rational long-term spectrum planning process. And by long term, I do not mean delay. I mean judicious and doing your homework.

So the FCC's action has caused serious concern within the GPS industry. Initial technical analyses show that these very high-powered wireless database stations will cause significant interference to GPS receivers within a significant radius of the base station. And the consequences of this disruption, you know, are potentially far reaching.

If you think of their proposal to build 40,000 base stations throughout metro areas in the United States, think of 40,000 GPS dead spots miles in diameter where your GPS receiver loses its fix. And I think just from normal consumer uses, you can see the implications.

The reason I am here is that the National Telecommunications Information Administration is under the jurisdiction of this committee and they play a major role. They represent the interests of federal spectrum users and they filed a letter with the FCC while it was considering this waiver on an extremely fast track on behalf of DoD, NASA, DoT, Department of Interior, FAA, the manager of the National Communications System raising concerns with the LightSquared proposal.

So LightSquared's proposal to build 40,000 terrestrial base stations in this band represents a tectonic change in the use of the spectrum band. This band was reserved for satellite uses. I would suggest spectrum. Spectrum is an important public asset and cannot be handed over at the behest of a private party.

I would also suggest that the FCC cannot waive the laws of physics that make this extremely problematic to have such high-powered uses sitting next to receivers that are trying to listen to satellite signals in the sky.

So what we are asking this committee from an oversight standpoint and appropriations standpoint is to ensure that the FCC fully considers these issues, that the FCC make clear to LightSquared that it should not be investing in facilities until the interference issues are resolved.

The FCC has created an interference study process and the GPS industry is committed to full participation in this process. And once that process is complete, we expect that the FCC will do a full inquiry and a full public comment period on this application.

Thank you.

[The information follows:]

Testimony of Jim Kirkland, Vice President and General Counsel of Trimble Navigation Limited
March 11, 2011 Hearing of the Commerce, Justice, Science Subcommittee of the
House Appropriations Committee

Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to testify. My testimony does not relate to a funding issue. Rather, I am here to present the committee with information regarding an issue of key importance to the National Telecommunications and Information Administration and all Americans.

Recently, the Federal Communications Commission (FCC) conditionally approved an application for a waiver allowing a company called LightSquared to repurpose the satellite spectrum immediately neighboring that of the Global Positioning System (GPS) for use in extremely high-powered ground-based transmissions. In doing so, the FCC waived its own rules, acting with unusual speed. The section of spectrum at issue is in the L Band 1 (1525 – 1559 MHz) and is immediately adjacent to the GPS section (1559 – 1610 MHz).

The FCC's action has caused serious concern within the GPS industry and user community since this planned use is fundamentally incompatible with existing GPS uses. Initial technical analyses have shown that the distant, low-powered GPS signals would receive substantial interference from high-powered, close-proximity transmissions from a network of ground stations. The consequences of disruption to the GPS signals are far reaching, likely to affect large portions of the population and the federal government. Therefore, it is imperative that the new system not be deployed unless it can be conclusively guaranteed that the GPS users are fully protected from radio interference.

The Global Positioning System, or GPS, was first launched more than 30 years ago and is now a critical and extremely reliable part of our national infrastructure. Millions use it routinely every day. The satellites which feed GPS data to the Earth's surface were initially intended for military purposes. Following the 1983 Korean Airlines disaster, President Reagan announced that GPS would be available for civilian purposes and in 1996 GPS was declared by President Clinton to be a dual-use system with an Interagency GPS Executive Board established to manage it as a national asset. Taxpayers have invested billions of dollars in the system over the decades, while the private sector has invested in both civilian and military uses. Today, GPS is a national asset, from which every taxpayer can benefit through both consumer and professional GPS equipped devices. The Global Positioning System has stimulated a multi-billion dollar global industry, and technology leaders such as Trimble contribute both to the domestic economy and to US exports.

The swath of spectrum where GPS satellites transmit, the L Band, has long been reserved for satellite to earth communications of various types. It is fundamental to sound spectrum planning that like uses be grouped together to ensure similarity of technical characteristics and avoid interference. Lightsquared's proposal to build 40,000 terrestrial base stations operating at 1 billion times the power levels of GPS signals as received on earth represents a tectonic change in the use of this band. While the GPS community lauds efforts to add new broadband

competition and free up spectrum for mobile uses, this must be done in the context of rational, long term spectrum planning, rather than the rushed, ad hoc waiver process followed by the FCC to date. Spectrum is a public asset and it should not lightly be handed over at the behest of a private party. More fundamentally, the laws of physics cannot be waived by the FCC. This is a serious problem with no obvious solution.

Trimble has been a leader in the GPS industry since it first began. My company manufactures and sells commercial use GPS devices and services. You are probably more familiar with consumer companies, such as Garmin, who sell similar devices for individual use. Trimble employs over 4,000 people worldwide and over 2,000 people in the US. Trimble sells many GPS devices to the federal government, to the Department of Defense, the Department of Interior, The Department of Homeland Security, The Department of Transportation and others, including the US Air Force and Air National Guard, US Army, US Army Corps of Engineers, US Marine Corps, US Navy, US Coast Guard, Federal Emergency Management Agency, General Services Administration, National Parks Service, US Forest Service, Natural Resources Conservation Service, The Bureau of Land Management, Bureau of Indian Affairs, US Fish and Wildlife Service, US Environmental Protection Agency, US Geological Survey, Bureau of Reclamation, NASA and NOAA.

The National Telecommunications and Information Administration, which falls under the jurisdiction of this Subcommittee, has a substantial stake in the outcome of this FCC decision. As the Executive Branch representative on telecommunications issues, the NTIA registered the objection of eight federal agencies with the FCC, including the Department of Defense. The NTIA letter states that it received letters from: the Space-Based Positioning Navigation & Timing, National Coordination Office, the Office of the Assistant Secretary of Defense, National Aeronautics and Space Administration, the Office of the Secretary of the Department of Transportation, the Office of the Secretary of the Department of Interior, the Federal Aviation Administration, and the Office of the Manager of the National Communication System raising concerns with the LightSquared proposal.

Initial tests indicate that each LightSquared ground station will cause varying levels of interference with GPS within miles of the ground stations, and LightSquared plans to build as many as 40,000 such ground stations. If GPS is interfered with, critical private and public sector activity will be adversely affected, including:

- **Public Safety:** Public safety depends on GPS technology daily because first responders such as law enforcement, fire fighters, and emergency medical personnel rely on it day-in and day-out to provide critical instant location and route information. Disruptions to the GPS transmission pose a serious threat to public safety.
- **Homeland Security:** GPS equipment is widely used by the Departments of Defense, Interior, Transportation, Commerce and Homeland Security. Federal, state, and local government employees rely on GPS equipment in disaster response, public safety, and security

and in the management of our national assets and infrastructure, as do emergency services for rapid response, dispatch, and accident investigation.

- **Consumers:** Millions of Americans use GPS-enabled consumer devices in their cars and on their cell phones and other hand-held devices as vital, reliable every day navigational tools.
- **Aviation:** GPS receivers used in thousands of aircraft could be jammed within miles of LightSquared's transmissions. GPS, together with the Wide Area Augmentation System or WAAS (which will also be affected) has long been approved by the Federal Aviation Administration (FAA) for aircraft navigation and FAA-approved GPS instrument approaches now provide a landing system option at the many U.S. airports not equipped with land-based instrument landing systems. GPS also plays a critical role in the FAA Next Generation Air Transportation System, which will modernize air traffic control and address the nation's need for expanded air traffic capacity without compromising air safety.
- **Transportation:** GPS equipment is used in critical asset management activities for our national road and rail infrastructure, improving efficiency, lowering costs and enabling better decision making. The Federal Rail Administration's Positive Train Control mandate further drives the use of GPS to prevent train-to-train collisions, derailments, and casualties or injuries to railway workers. In addition, GPS is used to help fleets lower fuel consumption and improve their carbon footprint.
- **Agriculture:** Farmers use GPS to improve efficiency and crop yields, reduce environmental impact and comply with U.S. Agriculture reporting regulations.
- **Forestry:** The U.S. Forestry industry and Forest Service use GPS in forest land management and for Forest Automation Systems which improve logging efficiency and reduce environmental harm.
- **Engineering and Construction:** The U.S. building, construction, and civil engineering industry – one of the economic sectors most severely impacted by the recent recession – has made large investments in the use of GPS technology to modernize and automate construction sites, machines and processes. GPS is also used to monitor the movement of physical infrastructure such as bridges, dams, mines, and other natural and manmade structures. Disruption to this service could negatively impact positive economic and societal improvements.
- **Surveying, Mapping, and Land Management:** Interruption of the national geodetic infrastructure would disrupt surveying and mapping activities necessary for land title transactions, land development, building and civil engineering activity, and accident investigations. It would also disrupt the field creation, maintenance, and use of geographic information systems (GIS) databases that underpin our national digital mapping infrastructure.

- **Utilities:** Utility services nationwide including electricity, water, gas and telecommunications depend on GPS signals in a number of ways. GPS signals are used to synchronize the power grid. Other uses include synchronizing networks, maintaining and managing infrastructure and coordinating rapid responses to network outages and incidents – activities that are all essential to restoring disrupted services as quickly as possible.
- **Natural Resources:** Natural resources industries engaged in the exploration, production and distribution of energy and minerals rely on the GPS service throughout their operations.
- **Disaster Management and Scientific Research:** High-accuracy GPS networks are deployed along crustal faults and around volcanoes. In the U.S, the data is used to study and better understand the crustal movements that cause seismic hazards such as earthquakes and volcanic eruptions. In addition to disaster prevention and relief, GPS is also used for weather services and scientific research.

In recognition of the potential interference to GPS receivers, the FCC, as part of its January 26, 2011 modification order, required the establishment of a working group to bring together LightSquared and the GPS community. This working group will study the interference concerns, identify measures to prevent interference and produce a report for FCC review no later than June 15, 2011. The working group process will be complete once the FCC, in consultation with NTIA, concludes that “the harmful interference concerns have been resolved and sends a letter to LightSquared stating that the process is complete.”

The GPS industry is committed to work with LightSquared, FCC, NTIA and other interested parties in this working group process. However, we believe that additional safeguards are needed. We recommend:

1. The FCC must make clear, and the NTIA must ensure, that LightSquared’s license modification is contingent on the outcome of the mandated study. The study must be comprehensive, objective, and based on correct assumptions about existing GPS uses rather than theoretical possibilities. The views of LightSquared, as an interested party, are entitled to no special weight in this process.
2. The FCC should make clear that LightSquared and their investors should not proceed to make any investment in operating facilities prior to a final FCC decision (or at least make it explicit that they do so at their own risk). While this is the FCC’s established policy, it failed to make this explicit in its order.
3. Further, the FCC’s, and NTIA’s, finding that “harmful interference concerns have been resolved” must mean “resolved to the satisfaction of preexisting GPS providers and users.”
4. Resolution of interference has to be the obligation of LightSquared, not the extensive GPS user community of millions of citizens. LightSquared must bear the costs of preventing interference emanating from their devices, and if there is no way to prevent interference, it

should not be permitted to operate. GPS users or providers should not have to bear any of the consequences of LightSquared's actions.

5. This is a matter of critical national interest. There must be a reasonable opportunity for public comment of at least 45 days on the report produced by the working group and further FCC actions on the LightSquared modification order should take place with the approval of a majority of the commissioners, not at the bureau level.

Mr. WOLF. Thank you for your testimony.

We do not have jurisdiction over the FCC. We do over the NTIA.

Are they in your district, this group?

Mr. AUSTRIA. No.

Mr. WOLF. Because I was going to make a suggestion that, maybe you could take the lead here working with the staff. We can bring NTIA in with the FCC, we used to the fund the FCC out of this committee, and see if there is something that can be worked out.

Are you in Ohio?

Mr. KIRKLAND. We have facilities in Ohio. We have them throughout the country including Chantilly, Virginia.

Mr. WOLF. Where are you located?

Mr. KIRKLAND. We are based in Sunnyvale. I am in the Sunnyvale headquarters.

Mr. WOLF. In California?

Mr. KIRKLAND. California.

Mr. WOLF. Okay.

Mr. AUSTRIA. Mr. Chairman, I will be glad to work——

Mr. WOLF. Yeah, why don't you do that and we will get the staff to work with you and bring NTIA up here. We do not want to hurt Mr. Fattah's golf game.

Mr. KIRKLAND. Or his iPad.

Mr. AUSTRIA. One other thing I wanted to do is, some of the references you made, I have got two letters here from the secretary of Defense and also the secretary of Commerce that I would like to submit for the record that show that they have concerns about this as well——

Mr. WOLF. Sure.

Mr. AUSTRIA [continuing]. And interfering with the GPS. You know, we all use, I mean, whether it be iPad, the iPhone, or the Smartphone or in my car when I am navigating or just the handheld GPSs, I mean, it impacts all of us. And I think it is important.

[The information follows:]



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
6000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-6000

DEC 28 2010

NETWORKS AND
INFORMATION
INTEGRATION

Mr. Karl Nebbia
Associate Administrator
Office of Spectrum Management
National Telecommunications and Information Administration
U.S. Department of Commerce
Washington, D.C., 20230

Mr. Nebbia

I am concerned with the Draft Order and Authorization (O&A) the Federal Communications Commission (FCC) sent to National Telecommunication and Information Administration (NTIA) which would grant LightSquared a waiver of the FCC's rules in the 1525-1559 MHz band. This band is used by Federal and non-Federal Inmarsat users, is adjacent to 1559-1610 MHz used by Global Positioning Systems L1 (GPS L1), and 1435-1525 MHz used by Federal and non-Federal Aeronautical Mobile Flight Test Telemetry (AMT). The GPS L1 band is used for military, federal and all commercial applications. It is my understanding that interference to GPS, Inmarsat, and AMT operations from LightSquared's terrestrial mobile use, particularly from base stations, would likely result if the requested waiver is "conditionally granted" by FCC as it currently stands and the necessary studies are not completed and understood.

DoD is concerned with the O&A being conducted without the proper analysis required to make a well informed decision. Given the potential negative impacts to GPS, Inmarsat, and AMT operations, request NTIA advocate to the FCC to defer action on the waiver request and place this application under a Notice of Proposed Rule-Making to allow for the development of a robust public record and adequate interference analysis and mitigation options to protect GPS, Inmarsat, AMT and any other Federal operations in and adjacent to the band.

Thank you for your time regarding this matter and if you have any questions please feel free to contact me or my point of contact Mr. Kenneth Turner at 703-607-0735.

Sincerely

Danny Price
Director, Spectrum and Communication Policy





UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Communications
and Information
 Washington, D.C. 20230

JAN 12 2011

Mr. Julius Genachowski
 Chairman
 Federal Communications Commission
 445 12th Street, SW
 Washington, D.C. 20554

Dear Chairman Genachowski:

The National Telecommunications and Information Administration (NTIA), in consultation with the Federal agencies, has reviewed the Federal Communications Commission (FCC) Public Notice requesting comments on an application by LightSquared Subsidiary LLC (LightSquared) to modify its authority to provide mobile-satellite service/ancillary terrestrial component (MSS/ATC) service. In our view, this proposal raises significant interference concerns that warrant full evaluation as part of the FCC's consideration of LightSquared's application to ensure that LightSquared services do not adversely impact Global Positioning System (GPS) and Global Navigation Satellite System (GNSS) receivers, maritime and aeronautical emergency communication systems, and Inmarsat receivers used by the Federal agencies.¹

Grant of the LightSquared waiver would create a new interference environment and it is incumbent on the FCC to deal with the resulting interference issues before any interference occurs. Several Federal agencies with vital concerns about this spectrum band, including the Departments of Defense, Transportation and Homeland Security, have informed NTIA that they believe the FCC should defer action on the LightSquared waiver until these interference concerns are satisfactorily addressed.² If the FCC grants the requested waiver despite the views of the agencies it should, as part of the grant, establish a process (i) that will ensure the interference issues (including fundamental concerns about interference with GPS safety-of-life applications) are resolved prior to LightSquared's offering service that could cause interference, and (ii) that motivates all parties to move expeditiously and in good faith to resolve the issues. NTIA stands ready to work with the FCC, LightSquared, the affected communities and concerned Federal agencies to address the interference concerns discussed herein.

1. See Federal Communications Commission Public Notice, SAT-MOD-20101118-00239, Report No. SAT-00738 (rel. Nov. 19, 2010); See Letter from Jeffrey J. Carlisle, Executive Vice President, Regulatory Affairs and Public Policy, LightSquared, to Marlene H. Dortch, Federal Communications Commission, dated November 18, 2010 ("LightSquared November 18 Letter"); The GNSS is a satellite system that is used to provide position, navigation, and timing information to a user's receiver anywhere in the world. Two GNSS systems are currently in operation: the United States' Global Positioning System (GPS) and the Russian Federation's Global Orbiting Navigation Satellite System (GLONASS). A third, Europe's Galileo, is planned. Each of the GNSS systems employs a constellation of orbiting satellites working in conjunction with a network of ground stations. There are also ground-based and spaced-based augmentation systems.

2. See, e.g. Letter from Mr. Danny Price, Office of the Assistant Secretary of Defense; Director, Spectrum and Communications Policy to Mr. Karl B. Nebbia, Associate Administrator, NTIA Office of Spectrum Management, Department of Commerce, dated December 28, 2010, a copy of which is attached hereto.

In its application, LightSquared states that it will operate its network on a wholesale basis and make capacity available to wholesale customers who serve end-users.³ Although LightSquared intends to make dual-mode handsets available to its wholesale customers, it has not made clear whether it will require its wholesale customers to offer dual-mode handsets to their end-users. If it does not require dual-mode handsets, LightSquared's wholesale customers will have the ability to offer terrestrial-only plans to their own end-users, permitting them to offer ATC-only subscriptions and potentially using 100 percent of their network capacity for terrestrial-only service.⁴ The large increase in terrestrial usage that is expected to result from LightSquared's new business model creates a new and more challenging interference environment that must be addressed satisfactorily.

Concerning GPS protection, NTIA recognized in 2002 that facilitating the introduction of ATC services in spectrum used for MSS could lead to an attendant increase in interference to GPS receivers, such as Enhanced-911 (E-911) capable handsets and consumer navigation and location devices.⁵ However, given the expected limited deployment of ATC base stations at that time under the FCC's orders granting ATC authority,⁶ NTIA believed that the FCC could address the potential interference to GPS receivers by establishing limits on emissions in the GPS frequency bands. The FCC specified limits on the radiated power of out-of-band emissions in the 1559-1610 MHz band from ATC base and mobile stations⁷ and also agreed to coordinate any ATC authority grant with NTIA, pursuant to the general notification process, to assure adequate protection of GPS services.⁸ Consistent with this agreement, the FCC has required in all previous authorizations granted for ATC in the MSS bands that operations comply with more

3. LightSquared is authorized to operate MSS/ATC base stations in the 1525-1559 MHz band and MSS/ATC mobile stations in the 1626.5-1660.5 MHz band.

4. See Section 25.149 of the FCC Rules. The FCC based its decision to permit implementation of MSS/ATC on the premise that ATC must be "ancillary" to MSS operation. To ensure that MSS/ATC allocation remains a satellite service, the FCC established gating requirements for MSS/ATC authorization and operation to ensure that MSS/ATC will augment, rather than supplant, MSS. To satisfy the gating requirements, an MSS licensee must, among other things, offer an integrated service of MSS and MSS/ATC by affirmatively demonstrating that the MSS/ATC operator will use a dual-mode handset that can communicate with both the MSS network and the MSS/ATC component to provide the proposed ATC service or by providing other evidence that the MSS/ATC operator will provide an integrated service offering to the public.

5. See, e.g., Letter from Fredrick R. Wentland, Acting Associate Administrator, Office of Spectrum Management, National Telecommunications and Information Administration to Donald Abelson, Chief, International Bureau, Federal Communications Commission, IB Docket No. 01-185 at 1 (Nov. 12, 2002).

6. See *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands; Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Report and Order and Notice of Proposed Rulemaking*, FCC 03-15, 18 FCC Rcd 1962 (2003) (*ATC Report and Order*), modified by Order on Reconsideration, 18 FCC Rcd 13590 (2003), reconsidered in part in *Memorandum Opinion and Order and Second Order on Reconsideration*, FCC 05-30, 20 FCC Rcd 4616 (2005) at ¶ 71.

7. See Section 25.254(a)(4) and Section 25.254(b)(4) of the FCC Rules.

8. See *supra* note 5.

restrictive out-of-band emission limits in the 1559-1610 MHz band.⁹ However, due to the radio frequency filters employed in GPS receivers, the signals from MSS/ATC base stations and mobile stations operating close to GPS and GNSS receivers could still cause in-band interference to the receiver.¹⁰ The GPS and GNSS manufacturer and user communities have never raised the issue of in-band receiver interference during the previous MSS/ATC rulemaking proceedings. It is NTIA's view that the Federal and non-Federal GPS users and GPS manufacturers thought this problem was manageable under the original MSS/ATC concept where there would be a limited number of terrestrial base stations transmitting at a low duty cycle to fill gaps in MSS coverage. But as the number of terrestrial base stations increases and/or the duty cycle of base stations transmissions increases to support the proposed LightSquared terrestrial network, NTIA is concerned that the likelihood of GPS and GNSS receiver in-band interference will also increase.¹¹ While the distance where this interference occurs may vary based on the specific types of GPS applications considered, base stations situated in urban areas may never be far from GPS capable handsets. Furthermore, the large installed base of GPS-dependent devices makes this situation difficult to change over the short term.

Federal and non-Federal telecommunications systems depend on GPS timing receivers for synchronization to achieve a high degree of accuracy required by many of these systems. Degradation in performance, due to the introduction of interference can cause timing receivers to provide a low quality timing solution, or to lose lock with incoming GPS signals altogether. Section 25.253(c)(2) of the FCC Rules requires MSS/ATC applicants to coordinate with Commercial Mobile Radio Service base stations that use GPS timing receivers. LightSquared has indicated to NTIA that they will provide the technical information necessary for Federal entities to fully assess the potential impact to GPS timing receivers used by their telecommunication systems. As LightSquared makes this information available, NTIA will

9. MSS/ATC base and mobile stations operating in the 1525-1559 MHz, 1626.5-1660.5 MHz, 1610-1626.5 MHz, 2000-2020 MHz, and 2180-2200 MHz bands are required to suppress the power of any emission in the 1559-1610 MHz band in accordance with the following equivalent isotropically radiated power (EIRP) density limits: the EIRP density for mobile stations is limited to -95 dBW/MHz for wideband emissions and -105 dBW/kHz for narrowband emissions; and the EIRP density for base stations is limited to -100 dBW/MHz for wideband emissions and -110 dBW/kHz for narrowband emissions.

10. The established out-of-band emission limits will not protect the GPS and GNSS receivers from in-band interference effects such as gain compression and intermodulation. Manufacturers have designed GPS receivers based on the interference environment, the size, cost and availability of filter technology, and on the requirements of the applications and missions they support. They based consideration of the interference environment on the allocated mobile satellite service, not on ubiquitous mobile broadband.

11. See Letter from Charles R. Trimble, Chairman, United States GPS Industry Council, to Karl Nebbia, Associate Administrator, Office of Spectrum Management, National Telecommunications and Information Administration dated December 13, 2010. NTIA has received letters from the Space-Based Positioning Navigation and Timing, National Coordination Office, the Office of the Assistant Secretary of Defense, the National Aeronautics and Space Administration, the Office of the Secretary of the Department of Transportation, the Office of the Secretary of the Department of Interior, and the Federal Aviation Administration, requesting that any FCC action on the LightSquared waiver request be deferred until the appropriate technical and/or regulatory mitigation measures can be developed to protect GPS operations. The Office of the Manager of the National Communications System made a similar request to defer the waiver until additional interference data is available.

review it and work with LightSquared to ensure that GPS timing receivers used by Federal telecommunication systems are protected.

LightSquared's application also implicates the bands 1545-1559 MHz and 1646.5-1660.5 MHz, which are allocated for aeronautical emergency communications in the Aeronautical Mobile-Satellite (Route) Service (AMS(R)S) for use during en-route oceanic flights, as well as the bands 1530-1544 MHz and 1626.6-1645.5 MHz which are allocated for maritime emergency communications and used by the U.S. Coast Guard as part of the Global Maritime Distress and Safety System (GMDSS). International footnotes 5.353A, 5.357, 5.362A, and domestic footnotes US308 and US315 specify requirements for the protection of the aeronautical and maritime safety services.¹² Because aeronautical and maritime safety communication requires international interoperability including "priority access with real-time preemptive capability" for AMS(R)S and GMDSS systems as recognized by the International Civil Aviation Organization and the International Maritime Organization, any change in the use of the bands 1530-1559 MHz and 1626.6-1660.5 MHz requires careful consideration. The proposal by LightSquared could result in a shift toward terrestrial-only operations and could for all practical purposes reduce or eliminate access to the spectrum by AMS(R)S and GMDSS operations. NTIA has expressed concerns in the past that an increase in non-safety operations, and the inability of some MSS systems to provide safety services, may limit spectrum access for the future growth of AMS(R)S and GMDSS emergency communications.¹³ As the FCC considers changes from the original MSS/ATC concept for the bands 1525-1559 MHz and 1626.5-1660.5 MHz, the FCC and NTIA must work together to ensure that LightSquared's services do not degrade or limit present and future safety communication services operated consistent with the existing domestic policy.

A third issue raised by LightSquared's application is possible interference with Inmarsat services. The Department of Defense (DoD) has informed NTIA that its MSS earth stations using Inmarsat commercial services operating in the bands 1525-1544 MHz and 1626.5-1645.5 MHz require a high confidence of protection from interference for national security reasons, and that any deployment of ATC base stations must be contingent on reaching prior agreement with DoD in certain circumstances.¹⁴ Additionally, the DoD has proposed specific requirements and considerations to facilitate the protection of their earth station receivers. Sky Terra Subsidiary LLC has been working with the DoD to ensure the successful co-existence between ATC

12. Special protections and preemptive access are required for aeronautical and maritime safety services.

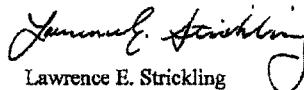
13. See Letter from Karl B. Nebbia, Associate Administrator, National Telecommunications and Information Administration Office of Spectrum Management, to Julius Knapp, Chief, Office of Engineering and Technology, Federal Communications Commission, dated May 13, 2009. In paragraph 5 of the letter it is stated that, "NTIA is concerned that an increase in MSS operations may limit spectrum access for the future growth of AMS(R)S and GMDSS emergency communications. Also, all MSS systems do not have the capability to provide AMS(R)S or GMDSS communications, and systems providing AMS(R)S and GMDSS may limit the channels assigned for these services. Spectrum utilized in these ways limit the amount of spectrum available for the future growth of emergency communications. If this becomes an issue, further discussions on intra- and inter-system priority access with real-time preemptive capability may be necessary."

14. See Letter from Mr. Danny Price, Office of the Assistant Secretary of Defense; Director, Spectrum and Communications Policy to Mr. Karl B. Nebbia, Associate Administrator, NTIA Office of Spectrum Management, dated March 19, 2010.

operations and Inmarsat earth station receivers.¹⁵ NTIA and the DoD believed this problem was manageable under the original MSS/ATC concept, but the introduction of terrestrial-only handsets may increase the duty cycle of the base station transmissions and thus the probability of interference to Inmarsat earth station receivers. Inmarsat and LightSquared will need to continue to work with the DoD to resolve and identify the appropriate solutions necessary to protect DoD and other agency earth station receivers. This includes addressing any additional issues raised by the increase in base station transmissions to support terrestrial-only services. NTIA requests that the FCC ensure the resolution of this issue to the satisfaction of critical Federal users.

NTIA understood the original construct of MSS/ATC operations to be that they would operate as "satellite first/terrestrial second" systems. However, the many modifications, rule changes and waivers since the FCC adopted rules in 2003 to allow MSS/ATC more flexibility increase the risk of interference with existing services. Thus far, we have moved forward allowing deployment of ATC systems compatible with Federal systems maximizing the use of the available MSS spectrum. While NTIA has not previously contemplated the impacts of the introduction of terrestrial-only handsets in this band, we are willing to work with all those involved so that Federal operations are protected while allowing MSS/ATC flexibility. NTIA pledges to support the multi-party effort recommended above to ensure that the issues can be brought to closure as quickly as possible.¹⁶ If you have any questions regarding these recommendations please feel free to contact me.

Sincerely,



Lawrence E. Strickling

Attachment

15. LightSquared was previously known as Sky Terra Subsidiary LLC.

16. See also, Letter from Mr. Sanjiv Ahuja, Chief Executive Office, LightSquared to the Honorable Lawrence E. Strickling, Assistant Secretary of Commerce for Communications and Information, dated January 6, 2011.

Mr. WOLF. No. I agree with you. And we will try to do something and see if we can get working with Mr. Fattah and get everybody together.

Mr. FATTAH. Let me assure the chairman that I would love to work with my colleague on this matter because GPS is critically important.

And, you know, this gets to your earlier point at a different hearing. We have various agencies with satellites and operations and part of that is the GPS. And then you come down to the spectrum distribution issues that affect law enforcement and on a variety of points under our bill in the Commerce Department. And so I think that even though we do not have direct jurisdiction over the FCC, I think that it is appropriate for us to intervene—

Mr. WOLF. Yes.

Mr. FATTAH [continuing]. And to try to be helpful.

Mr. KIRKLAND. Mr. Chairman, if I could comment, you know, the obvious uses of GPS by consumers, that is what everyone knows, but this is deeply embedded in Department of Defense systems, in first responder systems, in all elements of law enforcement as I am sure you can imagine. So—

Mr. WOLF. Well, Steve, if you can do that and we will see what we can do. You should be in touch with Mr. Austria. Do you have somebody here in town so you do not have to fly back and forth from Sunnyvale?

Mr. KIRKLAND. Yes, we do. We have been here for a couple days and we—

Mr. WOLF. Why don't you have somebody contact Steve's office.

Mr. KIRKLAND. Definitely. We have been in touch.

Mr. WOLF. Great.

Mr. FATTAH. And I love the point that you made about the fact that with a small government investment, the private sector has taken something and made a lot of it because it is an important point to make that we do need to invest in new technology and innovation, which is a point we have been making throughout these hearings.

Thank you.

Mr. WOLF. Well, it came up yesterday at the National Science Foundation hearing.

Thank you very much.

Mr. KIRKLAND. Thank you.

Mr. WOLF. Sea Grant College Association, Dr. Jonathan Pennock.

FRIDAY, MARCH 11, 2011.

NATIONAL SEA GRANT COLLEGE PROGRAM

WITNESS

JONATHAN PENNOCK, PRESIDENT, SEA GRANT COLLEGE ASSOCIATION

Mr. PENNOCK. Good morning, Chairman Wolf, Ranking Member Fattah, and Representative Austria. Thank you for the opportunity to testify on behalf of the National Oceanographic and Atmospheric Administration and particularly the National Sea Grant College Program.

My name is Jonathan Pennock. I am director of the New Hampshire Sea Grant Program and also president of the Sea Grant Association.

On behalf of my own institution and the 31 other institutions that make up the National Sea Grant College Program, I want to express our appreciation to the subcommittee for its long-standing support of Sea Grant.

Going forward, to be fully responsive to the increasing challenges faced by our coastal communities, the Sea Grant Association is recommending a funding level for Sea Grant of \$70 million in fiscal year 2012.

We certainly recognize the extreme economic challenges that the country faces and the difficult decisions that this committee faces at this time, but we note that this request is nearly \$14 million below the authorized level for fiscal year 2012 and it is consistent with previous views expressed by this subcommittee about adequate funding for the program.

During the past year, the subcommittee's support of Sea Grant has been validated through numerous examples of the value of Sea Grant's place-based partnership between federal, state, and university communities.

For example, this past Wednesday, agency leaders who led the Nation's response to the Deepwater Horizon disaster espoused both the value of Sea Grant itself in connecting Gulf Coast stakeholders to the federal response to the disaster and the importance of existing in-place federal university partnerships such as Sea Grant to successful responses such as the Deepwater Horizon.

During the year, other Sea Grant led research and extension efforts developed new and efficient technologies for the fishing industry, contributed sound science to the restoration of the degraded coastal ecosystems, stimulated private sector jobs in aqua culture and marine-based industries, and facilitated the adoption of hazard resilient policy and investment by private community and state entities.

By continuing a significant national demographic shift that started in the 1970s, America's coastal population continues to grow and with it nurture much of the Nation's economic growth.

Today a wide range of opportunities exist along our coasts including those in Ohio and the Great Lakes for fuller economic development of the Nation's energy resources, seafood-based businesses, marine biotechnology enterprises, maritime commerce, and coastal tourism.

At the same time, human degradation of these environments, impacts that truly challenge the long-term sustainability and value of these systems must be addressed. Sea Grant is one of the entities that really remains uniquely positioned to address these issues.

The particular example, the response activities in the Gulf once again showcases a Sea Grant model that is adaptive and nimble by design. Although working as a programmatic entity of NOAA, Sea Grant has a number of unique advantages over many federal programs with regard to how quickly and how well it can respond to pressing coastal resource and community needs at regional, state, and local scales.

Sea Grant employs a research-based and non-advocacy approach that is neither confined to one scientific discipline nor charged with specific regulatory or resource management responsibilities. Thus, Sea Grant is seen as a valued and neutral partner by community and private sector leaders. It is also notable that the federal appropriation for Sea Grant is leveraged significantly by additional non-federal resources from state university and private partners.

All of these key organizational mission attributes provide Sea Grant with significant national program flexibility and thus great responsiveness to existing and emerging coastal issues wherever they might occur.

Thank you for your consideration of this request and again for your past support of the Sea Grant Program.

[The information follows:]

Statement by Dr. Jonathan Pennock
President of the Sea Grant Association
Director, University of New Hampshire Marine Program
and Director, New Hampshire Sea Grant College Program

Before the
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
House of Representatives
Washington, D.C.
March 11, 2011

Mr. Chairman and Members of the Subcommittee -- thank you for the opportunity to testify on behalf of the National Oceanographic and Atmospheric Administration's (NOAA) National Sea Grant College Program. My name is Jonathan Pennock, Director of the New Hampshire Sea Grant Program. I am here today as the President of the Sea Grant Association (or SGA) to recommend a funding level of \$70 million for NOAA's National Sea Grant College Program for FY 2012.

On behalf of my own institution and the 31 additional institutions making up the Sea Grant Program, I want to express our appreciation to the Subcommittee for its long standing support for the Sea Grant Program. During the past year the Sea Grant Program has provided numerous additional examples of the value of the Sea Grant place-based partnership between NOAA and state university communities. For example, over the past year Sea Grant Programs were integral to connecting Gulf Coast stakeholders to the federal response to Deepwater Horizon, contributed sound science to the restoration of degraded coastal ecosystems, developed new and efficient technologies for the fishing industry, stimulated private sector jobs in aquaculture and marine-based industries, and facilitated the adoption of hazard resilient policy and investment by private, community and state leaders. Going forward, to be fully responsive to the increasing challenges faced by our coastal communities, the SGA is recommending a funding level for this program of \$70 million for FY 2012. This is nearly \$14 million below the level authorized for FY 2012 but is consistent with previous views expressed by this Subcommittee about adequate funding for this program.

Constituting a significant national demographic shift, America's coastal population has grown significantly since 1970, and has accompanied and nurtured much of the nation's economic growth during this period. Today, a wide range of opportunities exist along our coasts for fuller economic development of the nation's energy resources, seafood-based businesses, biotechnology-based enterprises, maritime commerce, and tourism industry. At the same time, challenges must be addressed, such as resource use and user conflicts; tainted coastal watershed run-off; sea level rise; shoreline erosion; exotic species invasions; oil spills; and the development of community infrastructure that minimizes impact on the coastal environment. The National Sea Grant College Program remains uniquely positioned to address these issues.

Since its creation in 1966, the National Sea Grant College Program has been at the forefront of addressing economic opportunities and environmental issues facing coastal communities through its research and outreach efforts. Sea Grant's proactive and highly praised role in addressing community and research concerns associated with the Deepwater Horizon oil spill in the Gulf of Mexico clearly demonstrated the program's capacity to be a key and highly effective partner in helping to solve coastal resource problems. Officials at the highest levels of NOAA and other federal and state agencies have praised Sea Grant's Gulf spill response, including its development of a clearinghouse on all of the disaster's related research and monitoring activities, and its hosting of more than 60 local meetings, educational sessions, and public forums in which over 5,000 spill-affected participants in the Gulf region received science-based spill-response information or training.

The particular example of response activities in the Gulf once again showcases a Sea Grant model that is adaptive by design and thus very nimble. Although working as a programmatic entity of NOAA, Sea Grant has a number of unique advantages over many federal programs with regard to how quickly and how well it can respond — in research-based, non-advocacy fashion — to pressing coastal resource and community needs. For example, Sea Grant is “bottom-up” driven and university-based, and is fully and actively engaged with appropriate regional, state and local organizations. In addition, Sea Grant is not charged with specific regulatory or resource management responsibilities, nor are its efforts confined to any one scientific discipline or approach. Rather, Sea Grant can focus or refocus its research and outreach activities to best address resource issues impacting individual coastal communities or the nation as a whole.

While state Sea Grant programs collaborate closely with, and are guided by input from, NOAA, other federal programs, and state agencies, the state Sea Grant programs are able to adjust program operations to serve the real time needs and priorities of their local and state jurisdictions. As a result of this flexibility in the Sea Grant federal-state partnership, the federal appropriation for Sea Grant is leveraged significantly by additional non-federal resources from university and state partners. For every federal dollar appropriated, an additional two dollars is raised from non-federal sources thus maximizing the impact of the federal investment. All of these key organizational and mission attributes provide Sea Grant with great national program flexibility and thus great responsiveness to existing and emerging resource issues, wherever they might occur.

The SGA believes the Nation must use its coastal resources in ways that not only improve the national economy, but also sustain the health and productivity of coastal ecosystems over the long term. With the federal funding recommended by the SGA to complement significant state and local support, the National Sea Grant College Program will be uniquely positioned to provide the leadership and support necessary to meet this challenge.

Thank you for your consideration of this request and, again, for your past support of a strong Sea Grant National College Program. I would be happy to answer any questions the Subcommittee may have.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. I want to thank you for your work and even though we are not going to spend a lot of time on it today, I want to find ways that we can even enhance what you are doing.

Thank you very much.

Mr. PENNOCK. Thank you very much.

Mr. WOLF. Thank you.

The next witness, National Marine Sanctuary Foundation, Jason Patlis.

FRIDAY, MARCH 11, 2011.

NATIONAL MARINE SANCTUARY FOUNDATION

WITNESS

JASON PATLIS, PRESIDENT AND CEO, NATIONAL MARINE SANCTUARY FOUNDATION

Mr. PATLIS. Good morning, Mr. Chairman, Mr. Ranking Member, Mr. Austria.

Thank you for the opportunity to testify before you today in support of a robust and capable National Oceanic and Atmospheric Administration and National Marine Sanctuary System both so that they could serve the American people and continue contributing to the recovery of the American economy.

My name is Jason Patlis. I am here today as the president and CEO for the National Marine Sanctuary Foundation. I am also speaking on behalf of the national network of community level organizations across the country that support the sanctuary system. They run across from the pacific northwest to New England, the Great Lakes, Florida, and the West Coast.

Together our eight organizations are dedicated to advancing national marine sanctuaries as critical tools for a healthy ocean and for restoring and revitalizing coastal communities and economies across the Nation.

In addition, I am appearing as a member of the Friends of NOAA Coalition. The Friends of NOAA are supporters, stakeholders, and partners of NOAA that educate and inform interested audiences about the full range of NOAA activities including those that contribute to the economic growth and job creation in this country so that NOAA can carry out its responsibilities relating to our oceans and coasts, fisheries research, and weather and climate including satellites.

The National Marine Sanctuary Foundation strongly supports the Administration's request for NOAA and the Sanctuary Program in fiscal year 2012, although we believe they fall far short of what is required.

The Sanctuary Program needs to be funded at the fiscal year 2010 enacted level of \$62 million in order to fulfill its responsibilities to the American people.

Recognizing the difficulties of the current budget climate, this Administration has consistently failed to follow Congress' lead and provide sufficient funding for the Sanctuary Program. Time and again, Congress has recognized the value of this program and pro-

vided increases over the Administration's request and we are asking to do so again this year notwithstanding the budget climate.

NOAA is one of the premier science agencies of the Federal Government and provides decision-makers with critically important data, products, services that promote and enhance the Nation's economy, security, environment, and quality of life.

Just this morning with the tsunami sweeping across the Pacific, NOAA's mission and services were on full display in terms of saving America's lives and property and providing services for citizens across the world.

Many of NOAA's activities come together in its system of 14 national marine sanctuary sites where researchers collect important data, educators work to advance ocean literacy, law enforcement officers ensure sustainability of public access and recreational opportunities, and even archeologists seek to preserve America's rich history at sea.

Further, national marine sanctuaries play a crucial role as the public face of an agency that few Americans know about despite the fact that we depend on their data and services every day.

My written testimony includes many examples of the benefits of the sanctuary system.

In southern Florida, marine tourism and recreation in two counties adjacent to the Florida Keys National Marine Sanctuary employ more than 70,000 people and contribute \$4.5 billion per year to the State GDP.

On the shores of Lake Heron, visitors in three counties adjacent to Thunder Bay National Marine Sanctuary spend \$110 million per year on recreational activities.

And in California, in the Monterey Bay National Marine Sanctuary, education and science facilities spend over \$200 million per year and employ roughly 1,800 people.

On the flip side, failure to provide sufficient funding will result in significant impacts in all of the sanctuaries across the country. My testimony offers examples of the impacts of those cuts that will only diminish the economic activity and job creation that is beginning to revitalize our coastal communities.

Mr. Chairman, I would like to thank you for the opportunity to testify before you today on behalf of the foundation and the Friends of NOAA Coalition and the partners of the Sanctuary Program across the country.

[The information follows:]

Mr. Jason Patlis, President and CEO, National Marine Sanctuary Foundation
Testimony Submitted to the House Appropriations Subcommittee on Commerce, Justice,
Science, and Related Agencies
“FY2012 Commerce, Justice, Science, and Related Agencies Appropriations”
March 11, 2011

Introduction

For eleven years, the National Marine Sanctuary Foundation (NMSF) has strengthened America's National Marine Sanctuary System, and sanctuary communities from coast to coast, by raising private funds, making strategic grants, promoting science-based public policies, creating innovative partnerships, and advancing public awareness. Our National Marine Sanctuary System needs adequate resources to meet new challenges while fulfilling its existing mandates, and NMSF respectfully requests that the subcommittee recommend funding:

- the *Marine Sanctuary Program Base, within the National Oceanic and Atmospheric Administration's (NOAA) Operations, Research, and Facilities account, at the FY2010 enacted level of \$49 million;* and
- the *Marine Sanctuaries Construction Base, within NOAA's Procurement, Acquisition, and Construction Account, at the FY2010 enacted level of \$13 million.*

Joining NMSF in this request is the national network of community-based, non-profit organizations that support specific sites within the sanctuary system. On behalf of their members from coast to coast, the Cordell Marine Sanctuary Foundation, Farallones Marine Sanctuary Association, Friends of Thunder Bay National Marine Sanctuary, Monterey Bay Sanctuary Foundation, Olympic Coast Alliance, Sanctuary Friends Foundation of the Florida Keys, and Stellwagen Alive! strongly support continued funding of the National Marine Sanctuary System at the FY2010 enacted levels.

Although the enduring value of the sanctuary system's 14 sites is appreciated each year by tens of thousands of Americans, the President's Budget Request for 2012 continues a disturbing trend of underfunding the sanctuary program – despite nearly a decade's worth of unmistakable signals from Democrats and Republicans in both houses of Congress that the program deserves additional funds. While we recognize the challenges associated with providing increased funding in the current budget climate, and the need to fund other important programs under the jurisdiction of the subcommittee, we believe that the President's FY2012 budget request for national marine sanctuaries falls short of what is needed for even the most basic operations and maintenance. Investments in our National Marine Sanctuary System provide incredible returns to society, both today and for future generations, and we encourage the subcommittee to consider providing additional support to sanctuaries wherever possible.

The National Marine Sanctuary System and NOAA's Office of National Marine Sanctuaries

The Office of National Marine Sanctuaries (ONMS), part of the National Ocean Service, manages the National Marine Sanctuary System. Consisting of 14 of our nation's most valued ocean places that encompass more than 150,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa, the system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. Sanctuaries protect vibrant ocean ecosystems such as coral reefs and kelp forests, conserve essential habitat for endangered and commercially-important marine species, and safeguard historically

significant shipwrecks and cultural resources. Ranging in size from less than one square mile to 137,792 square miles, each sanctuary site is a unique place where local communities are consistently involved in operations and management.

ONMS manages the 14 sites in the National Marine Sanctuary System through four regional offices that work with other Federal agencies operating at a regional level and coordinate various programs and assets among the sites, regions, and headquarters. Programmatic oversight, guidance, and support from the headquarters office ensure that the sites function as a coordinated system. Headquarters functions include the development of system-wide, programmatic initiatives; policy and budget development; legislative and regulatory initiatives; management plan review and revisions; development and designation of new sites; and overall guidance and program direction. These functions ensure that the sanctuaries operate in an integrated system that has greater national impact than the sum of the individual site actions.

In annual appropriations bills, Congress provides funding to ONMS through separate accounts for operations and procurement.

- The Operations, Research and Facilities (ORF) account funds daily operation of a wide variety of education, research, monitoring and management programs in all 14 sites managed by ONMS. Activities funded by ORF include development and implementation of management plans, research and monitoring programs, cultural resource programs and education & outreach activities; coordination and collaboration with partners; permitting; and management of volunteer programs and citizen advisory councils.
- The Procurement, Acquisition and Construction (PAC) account funds the purchase and overhaul/restoration of assets, including facilities and vessels, across all 14 sites managed by ONMS. Activities funded by PAC include implementation of a comprehensive facilities plan; construction of exhibits, signage and kiosks; development of cooperative centers for education and outreach; and safety improvements, Americans with Disabilities Act-required upgrades, and replacement and repair for NOAA-owned facilities.

Sanctuaries are Economic Engines for Coastal Communities

Providing stable and sufficient appropriations for ONMS will ensure that it can continue to reach over 800 communities in the United States through cutting-edge research initiatives, meaningful public education programs, essential community partnerships, and sustainable management of activities affecting sanctuaries. Furthermore, sufficiently investing in national marine sanctuaries will continue to produce wide-ranging economic benefits.

- In southern Florida, marine tourism and recreation in the two counties adjacent to the Florida Keys National Marine Sanctuary employs about 70,400 people and contributes \$4.5 billion per year to state GDP.¹
- In California, marine science and education facilities focused on the waters of the Monterey Bay National Marine Sanctuary had a combined annual budget of over \$250 million and employed over 2,100 people in 2009.²
- Commercial fishing in the Gulf of the Farallones National Marine Sanctuary produces 51 percent of California's Dungeness crab landings, 40 percent of the state's rockfish, and 34

percent of its salmon. The average ex-vessel value of these fisheries between 1997 and 2003 was over \$4.8 million per year.³

- On the shores of Lake Huron, tourists in 2000 spent \$110 million visiting the three counties adjacent to Michigan's Thunder Bay National Marine Sanctuary, providing almost \$36 million in personal income and supporting 1,700 jobs.⁴
- Between 1997 and 2003, 12% of California's commercially-caught salmon and 25% of the state's rockfish were caught within the Cordell Bank National Marine Sanctuary: dockside value averaged \$753,000 over this period.⁵
- Over 700,000 tourists spent a total of \$126 million on commercial whale-watching trips to the Stellwagen Bank National Marine Sanctuary during 2008, supporting 31 businesses and almost 600 jobs.⁶
- In Washington, cruise ships transiting the Olympic Coast National Marine Sanctuary supported 3,781 jobs and generated \$312.5 million in business revenue in the Puget Sound area in 2009.⁷

We offer these examples to suggest that the benefits of funding our national marine sanctuaries far outweigh the Federal outlays that support them. Investing in these sites does much more than simply protect small areas of the ocean – national marine sanctuaries are economic engines for coastal communities, and investing in sanctuaries is a down payment on the future of our fishing families, dive operators, and whale-watching vendors, not to mention the diversity of other Americans whose livelihoods are wholly dependent on a healthy ocean and coasts.

Sanctuary Management Features Intense Community and Constituent Involvement

Since 1972, ONMS has worked cooperatively with the public and Federal, state, and local officials to allow public access to and commercial and recreational activities within sanctuaries, provided that they do not degrade the underlying resources on which such activities are based. The designation and management of new sanctuaries is wholly dependent on public engagement and features more community involvement than most other processes for federal agency rulemaking. Regulation of constituent activities in sanctuaries is guided by a rigorous public process that includes three notice-and-comment rulemakings (concerning the proposal to designate a sanctuary, the final designation document, and the proposed sanctuary management plan) and a full Environmental Impact Statement, each of which provides ample opportunities for stakeholders and affected parties to contribute to a 'bottom-up' process where local communities are involved from very beginning. This locally-driven approach to management has been successfully implemented in sanctuaries across the country, and the participation of diverse ocean user groups helps to ensure that the regulatory burden does not fall disproportionately on any one industry or user group.

In addition to involving the public in the designation and regulation of national marine sanctuaries, day-to-day sanctuary operations and management are informed by an extensive nationwide network of Sanctuary Advisory Councils. Comprised of almost 300 individuals across the 14 sites managed by ONMS, Advisory Councils ensure that commercial and recreational fishermen, port and shipping communities, Tribes, states, and local governments, the tourism and recreation industry, researchers, conservationists, and other sanctuary stakeholders are aware of and actively engaged in the management of their local marine sanctuaries. Sanctuaries are also hubs for volunteer activity: in 2009, over 100,000 hours were contributed by volunteers in local sanctuary communities.

Programmatic Outlook for National Marine Sanctuaries Under Proposed Funding Levels

We remain concerned that ONMS has not received sufficient appropriations for several consecutive budget cycles. As a result of these shortfalls, and the continued underfunding proposed for FY12, we project that every single vessel operated by ONMS will remain tied up at the dock during the 2012 fiscal year, negatively impacting university, state and Federal partnerships in all sanctuaries. Even the R/V *Manta*, for which Congress recently appropriated funding to enhance management of the Flower Garden Banks National Marine Sanctuary in the Gulf of Mexico – an area of vital importance to our nation's energy security and economy – will be rendered completely inactive due to a lack of funding for fuel and operations.

The potential impact of reducing appropriations below the FY2010 enacted level goes far beyond sanctuary vessels: limiting visitor center hours, eliminating research programs and diminishing enforcement capacities will prevent ONMS from fulfilling its statutory mandates while also reducing the economic activity and job creation that surrounds healthy sanctuary communities. For example, funding national marine sanctuaries below the FY2010 enacted level could force the program to:

- **Cut treasured public access and recreation opportunities for all Americans.**
Funding cuts risk the Florida Keys NMS' 767 mooring buoys, which provide public access and recreational opportunities within the sanctuary while protecting coral reefs and shipwrecks from anchor damage, preserving them for future generations.
- **Restrict enforcement operations that protect legal fishermen by guarding against illegal fishing.**
Lack of funding jeopardizes on-water patrols for illegal lobster fishermen in the Florida Keys NMS. In a single 2010 case, illegal fishermen pilfered 8,500 pounds of spiny lobster within a six-month period. The lobster had a street value of \$155,000 – money that was effectively taken out of the pockets of hardworking, legal fishermen.
- **Dramatically shrink visitor center hours.**
Visitor centers are a vital link between sanctuaries and the millions of Americans who visit the coast each year and serve as the public face of the entire NOAA organization. Sanctuary visitor centers see over 200,000 visitors per year, including the Mokupapapa Discovery Center (Hilo, HI), Great Lakes Maritime Heritage Center (Alpena, MI), and Florida Keys EcoDiscovery Center (Key West, FL).
- **Eliminate cooperative education efforts with local museums that leverage private funds for taxpayer benefits.**
Placing exhibits in partner institutions, like the California Academy of Sciences' three-story "California Coast" aquarium, is often the most successful and cost-effective method for reaching the American public. Well over 1 million people visit the academy every year and learn how the Gulf of the Farallones NMS protects America's valuable natural, cultural, and historical resources.
- **Cancel collaborative research efforts with local universities that leverage private funds for taxpayer benefits.**
Funding cuts could endanger partnerships with Oregon State University, Stanford University, and the University of California for collection of wind, tide, current, and marine life data that is essential for maritime commerce and search-and-rescue operations within the Channel Islands, Monterey Bay, Gulf of the Farallones, Cordell Bank, and Olympic Coast NMS.
- **Dismantle successful education initiatives that save taxpayers money by focusing on low-cost prevention instead of expensive restoration or remediation.**

The Multicultural Education for Resource Issues Threatening Oceans (MERITO) program's media outreach has touched over 13 million California residents. The California Bay-Watershed Education and Training (B-WET) program increases the stewardship ethic of participating youth, and local communities in the Chesapeake Bay, Gulf of Mexico, Hawaii, New England, and Pacific Northwest have imported the program.

NOAA Needs Sufficient Funds to Fulfill its Responsibilities to the American People

As a member of the Friends of NOAA coalition, the National Marine Sanctuary Foundation works with other supporters, stakeholders, and partners of NOAA to educate and inform interested audiences about the full range of NOAA activities, enabling the agency to more effectively carry out its responsibilities relating to our ocean and coasts, fisheries, research, and weather and climate, including satellites. NOAA is one of the premier science agencies in the Federal Government and provides decision makers with critically important data, products, and services that promote and enhance the nation's economy, security, environment, and quality of life. NOAA's weather forecasts and warnings alone generate annualized benefits of \$31.5 billion, and the agency's ocean and atmospheric research, fisheries management, and satellite enterprises are essential for the continued prosperity of our nation. For example, recovery of overfished stocks has produced an additional \$2.1 billion in income and \$5 billion in sales over the past decade. Providing insufficient funding for NOAA will only serve to diminish the economic activity and job creation that is at present successfully revitalizing communities across America.

We hope the subcommittee will see the benefits of investing in NOAA and the National Marine Sanctuary System, and that a failure to provide sufficient funding will endanger, quite literally, American lives and livelihoods across the nation.

¹ National Ocean Economics Program. (2004) "Ocean Economy Data." Available: <http://www.oceaneconomics.org/Market/ocean/oceanEconResults.asp?IC=N&selState=12&selCounty=12086&selCounty=12087&selYears=All&selSector=6&selIndust=All&selValue=All&cbMultiplier=Multiply&selOut=display&noepID=3204>.

² Griggs, Gary, Monterey Bay Crescent Ocean Research Consortium. (2009) "Major Marine Sciences Facilities in the Monterey Bay Crescent- 2009." Available: https://secure.got.net/domains/mbcorc.org/Membership_Info_files/MontereyBayLabs2009.pdf.

³ Scholz, Astrid, and Charles Steinback, Ecotrust. (2005). "Socioeconomic Profile of Fishing Activities and Communities Associated with the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries." Available: http://www.ecotrust.org/jmpr/JMPRsocioeco_final.pdf.

⁴ Parnillo, Jordan, and Rod Ehler (2007). "A Socioeconomic Overview of Northeast Michigan Counties." U.S. Department of Commerce: NOAA National Ocean Service, National Marine Sanctuary Program. Available: http://www.misagrants.unimich.edu/downloads/nemia/NEMIA_Chapter_2_Socio-economic_Assessment.pdf.

⁵ Scholz, Astrid, and Charles Steinback, Ecotrust. (2005). "Socioeconomic Profile of Fishing Activities and Communities Associated with the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries." Available: http://www.ecotrust.org/jmpr/JMPRsocioeco_final.pdf.

⁶ O'Connor, Simon *et al* (2009). Whale Watching Worldwide: tourism numbers, expenditures and expanding economic benefits, a special report from the International Fund for Animal Welfare. Prepared by Economists at Large. Available: http://www.ifaw.org/Publications/Program_Publications/Whales/asset_upload_file841_55365.pdf.

⁷ Port of Seattle. "Seattle Sets New Record for Cruise Ships in 2009." 10/26/2009. Available: http://www.portseattle.org/news/press/2009/10_26_2009_01.shtml.

Mr. WOLF. Thank you very much.

Mr. Fattah.

Mr. FATTAH. I thank the witness.

Mr. WOLF. The next witness, Lummi Indian Nation, Merle Jefferson.

There are going to be votes, too, we understand now maybe about 11:30. So I do not know how long you are going to go, but go ahead, sir.

FRIDAY, MARCH 11, 2011.

LUMMI INDIAN NATION

WITNESS

**MERLE JEFFERSON, MEMBER, LUMMI INDIAN BUSINESS COUNCIL,
LUMMI INDIAN NATION**

Mr. JEFFERSON. I thank the committee today for hearing Lummi Nation here, Mr. Chairman.

My name is Merle Jefferson. I am the natural resource director for Lummi Nation and I am also elected councilman for the nation in the northwest and Washington State.

And I want to summarize our testimony for today. First of all, Lummi Nation's total request is for \$11,650,000 to be used as in the following, \$750,000 for ESA monitoring and assessments; \$6.7 million for salmon hatchery improvements to comply with ESA and to help rebuild threatened stocks; \$4.2 million for shellfish hatchery improvements to increase production to support displaced fishers.

The Lummi Nation is the third largest tribe and the biggest fishing tribe in Washington State. Today our treaty rights are at risk and we need help.

The Lummi Nation currently operates two salmon hatcheries and one shellfish hatchery that support tribal and non-tribal fisheries.

The Federal Indian Species Act of 1973 mandates contribution and recovery of stocks. The Indian Species Act is also a double-edge sword whereas it should help rebuild threatened stocks, but at the same time, it impacts and reduces our treaty rights.

The hatcheries were originally intended to restore the habitat, but the reality is we need to restore and protect the habitat to get the most out of our hatcheries.

The salmon hatchery production has been reduced over 70 percent in our watersheds due to ESA and state budget cuts.

We also cannot harvest wild stocks because they are protected. The reduction in hatchery fish and no harvest of wild stock present another due impact to our treaty fishers.

Hatchery improvements could triple the current value to tribal and non-tribal fisheries from about two million to about six million per year to the fishers.

Another example is the killer whale which are endangered and protected. Killer whales feed on chinook salmon that are also protected. Scientists want tribal fishers to limit the chinook harvest to protect the killer whales, yet this is another impact on treaty fishing rights.

The Lummi Nation is actively involved in recovery plans in the Nooksack Basin that includes management, monitoring, frequent policy level meetings. The ESA activities have more than tripled our responsibilities and the costs are beyond our control.

The Lummi Nation needs help in the following to maintain our livelihood as fishermen: To improve the conditions of the hatcheries; continue policy discussions and partnership with all parties in the development of recovery plans and protecting our treaty rights.

The Lummi Nation is requesting federal assistance from the Department of Commerce for fiscal year 2012. The Lummi Nation also supports the request for a Northwest Fish Commission.

Finally, the Lummi Nation also supports fiscal year request for a National Congress of American Indians.

And I want to thank you for hearing us today. Thank you.

[The information follows:]



Testimony of the Honorable Clifford A. Cultee, Chairman
Lummi Nation
FY 2012 Appropriations for the
United States Department of Commerce
Before the
House Appropriations Subcommittee on Commerce, Justice, Science
And Related Agencies

Good morning to the distinguished Committee Members. Thank you for this opportunity. I am honored to present the appropriations request of the Lummi Nation for fiscal year 2012 to the Department of Commerce. Today I am presenting a long-term, strategic plan described in a sustainable set of coordinated proposals to address the prolonged economic and cultural disaster and the suffering of our people. This strategy is a comprehensive approach combining habitat restoration, environmental monitoring and assessment, with Lummi Hatchery infrastructure improvements.

Lummi Nation Specific Total Request is: \$11,650,000

This funding is being requested under the 1855 Treaty of Point Elliot, Secretarial Order No. 3206, entitled "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (ESA), and Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act.

Lummi Nation 2012 Budget Requests

+ \$750,000 Monitoring and Assessment Program to include:

- *Habitat restoration program support*
- *Environmental and fisheries monitoring program*
- *Lummi Natural Resources Department policy staff support*

+ \$10.9 million - Salmon/Shellfish Hatcheries

- *\$6,716,000 Lummi Bay and Skookum Hatchery Improvements*
- *\$4,184,000 Lummi Shellfish Hatchery Improvements*

Regional Requests

The Lummi Nation supports the FY 2012 Requests of the Northwest Indian Fisheries Commission

National Requests

The Lummi Nation supports the FY 2012 Requests of the National Congress of American Indians

Justification of Requests - Lummi Nation Specific Total Request is: \$11,650,000

+ \$750,000 Monitoring and Assessment Program

+ \$10.9 Million for Lummi Hatchery Infrastructure- Stock Re-Building Program

The Lummi Nation requests funding to support this strategic plan to eliminate the Tribe's dependence upon the Fraser River Sockeye salmon stock and to account for lost fishing opportunities imposed by the ESA. The Lummi Nation appropriation requests represent an investment in a sustainable strategy to maintain a future moderate living for fishermen as guaranteed by the treaty 1855 Point Elliot Treaty, affirmed by the U.S. Supreme Court (1979).

The Lummi Nation currently operates two salmon hatcheries and one shellfish hatchery that support tribal and non-tribal fisheries in the region. Lummi Nation hatcheries were originally constructed utilizing Department of Commerce funding received from 1969-1971. Since that time Hatchery operations and maintenance funding from the Bureau of Indian Affairs has been used. At the time of construction, those hatcheries were cutting edge.

Original Hatchery infrastructure needs to be repaired, replaced or completely modernized. Lummi Nation fish biologists estimate that these facilities are now operating at 40% of their productive capacity. Through the operation of these hatcheries, the Tribe annually produces 1 million fall Chinook salmon, 2 million Coho salmon, and 6.5 million shellfish seed and 300,000 pounds of clams. These production numbers simply do not provide the fishing opportunity and associated economic benefits necessary to offset the financial loss caused by the Sockeye Salmon Fisheries Disaster. To provide sufficient salmon stock resources and shellfish harvest opportunities on an annual basis to the Lummi Fishing Fleet, the hatchery operations and associated infrastructure require rehabilitation.

The hatchery infrastructure improvement plan represents an investment that increases the immediate annual return and is a long-term sustainable activity.

Detailed Hatchery line-itemized descriptions are listed below:

1. **Lummi Nation Skookum Creek Hatchery - \$725,000**
 - a. **\$725,000 New Raceways** – Replace originally constructed infrastructure that is deteriorating and falling apart.
2. **Lummi Bay Hatchery - \$5,991,000**
 - a. **\$5,536,000 Nooksack River Pump Station** – The project will increase annual production by 300% by providing additional water to the hatchery. The major limiting factor to production at this facility is lack of freshwater. This project will ensure adequate water supply to achieve needed production levels.
 - b. **\$455,000 Rearing Pond Improvements**
Repair and pave juvenile rearing pond and restructure adult ladder and attraction complex.

3. Lummi Shellfish Hatchery - \$4,184,000

- a. **\$484,000 Improvements at Shellfish Hatchery** - Repair and expand current facility to increase seed production by improving heating & cooling systems, live feed production, and growout tank space
- b. **\$2,400,000 Build a Geoduck-Specific Hatchery** - The current facility could then be dedicated to oyster and manila clam production. Increased seed production will increase enhancement activities on Lummi tidelands to create jobs for tribal harvesters and support the West Coast shellfish industry and associated businesses.
- c. **\$1,300,000 Repair the Seapond Tidegates** - Improving circulation within the Lummi Bay Seapond will improve production at both the shellfish and Lummi Bay salmon hatcheries and production of manila clams in the seapond.

Background Information

The Lummi Nation is located on the northern coast of Washington State, and is the third largest Tribe in the State, serving a population of over 5,200 people. The Lummi Nation is a fishing Nation. We have drawn our physical and spiritual subsistence from the rivers, marine tidelands, and marine waters since time immemorial. Lummi has rights guaranteed by the 1855 Treaty of Point Elliot to harvest fish, shellfish, and game in our Usual and Accustomed area. The Boldt decision of 1974 re-affirmed that right, and designated Lummi as a co-manager of a once abundant salmon fishery. Now, the abundance of wild salmon is gone. In 1985, the Lummi fishing Fleet landed more than 15 million pounds of finfish and shellfish. In 2001, the combined harvest was approximately 3.9 million pounds. The remaining salmon stocks do not support tribal fisheries, and the Nation is suffering both spiritually and economically.

In 1973, the Endangered Species Act (ESA) was passed. The ESA should have resulted in improved salmon habitat and more resources for salmon habitat restoration, but the ESA has become a “double-edged sword”. Today, the ESA has impacted Tribal hatchery production and Tribal harvests for commercial, subsistence, and ceremonial purposes. Tribal dependence on salmon and the timing of economic development results in Tribal members and Tribal governments bearing a disproportionate burden for the conservation of listed species. Lummi Treaty fishers are directly impacted by the listing of Puget Sound Chinook, Bull trout, and Puget Sound steelhead. Secretarial Order 3206, entitled “American Indian Tribal rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act”, specifically states that “...the Departments will carry out their responsibilities in a manner that.... strives to ensure that Indian Tribes do not bear a disproportionate burden for the conservation of listed species...”. The Lummi Nation is actively engaged in recovering listed salmon species in our watershed, restoring critical habitat, and monitoring listed population to determine which factors adversely affect those populations and other critical but non-listed species. The Lummi Nation cannot, however, continue to recover salmon and maintain our way of life without appropriations from the Federal Government.

Continuous Sockeye Fisheries Disaster Declaration

In 2008, the Department of Commerce reissued the sockeye fishery disaster declaration in a statement contained in a letter to Lummi Nation, (see letter from Secretary Department of Commerce, November 3, 2001). The declaration conforms with the findings of the Congressional Research Services – “CRS Report to Congress, Commercial Fishery Disaster Assistance, (RL-34209).” For more information, see CRS Report RS21312, by Eugene H. Buck.

In 2010, the Fraser river sockeye salmon run was the largest is recorded history. After years of sitting on the beach, the Lummi sockeye fleet was able to harvest sockeye salmon again. One good year, however, does not make up for the previous years of continuous fisheries disasters and associated loss of financial and cultural benefits. To account for the lack of a consistent sockeye salmon fishery and to make up for the lost fishing opportunity attributed to habitat degradation and subsequent salmon population crashes, the Lummi Nation plans to bolster both finfish and shellfish production from its facilities.

Hatcheries ensure future salmon stock populations large enough to support our families and our way of life, until such time as the habitat is able to sustain harvestable levels of salmon. The Lummi Nation recognizes that hatcheries alone will not restore salmon stocks to historical levels. The Lummi Natural Resources Department allocates a substantial amount of time, effort, and funding to improving and monitoring freshwater habitat, managing and monitoring Tribal harvest activities, and is intent upon restoring ecosystem function in the Nooksack River Basin.

By improving hatchery production of shellfish, chum salmon, coho salmon, and Chinook salmon, the Lummi Nation will create a reliable backup resource to salmon fishers; decreasing Tribal dependence on the sockeye fishery. Additionally, we seek to raise the value of these harvests through advanced marketing, the introduction of a fisher’s market and shellfish growout operations for shellfish products.

Regional Requests

The Lummi Nation supports the FY 2012 Requests of the Northwest Indian Fisheries Commission

National Requests

The Lummi Nation supports the FY 2012 Requests of the National Congress of American Indians

On behalf of the Lummi Nation, Hy'shqe.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. I know you traveled a long way and I heard your request and the fact that you need help. And I want to offer you whatever help that we can provide in relationship to your request and we will work with the chairman to do all that can be done.

Thank you.

Mr. JEFFERSON. Thank you.

Mr. WOLF. Next, Board on Oceans, Atmosphere, and Climate, Association of Public and Land-Grant College, Dr. Tony Busalacchi.

FRIDAY, MARCH 11, 2011.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL AERONAUTIC AND SPACE ADMINISTRATION, NATIONAL SCIENCE FOUNDATION 2012 BUDGETS

WITNESS

TONY BUSALACCHI, PROFESSOR, UNIVERSITY OF MARYLAND—COLLEGE PARK, BOARD ON OCEANS, ATMOSPHERE, AND CLIMATE, ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES

Mr. BUSALACCHI. Good morning, Chairman Wolf, Ranking Member Fattah.

On behalf of the Association of Public and Land-Grant Universities, Board on Oceans, Atmosphere, and Climate and its 218 institutions of higher learning, I thank you for the opportunity to provide support of the proposed fiscal year 2012 budgets for NOAA, NASA, and NSF.

These three agencies support research at our member institutions that provides critical information to decision-makers and communities across the country. That is why we strongly support the Administration's request of \$5.5 billion for NOAA, \$7.8 billion for the NSF, and \$5 billion for NASA science account.

While recognizing that difficult budget decisions must be made for the Nation's fiscal health, the President's proposed budget for these three agencies advances the country's scientific knowledge agenda and will subsequently undergird the economy, secure the well-being of the Nation.

The natural and earth system sciences and technology programs, NOAA, NSF, and NASA, make the Nation's surface, air, and marine transportation safer and more efficient, advance energy technology, provide the science support to the defense industry, and create the knowledge based upon which society can make wise environmental management decisions.

Environmental data collected and distributed by NASA, NSF, and NOAA represent a national resource and are used by universities for research, education, and outreach, and especially by private industry to produce products and services.

Time and again, we have heard how research is the seed corn that drives innovation in this country. I am involved in the coordination of a number of international research initiatives and I must tell you in no uncertain terms that our competitiveness in the international arena is in serious jeopardy.

Ensuring homeland security, maintaining global communications, and informing the public of atmospheric and marine ecological health threats depend upon reliable science.

For example, NOAA provides important services to all Americans such as already mentioned tsunami warnings that are vital to our economy, national security, transportation, and human safety.

Extreme weather events like tornadoes, hurricanes, oppressive heat and drought or heavy precipitation demonstrate both the immediate and sustained impacts that weather and seasonal climate can have on the region.

About \$3 trillion or one-third of the U.S. economy is highly weather and seasonally climate sensitive. We support the establishment of the NOAA Climate Service as an economic imperative as private enterprise, public agencies, decision-makers, and society require seasonal and annual climate outlooks based on solid science.

To draw a parallel to the provision of weather services, with the advent of numerical weather prediction post-World War II, the private sector weather enterprise has grown to a \$2 billion annual industry.

With respect to NASA in 2007, the National Academies Earth Science Decadel Survey found that between 2000 and 2009, funding for earth sciences at NASA had fallen substantially. Earth science research is absolutely critical to understanding how the earth operates as a coupled system.

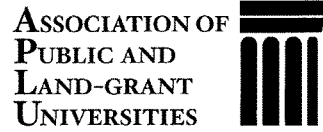
We are encouraged by the Administration's request to restore some of NASA's science mission funding. Past investments in NASA science mission have funded university research that has led to new instruments and views of our planet, valuable advances in weather and climate forecasting, and better understanding of earth's ecosystems as depicted in that gloss behind you.

Lastly but very importantly, we support funding of the NSF which is critical to U.S. basic research. NSF supplies almost two-thirds of all federal funding for university-based fundamental research in the geosciences. NSF GEO-supported research increases our ability to understand, forecast, and respond to environmental events and changes. Through facilities such as the National Center for Atmospheric Research and its Wyoming super computer, NSF provides the academic community with advanced capabilities that it would not be able to afford if conducted through individual institutions.

In closing, NOAA, NASA, and the NSF provide critical earth observations and research funding to scientists, engineers, and mathematicians working to increase understanding of natural phenomena of economic and human significance.

The Association of Public and Land-Grant Universities thanks you for continued support of these critical agencies. I am more than happy to answer any questions.

[The information follows:]



**FY 2012 Testimony of the
ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES (A·P·L·U)
Board on Oceans, Atmosphere, and Climate (BOAC)
to the House Appropriations Subcommittee on
Commerce, Justice, Science and Related Agencies (CJS)
Submitted by Dr. Leonard J. Pietrafesa and Dr. Yolande Serra,
Co-Chairs of the A·P·L·U Board on Oceans, Atmosphere, and Climate**

**Presented by Len Pietrafesa
Burroughs and Chapin Scholar, Coastal Carolina University
Professor Emeritus, North Carolina State University**

On behalf of the Association of Public and Land-grant Universities' Board on Oceans, Atmosphere, and Climate, and the national constellation of institutions of higher learning that it represents, I thank you for the opportunity to provide support of and recommendations for the proposed FY 2012 budgets for the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautic and Space Administration (NASA) and the National Science Foundation (NSF). NOAA, NASA and NSF each play unique roles in a number of high-priority U.S. and international initiatives. All three agencies also support research at our member institutions that provides critical information to policymakers and communities across the country. That is why we strongly support the administration's request of \$5.498 billion for NOAA; \$7.8 billion for NSF; and \$5.016 billion for NASA's Science Account.

"Although basic science can have colossal economic rewards, they are totally unpredictable. And therefore the rewards cannot be judged by immediate results. Nevertheless, the value of [Michael] Faraday's work today must be higher than the capitalization of all shares on the stock exchange."

--Margaret Thatcher, Speech to the Royal Society, Sept. 27, 1988

"America has been consuming its seed corn: From 1970 to 1995, federal support for research in the physical sciences, as a fraction of gross domestic product, declined 54%; in engineering, 51%. Annual federal spending on mathematics, the physical sciences and engineering now equals only the *increase* in health care costs *every nine weeks*. "

-- George F. Will: "Rev the Scientific Engine", The Washington Post, January 2, 2011

In the late 1930s, at a time when the government did not fund basic research, Alfred Loomis, a wealthy NY industrialist and science geek was the benefactor of basic research pursuits of the world's foremost scientists and mathematicians at his mansion, which was partially converted into a laboratory in Tuxedo Park NY. One of the scientific breakthroughs that he fostered led to the development of microwave radar. Via his cousin, Mr. Simpson, the Sec. of War, Mr. Loomis contacted President Roosevelt who contacted Mr. Churchill. An enormous mismatch in capabilities resulted between the Allies and the Axis. This is an example of a basic scientific breakthrough that to great measure is responsible for the position in the world order that the U.S. has enjoyed since WWII.

In 1946, given the fact that we did not know when to cross the English Channel to stage D-Day, the U.S. Congress realized that the U.S. needed federally funded, weather and ocean related R&D and created the Office of Naval Research; which was so successful that the federally funded National Science Foundation was created in 1949. Subsequently the U.S. became the world leader in R&D, its universities and industries became the most advanced in the World and thus the US became the leading economic power of the world. This was no happenstance.

Space weather research and forecasting is a jewel at the NOAA Space Environment Center. Sun storms interfere with the normal operation of communications, can cause large-scale blackouts and could shut down the nation's GPS satellite system and thus the U.S. spatial referencing network. Without research advances in Space Weather, the Nation's military defenses and security, transportation systems, commerce and competitiveness will be severely compromised.

Recently, a NASA scientist developed a new mathematical method to process non-linear and non-stationary data in his basic research and opened up an entire new field of data analysis. He was elected to the National Academy. However, the scientist has chosen to retire from NASA and has joined a university in Taiwan where the success rate for research proposals is 80 - 90% vs. U.S. rates of 10%. The U.S. has lost a National Academy member to a foreign country because of scarce U.S. research dollars.

While recognizing that difficult budget decisions that must be made for the nation's fiscal health, the President's proposed budget for these three agencies will serve the nation well in advancing science and technology which will subsequently undergird the economy, security and well being of the citizenry of the United States. Outlays in the natural and earth systems' science and technology programs of NOAA, NSF, and NASA will serve to improve and make the nation's surface, air and marine transportation safer and more efficient, advance energy technology, provide the scientific and technological advances to help the defense industry better meet its technology needs, contribute to advances in public health, make the country more resilient to environmental hazards, provide agricultural, energy and transportation sectors with seasonal outlooks, and create the knowledge base upon which society can make wise environmental management decisions. Environmental data collected and distributed by NASA, NSF and NOAA represent a national resource and are used by universities for research, education and outreach and especially by private industry to produce products and services.

Insuring homeland security, maintaining global communications, and informing the public of atmospheric and marine ecological health threats depend upon reliable science. Forecasting the onset, duration and effects of solar storms, atmospheric weather events, coastal storms, sea-level variability, toxic blooms, and seasonal climate conditions are dependent on sustainable growth of the science and technology that NOAA, NSF and NASA sponsor and conduct. In addition, the FY 2012 budget request will lead to the expansion of the private sector weather and seasonal and annual climate derivatives industry and thus create new jobs.

I next comment on aspects of the agency budgets and needs of the scientific community:

NOAA

NOAA provides important services to all Americans, services that are vital to our economy, national security, surface, marine and air transportation, human safety and the health of human and marine ecological systems. Extreme weather events, like tornadoes, hurricanes, oppressive heat, heavy precipitation both wet and frozen, dust storms and drought, clearly demonstrate both the immediate and long-term impacts that weather can have on a region. About \$3 trillion or one-third of the U.S. economy, including industries as diverse as agriculture, finance, energy, insurance, transportation, real estate and outdoor recreation, is highly weather and seasonal-climate sensitive.

NOAA's support of environmental research and education via Cooperative Institutes and programs such as the Oceanic & Atmospheric Research's Sea Grant and the Center for Sponsored Coastal Ocean Research are critical to university research, education and outreach. Similarly, NOAA's role in understanding the oceans and coastal areas and oceanic and coastal resources is also an economic imperative.

We do raise a major concern, the need for increased and sustained support of satellite and in situ environmental observing systems. As reported in several prior and recent National Research Council studies, (*Observing Weather and Climate from the Ground Up, a Nationwide Network of Networks*, NRC, 2009), the needs are particularly acute for urbanized areas as well as mountain, ocean and coastal regions. Vertical profiles of variables such as water vapor, winds, and temperatures are virtually non-existent over land and are non-existent over water. Over land, the primary recommendation is for the placement of vertical profilers, vertically pointing radars, acoustic sounders and lidars that collect vertical observations of wind and temperature from the ground up through the lower atmosphere. For the oceans, the ARGO network needs attention and support as it begins to seriously age. In the case of coastal ocean regions, estuaries and the Great Lakes, a key recommendation is for the build-out and major enhancement of the existing NOAA National Data Buoy Center (NDBC) atmospheric and coastal ocean-observing network and the Joint Polar Satellite System. The data collected are critical to many other NOAA missions, such as understanding supply of larvae of commercially important fisheries and trajectories of oil spills. A national network of profilers would greatly improve skill scores for forecasts, particularly for forecasts of heavy precipitation events and atmospheric chemistry conditions. Likewise, an enhanced and expanded NDBC network would address NOAA's proposed development of an ecological forecasting capability and also will greatly improve the skill scores of forecasting ocean and coastal weather-related phenomena such as precipitation amounts, types and durations of Gulf and Atlantic Nor'easters and West Coast cyclones and rogue waves. Coastal ocean observing, via the existing NDBC network, is challenged to keep operations at present levels and cannot be enhanced with modern observing sensors without major capitalization.

NASA

In 2007, the National Academies issued the report, "*Earth and Science Applications from Space: National Imperatives for the Next Decade and Beyond*." The report found that between 2000 and 2009, funding for Earth Sciences (ES) had fallen substantially. ES research is absolutely critical to understanding climate change, such as the decline of Earth's ice sheets and the health of the

global oceans. For this reason, BOAC is heartened by the Administration's request for NASA's expanded and enhanced science mission. Past investments in NASA's science mission have funded university research that has resulted in the development of new instruments and technologies and in valuable advances in weather forecasting, climate projections, and understanding of Earth ecosystems. Without the tools developed at NASA or with agency support, oceanic, atmospheric, hydrologic and earth-system scientists and the nation would have only a fragmentary picture of the interconnected functioning of the planet's oceans, atmosphere and land. The NASA data archive is a treasure trove of environmental information that researchers have come to depend upon. Through its support for young scientists and graduate students, the NASA science mission supports innovation. BOAC supports the NASA budget and applauds the special attention that the White House has paid to the restoration of NASA science.

We also hope that Congress will fund NASA to lead in developing and implementing a scatterometer mission; with fast community access to the data, capability to distinguish between wind and rain and a higher orbit for coverage of Alaskan waters.

NSF

BOAC supports funding of NSF, which is critical to U.S. basic research. NSF supplies almost two-thirds of all federal funding for university-based, fundamental research in the geosciences. GEO-supported research increases our ability to understand, forecast, and respond to and prepare for environmental events and changes. Through facilities such as the Oceans Observatory Initiative, the Integrated Ocean Drilling Program, and NCAR-Wyoming supercomputer, NSF provides the academic community with advanced capabilities that it would not be able to afford if conducted through individual institutions.

In the President's FY 2012 budget request beyond regular funding of research and related activities, major investments would include \$282.7 million (+\$87.2 million over FY2010/CR FY2011) for the Science, Engineering and Education for Sustainability (SEES) NSF-wide program, \$16 million (first time request) for Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21), \$10 million (first time request) for Creating a More Disaster Resilient America (CaMRA), \$13 million (-\$1.6 million below FY2010/CR FY2011) for a new Science and Technology Center and \$13.8 million (+\$1.2 million over FY2010/CR FY2011) for CAREER. SEES funding through GEO would focus on clean energy and technologies to help mitigate and adapt to environmental changes. CAREER funds would support young investigators who exemplify the role of teacher-scholars through outstanding research and education.

Together, NOAA, NASA, and NSF provide critical earth observations and research funding for scientists working to increase understanding of natural phenomena of economic and human significance. BOAC thanks the Committee for its continued support of these critical agencies.

About A•P•L•U

A•P•L•U (formerly National Association for State Universities and Land Grant Colleges) is the nation's oldest higher education association. Currently the association has over 200 member institutions located in all fifty states. The Association's overriding mission is to support affordable, high-quality public education through efforts that enhance the capacity of member institutions to perform traditional and innovative roles in teaching, research and public service..

About the Board on Oceans, Atmosphere, and Climate

The BOA's primary responsibility is to advance research and education in the oceanic/marine and atmospheric sciences through engaging scholars from its member institutions and through a robust federal relations program. The board has approximately 200 regionally distributed members, including some of the nation's most eminent research scientists, chief executive officers of universities, oceanic, atmospheric and hydrologic scientists, academic deans, and directors of Sea Grant programs.

Thank you for taking time to review our recommendations.

Mr. WOLF. I have no questions. But I want to say for the record and for the universities to hear I support everything you said, everything. I go farther than you. You do not go far enough. You do not do enough.

Mr. BUSALACCHI. What can we do?

Mr. WOLF. Simon and Garfunkel in the song The Boxer sung in Central Park, said "man hears what he wants to hear and disregards the rest." We are fundamentally disregarding.

Last month, the shortest month in the year, we had the biggest deficit we have ever had, \$228 billion. Forty cents of every dollar we spend is a debt. UVA put out a thing criticizing some of the budget cuts. Tell the President of UVA and all your presidents to call the President of the United States, the President of the United States that says come to the table with a speaker and deal with this issue of deficits.

If we do not deal with the entitlements, Medicare, Medicaid, and Social Security, all these programs will be cut. They are good programs. They are programs that we desperately need. I do not want to see China become the number one country. I want to see America continue. The 21st century should be the American century. But until we deal with the entitlement issue, these programs will be cut no matter if it is a republican Congress or a democratic Congress.

There was a report put out yesterday by a group called PIMCO that is saying that they are willing to buy the Spanish bonds more than they are the American bonds because Spain has now put together a program to deal with the deficit.

So I agree with you. I want to plus up. When I was chairman of this subcommittee before, we reversed the spending. But in order to plus up so we can have a renaissance in math and science and physics and chemistry and biology, we have got to deal with these entitlements.

So I agree with you. The Washington Post did an editorial by Ruth Marcus and she said we are waiting for Waldo. We are waiting for the President of the United States and this Administration to come up here and we have got to do it in a bipartisan way.

If they do, we can have a renaissance and fund not only this program but the previous programs that we were talking about.

Mr. Fattah.

And thank you for your testimony.

Mr. FATTAH. Let me thank you for your testimony. You are one of the most distinguished academic and intellectual minds in the country on these subjects and appreciate you taking the time to come.

I wish it were so simple as if we had a different President somehow we would not be in this circumstance. Our decline as a Nation in these issues, in our lack of investment in technology and science could not possibly be the responsibility of one party or one President. And we are going to have to rise above our partisan inclinations to focus on these issues.

I agree with the chairman that we need to deal with the funding. I am going to be offering a bill next week to deal with the debt and the deficit. But I think that on the substance of this, I agree with

you and the chairman said he agrees with you. And, in fact, we should be doing more as a country.

And, in fact, over the last two years, there has been a much more significant investment in these issues of technology and science and innovation than at any time of the country's history. I think the President would like to do more. However, we do have fiscal concerns that cannot be addressed unless we deal with the question of entitlements, unless we deal with the question of whether or not we want to be a leading country in this world, which will require us to pay for it in some form or fashion.

Thank you.

Mr. WOLF. Let me just chime in with Mr. Fattah. And we will put in the record here I sent numerous letters to the Bush administration, to Paulson. At a hearing before the Appropriations Committee, I told Secretary Paulson years from now when he is sitting in his rocking chair, he will feel like a failure for having not addressed this issue.

So my end is not against any particular issue. The previous Administration ignored the issue too. But I think we have got to provide the leadership to come together and, again, come together in a bipartisan way. If we do not do it—and he happens to be the President of the United States at this time, I did not vote for him.

But let me say for the record I will so submit if we can get from my office all of the letters to follow this little colloquy here, all of the letters, each and every letter that I sent to Secretary Paulson with the P.S.s that I put on there. They failed. They failed to provide the leadership.

Now it is an opportunity for this Administration and this President to provide it. And if he does provide it by the end of the year, we can reverse all this and I think have a renaissance for all of us and for my children and my grandchildren.

But I appreciate your testimony.

Mr. BUSALACCHI. Thank you, Mr. Chairman and Mr. Fattah.

Mr. WOLF. Thank you very much.

HOUSE OF REPRESENTATIVES,
Washington, DC, July 12, 2007.

Hon. HENRY PAULSON,
Secretary, Department of the Treasury,
Washington, DC.

DEAR SECRETARY PAULSON: As you know, Senator Voinovich and I reintroduced the Securing America's Future Economy (SAFE) Commission Act in January. I wanted to follow up with you and share the enclosed letter I wrote to the president asking that the administration embrace this idea.

I think about our children and grandchildren and it is disheartening that critical issues are falling by the wayside because Congress today is so polarized. I believe that a bipartisan commission operating outside the halls of Congress that would mandate action is the answer to getting our fiscal house in order and diverting financial crisis in this country.

The SAFE Commission bill has 32 cosponsors to date. I am committed to continue working with my colleagues to enact this legislation on a matter of such importance to our nation's future.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

HOUSE OF REPRESENTATIVES,
Washington, DC, August 3, 2007.

Hon. HENRY PAULSON,
Department of the Treasury,
Washington, DC.

DEAR SECRETARY PAULSON: I read your recent comments about reaching the statutory debt limit as early as October. I have always voted for the limit increase but am seriously considering voting against it this year because of the lack of leadership by the administration in taking steps to change the country's current financial path. I truly believe that this administration has the ability to change our course.

I am not writing to you today as a Republican or a Democrat, but as a father and grandfather. Lawmakers on both sides of the aisle understand the enormity of this issue and the impact that will be felt

for generations to come. It's disheartening that the partisan political divide in Congress is so consuming that issues with such high stakes continue to languish.

That's why I have introduced the Securing America's Future Economy (SAFE) Commission Act, which would establish a bipartisan commission and put everything--entitlement, tax policy, and other federal spending--on the table for review.

This administration can offer hope and start to remedy our fiscal prognosis, brightening the horizon for our children and their children. It is critical that they have all the opportunities the Greatest Generation made possible for you and me. Our grandchildren should set ambitious goals, and believe that hard work will be met by opportunity.

We have a moral obligation to address the long-term fiscal challenges ahead.

I know you are a good person and want what is best for America. With your leadership and vision, progress can be made.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

HOUSE OF REPRESENTATIVES,
Washington, DC, October 22, 2007.

Hon. HENRY PAULSON,
Department of the Treasury,
Washington, DC.

DEAR SECRETARY PAULSON: Just wanted to update you on the SAFE Commission legislation since I reintroduced the bill with Jim Cooper three weeks ago.

The measure has gained bipartisan support with over 40 cosponsors--split evenly between Democrats and Republicans from members of the Republican Study Committee to three of the four Blue Dog Coalition co-chairs I believe that support for this measure will continue to grow.

You may have read that the first baby boomer signed up for promised Social Security benefits last week. Our nation's "long term" deficit problem has arrived.

We should be concerned that last Monday the U.S. dollar hit an all-time low in the wake of a major housing recession and enormous trade deficits. We should care that the value of the dollar has been dropping against the Canadian dollar, the Euro and the Japanese yen.

What will it take for us to address these issues?

The SAFE Commission fits into what this administration claims to stand for and will ensure sound financial footing for generations to come. I have enclosed information on the bill since its reintroduction including a list of current cosponsors.

Please give serious consideration to the SAFE Commission Act.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

HOUSE OF REPRESENTATIVES,
Washington, DC, October 25, 2007.

Hon. HENRY PAULSON,
Secretary, Department of the Treasury,
Washington DC.

DEAR SECRETARY PAULSON: As meritorious as the Administration's argument is with regard to the \$21 billion in discretionary spending it is relatively insignificant compared to the massive entitlement spending problem. It is like comparing a mouse to an elephant.

Our SAFE Commission bill represents all that the Administration says it cares about, including more than 50 bipartisan cosponsors (see list).

Failing to address this issue is like driving a car toward the edge of a cliff with no brake pedal.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

HOUSE OF REPRESENTATIVES,
Washington, DC, November 1, 2007.

Hon. HENRY PAULSON,
Department of the Treasury,
Washington DC.

DEAR SECRETARY PAULSON: I am deeply troubled that this Administration is missing an opportunity to do something so powerful for our children and grandchildren.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

HOUSE OF REPRESENTATIVES,
Washington, DC, November 14, 2007.

Hon. HENRY PAULSON,
Department of the Treasury,
Washington, DC.

DEAR SECRETARY PAULSON: As a follow up to our conversation last week about the SAFE Commission. I want you to know that Roy Blunt has also signed onto the bill.

The Cooper-Wolf SAFE Commission has over 50 bipartisan cosponsors including Republican leadership in the House (see enclosed).

We are waiting for the Administration to support this effort to rein in entitlement spending.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

HOUSE OF REPRESENTATIVES,
Washington, DC, December 5, 2007.

Hon. HENRY PAULSON,
Department of the Treasury,
Washington, DC.

DEAR SECRETARY PAULSON: Enclosed is a letter I recently received from Ben Bernanke about our nation's fiscal imbalance, reiterating, "... if early and meaningful action is not taken, the U.S. economy could be seriously weakened, with future generations bearing much of the cost."

Your administration deserves credit for its work in the past to address the entitlement reform issue. Our parents told us that if at first you don't succeed, try, try again. I am asking that the SAFE Commission be that second try.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

HOUSE OF REPRESENTATIVES,
Washington, DC, January 17, 2008.

Hon. HENRY PAULSON,
Department of the Treasury,
Washington, DC.

DEAR SECRETARY PAULSON: Between July 19 and December 10, 2007, I wrote to you nine different times about the unsustainable financial path our country is on, and the bipartisan SAFE Commission as a potential way forward to rein in entitlement spending. I have respectfully asked for the administration's support because of the critical importance of taking action now.

I am disappointed that the administration is missing this opportunity to bring about a renaissance in America, giving hope to future generations and ensuring that our children and grandchildren can live in a world where hard work will be met by opportunity.

Best wishes.

Sincerely,

FRANK R. WOLF,
Member of Congress.

Mr. WOLF [continuing]. The next witness will be Pacific Salmon Commission, Dr. Jeffrey Koenings, Commissioner for Washington and Oregon.

And next we will have a Member of Congress, David Cicilline from the great State of Rhode Island.

Yes, sir.

FRIDAY, MARCH 11, 2011.

PACIFIC SALMON COMMISSION

WITNESS

JEFFREY KOENINGS, COMMISSIONER FOR WASHINGTON AND OREGON, PACIFIC SALMON COMMISSION

Mr. KOENINGS. Thank you, Mr. Chairman, Members of the committee.

I want to thank you for the opportunity to testify here today on behalf of the U.S. section of the Pacific Salmon Commission.

You have my detailed written testimony in front of you and I would like to summarize several of the salient points made in that document.

We are requesting your consideration of an increase in funding through NOAA Fisheries for implementation of the Federal U.S.-Canada Salmon Treaty for fisheries management activities by the member states from \$5.6 million to \$9.708 million.

In addition, we are recommending the funding of the Pacific Salmon Treaty, Chinook Salmon Agreement line item within, NOAA Fisheries' budget for fiscal year 2012 at \$1.844 million which is current funding.

The Pacific Salmon Commission is the implementation arm of the federal U.S.-Canada International Salmon Treaty ratified by the U.S. Senate in 1985. The U.S. section of the commission consists of the member states of Washington, Oregon, Alaska, Idaho, the Federal Treaty Tribes, and you will be hearing from some representatives of them later on, and the federal representatives.

Upon ratification of the treaty in 1985, along with its fishery management arrangements, the states and tribes received federal funding support for their fishery management and administrative activities through the federal Departments of State, Commerce, and Interior.

NOAA Fisheries provides funding for treaty implementation to the member states. That funding has remained constant since 1985. That is, the dollar amount has remained at around \$5.6 million since 1985 or for more than 25 years. You can imagine the decreased buying power of counts and dollar amounts over that time period.

Since 1985, many challenges have also surfaced for the management of sustainable salmon fisheries on both sides of the border, each of which has required improvements to the science underlying the tools for the conservation of each nation's fish stocks.

At a meeting last week of commissioners representing international, regional fishery management organizations held in Silver Springs, Margaret Spring, NOAA chief of staff, emphasized NOAA's need for coordinated and cohesive management inter-

nationally as an opportunity to complement national fisheries management.

The Pacific Salmon Commission fulfills that need in the northwest coast from Alaska through Canada, Washington State, to Oregon's coast.

Since 1985, the growing complexity of conservation-based fishing regimes has required vastly more stock assessment, fishing compliance monitoring, and technical support activities across multiple stocks and fisheries spread across thousands of miles of coastline.

In order to continue to implement the requirements of the Federal Pacific Salmon Treaty, the states over time have had to augment federal funding through the treaty with other federal and state support. Unfortunately, a lot of that support has now disappeared due to the initial actions of Congress eliminating federal programs like Anadromous Fish grants or by the fact that the states are simply broke.

Consequently we are asking the Federal Government to increase our funding support to replace the states and other funding that we have had to backfill this federal treaty implementation and would like to have you increase the funding from again \$5.6 million to \$9.708 million to represent the fishery management activities of the member states of this commission.

This concludes my statement on behalf of the U.S. section of the Pacific Salmon Commission and I would like to answer any questions if you have them.

[The information follows:]

U.S. Commissioners
David Bedford
Jeff Koenings
Olney Patt Jr.
Larry Rutter

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of the
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**TESTIMONY OF JEFFREY KOENINGS
U.S. COMMISSIONER, PACIFIC SALMON COMMISSION
U.S. SECTION OF THE PACIFIC SALMON COMMISSION**

**BEFORE THE SUBCOMMITTEE ON COMMERCE,
JUSTICE, SCIENCE AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS ON THE FY 2012 BUDGET
FOR THE DEPARTMENT OF COMMERCE**

March 11, 2011

Mr. Chairman, my name is Jeffrey Koenings, and I serve as a U.S. Commissioner on the Pacific Salmon Commission (PSC). The PSC was established in 1985 to oversee implementation of the Pacific Salmon Treaty (Treaty) between the U.S. and Canada. In May of 2008, the PSC concluded bilateral negotiations that developed revised ten-year salmon fishing regimes to replace regimes that were expiring at the end of 2008. The provisions of the new fisheries agreements were approved by the U.S. and Canadian federal governments and are being implemented for the 2009 – 2018 period. The U.S. Section recommends that Congress:

- Fund the Pacific Salmon Treaty Line Item of the National Marine Fisheries Service at \$9,708,000 for FY 2012 an increase in funding compared to \$5,600,000 in recent-year budgets. This funding provides support for the states of Alaska, Washington, Oregon, and Idaho and the National Marine Fisheries Service to conduct the salmon stock assessment and fishery management programs required to implement the Treaty's conservation and allocation provisions for coho, sockeye, Chinook, chum, and pink salmon fisheries. Included within the total amount of \$9,708,000 is \$400,000 to continue a joint Transboundary River Salmon Enhancement Program as required by the Treaty.
- Fund the Pacific Salmon Treaty Chinook Salmon Agreement Line item of the National Marine Fisheries Service for FY 2012 at \$1,844,000, level funding from what has been provided by Congress in recent years and is included in the President's FY 2012 request. This funding is necessary to acquire the technical information to fully implement the abundance-based Chinook salmon management program provided for under the Treaty.

The funding identified above is for ongoing annual programs and does not include new funding specifically needed for full application of the revised agreement for 2009-2018

that was negotiated by the PSC and accepted by the Governments of the U.S. and Canada on December 23, 2008. This funding was part of the National Marine Fisheries Service FY 2010 budget, which the U.S. PSC Commissioners recommend be continued in the FY 2012 federal budget.

The base Treaty implementation projects included in the Pacific Salmon Treaty Line Item consist of a wide range of stock assessment, fishery monitoring, and technical support activities for all five species of Pacific salmon in the fisheries and rivers from Southeast Alaska to those of Washington, Oregon, and Idaho. The states of Alaska, Washington, Oregon, Idaho, the federal National Marine Fisheries Service (NMFS), and the 24 treaty tribes of Washington and Oregon are charged with carrying out the salmon fishery stock assessment and harvest management actions required under the Treaty. Federal funding for these activities is provided through NMFS on an annual basis. The agency projects carried out under PSC funding are directed toward acquiring, analyzing, and sharing the information required to implement the salmon conservation and sharing principles of the Treaty. A wide range of programs for salmon stock size assessments, escapement enumeration, stock distribution, and catch and effort information collection from fisheries are represented. The information from many of these programs is used directly to establish fishing seasons, harvest levels, and accountability to the provisions of Treaty fishing regimes.

The base Treaty implementation funding of approximately \$5.6 million in the FY 2010 budget has essentially remained at this low level since the early 1990's. Since that time, the growing complexity of conservation-based (federal Endangered Species Act compliant) fishing regimes has required vastly more stock assessment, fishing compliance monitoring, and technical support activities. In order to continue to implement the federal PST, the states have had to augment federal funding with other federal and state support. For example, additional sources of funding have included federal Anadromous Fish Grants, federal Pacific Coast Salmon Recovery Funds (PCSRF), federal Dingell-Johnson dollars, and state general funds. However, the Anadromous Fish Grants were eliminated in the federal FY 2010 budget, use of PCSRF monies was constrained in FY 2010 by new appropriations language, and state dollars and Dingell-Johnson grants were cut significantly during the current economic recession.

The economic impact of commercial and sport fisheries has been measured by the U.S. Fish and Wildlife Service at approximately \$2-3 billion per year to the states involved in the PST. To continue to implement the federal PST conservation-based fishing regimes that contribute to the sustainability of salmon stocks and the large economic return to the states, the U.S. PSC members recommend an increase in base treaty implementation funding from the current \$5.6 million to \$9,708,000.

Effective, science-based implementation of negotiated salmon fishing arrangements

and abundance-based management approaches for Chinook, southern coho, Northern Boundary and Transboundary River salmon fisheries includes efforts such as increased annual tagging and tag recovery operations and application of other emerging stock identification techniques. The U.S. PSC members recommend that \$9,708,000 be provided for the NMFS Pacific Salmon Treaty Line Item in FY 2012 for Treaty technical support activities. The \$400,000 that has been provided in the separate International Fisheries Commissions line item since 1988 for a joint Transboundary River enhancement program with Canada is now included in this amount. The recommended amount for the combined projects represents an approximate increase of \$4,108,000 over the amount appropriated for FY 2010.

Beginning in FY 1998, Congress provided \$1,844,000 to allow for the collection of necessary stock assessment and fishery management information to implement a new abundance-based management approach for Chinook salmon coast-wide in the Treaty area. Through a rigorous competitive technical review process for project approval, the states of Alaska, Washington, Oregon, and Idaho, and the twenty-four treaty tribes are using the funding to support research and data collection needed for abundance-based Chinook management. The U.S. Section recommends level funding of \$1,844,000 for FY 2012 to support the abundance-based Chinook salmon management.

The U.S. and Canada agreed in 1988 to a joint salmon enhancement program on the Transboundary Rivers, which are rivers rising in Canada and flowing to the sea through Southeast Alaska. Since 1989, Congress has provided \$400,000 annually for this effort through the National Marine Fisheries Service International Fisheries Commission line item under the Conservation and Management Operations activity. Canada provides an equal amount of funding and support for this bilateral program. The funding for the U.S. share is included in the \$9,708,000 the U.S. Section is recommending for the FY 2012 NMFS Pacific Salmon Treaty line item.

This concludes the Statement of the U.S. Section of the PSC submitted for consideration by your committee. We wish to thank the committee for the support that it has given us in the past. I will be pleased to answer any questions the Committee Members may have.

SUMMARY OF PROGRAM FUNDING FOR THE U.S.-CANADA PACIFIC SALMON TREATY**DEPARTMENT OF COMMERCE
Pacific Salmon Treaty Line Item**

<u>FY 2009 Appropriation</u>	<u>FY 2010 Appropriation</u>	<u>FY 12 U.S. Section Recommendation</u>
\$5,610,000	\$5,600,000	\$9,708,000

The recommended FY 2012 amount includes \$400,000 provided for the Joint Transboundary River Enhancement Program currently funded under the NMFS International Fisheries Commission account.

Pacific Salmon Treaty – Chinook Salmon Agreement Line Item

<u>FY 2009 Appropriation</u>	<u>FY 2010 Appropriation</u>	<u>FY 2012 U.S. Section Recommendation</u>
\$1,844,000	\$1,844,000	\$1,844,000

Mr. WOLF. Thank you for your testimony.

Mr. Fattah.

Mr. FATTAH. I assume that the increase would cover the states' portion, not Canada's portion?

Mr. KOENINGS. It would cover the states' portions, absolutely.

Mr. FATTAH. Thank you very much.

Mr. WOLF. Thank you very much.

Mr. KOENINGS. Thank you.

Mr. WOLF. Our next witness will be Congressman David Cicilline from Rhode Island.

Welcome. Your full testimony will be in the record and if you could just give my best to Patrick Kennedy when you see him.

Mr. CICILLINE. I certainly will, Mr. Chairman.

FRIDAY, MARCH 11, 2011.

DEPARTMENT OF COMMERCE BUDGET

WITNESS

HON. DAVID CICILLINE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF RHODE ISLAND

Mr. CICILLINE. Thank you, Mr. Chairman and Ranking Member Fattah and Members of the committee, for the opportunity to appear before this subcommittee to provide testimony today.

While there are many vital programs that this committee has jurisdiction of that keep our communities safe and advance the growth of our economy, I am here today to speak on three programs that I think are particularly vital to creating jobs and growing the economy in my state and in our Nation.

Within the Department of Commerce budget, the President's fiscal year 2012 budget proposes \$143 million for the Hollings Manufacturing Extension Partnership, \$526 million for the International Trade Administration, and \$325 million for the Economic Development Administration, all to support programs authorized by the America COMPETES Reauthorization Act.

These are critically important investments to sustain our economic recovery, particularly for the State of Rhode Island where our recovery remains very fragile.

Today in Rhode Island, there are 40,400 individuals employed in the manufacturing industry. A decade earlier in 2000, the ocean state's manufacturing employment level was about 71,000.

Rhode Island was the first state in the northeast to enter the recession and over the course of this three-year downturn almost 12,000 manufacturing jobs were lost, the largest employment decline among all industries in our State.

Despite these losses, manufacturing currently represents the third largest share of private employment in Rhode Island and the average wage for an individual employed in manufacturing is \$47,000. Now, when one considers in addition to that the multiplier impact of manufacturing on Rhode Island, it becomes all the more evident how vital this industry is to our State.

By some accounts, the manufacturing multiplier is 2.4 which means manufacturing in Rhode Island accounts for more than 33

percent of employment and more than \$6 billion in wages in Rhode Island.

Industry outlooks through 2018 in the State of Rhode Island indicate that certain sectors of the manufacturing industry are projected to experience growth including manufacturing of computer and electronic products, food, chemicals, and transportation equipment.

The Hollings Manufacturing Extension Partnership provides small and medium size manufacturing firms the tools and expertise they need to improve productivity and competitiveness.

Since 1996, 750 manufacturers have worked along with some partners and experts at Rhode Island Manufacturing Extension Services. We call it RIMES. That is more than 40 percent of all the manufacturers in our State have benefitted from this program.

Partnering with state economic development and workforce agencies as well as private sector entities, RIMES has produced incredible economic benefits for our state and for the manufacturing sector in general.

And during a time when Congress is being asked to make some very tough decisions focused on lowering our deficit as the chairman just mentioned and cutting spending, I think it is important that we make the right decisions and at the same time sustain investments that help create jobs, innovate for the future, and ensure that we can remain competitive in the global marketplace. Hollings Manufacturing Extension has done that.

In addition to that, there is a huge initiative by the President to increase our exports and it is particularly important that in that role, that we support the Export Assistance Center which has provided tremendous assistance as businesses, particularly manufacturers, try to increase their exports.

For Rhode Island, they have had a direct impact and led to the creation of 5,400 additional jobs as a result of the services that they have provided.

And, again, as we work to cut spending, I think we have to do it in a way that is smart and not at the expense of initiatives that create jobs, bolster our economy, and allow manufacturers and businesses to innovate and compete.

The economic recovery of my district and of our state and certainly our Nation as a whole demands that we work collaboratively, that we focus our energy and resources on those initiatives that will help spur job growth now while providing our workers, our entrepreneurs, and our businesses, particularly small enterprises and manufacturers, with the tools they need to compete in the global economy.

I respectfully urge this committee, this subcommittee to fully fund these critically important economic development initiatives and for the levels requested in the President's fiscal year 2012 budget.

Thank you, Mr. Chairman.
[The information follows:]

Congressman David N. Cicilline (RI-01)**Testimony to the Subcommittee on Commerce, Justice, Science, and Related Agencies**

Thank you Chairman Wolf, Ranking Member Fattah, and members of the Subcommittee on Commerce, Justice, and Science for affording me the opportunity to provide testimony before you today. While there are so many vital programs and initiatives under the aegis of this subcommittee – activities in law enforcement, economic development, and science research that keep our communities safe and advance the growth of our economy – I am here today to speak on three programs that are vitally important to creating jobs and growing the economy in my state and in our nation. Within the Department of Commerce, the President's Fiscal Year 2012 Budget proposes \$143 million for the Hollings Manufacturing Extension Partnership, \$526 million for the International Trade Administration, and \$325 million for the Economic Development Administration to support programs authorized by the America COMPETES Reauthorization Act. These are critically important investments to sustain our nascent economic recuperation, particularly for the State of Rhode Island where our recovery remains fragile.

Today, in the State of Rhode Island, there are 40,400 individuals employed in the manufacturing industry. A decade earlier in 2000, the Ocean State's manufacturing employment level was 71,000. Rhode Island was the first state in the Northeast to enter the economic recession, and over the course of the three year downturn 11,900 manufacturing jobs were lost – the largest employment decline among all industries in the state. However, despite these losses manufacturing currently represents the third largest share of private employment, and the average wage for an individual employed in manufacturing is \$47,199 – that is a wage that surpassed both the state and national average in 2009. When one considers the multiplier impact of manufacturing in Rhode Island, it becomes all the more evident just how vital this industry is to the state's economy. By some accounts, the manufacturing multiplier is 2.4 – which means manufacturing in Rhode Island accounts for more than 33% of employment and more than \$6 billion in wages.

If this vital economic engine is to be sustained, we must continue our investments in programs that will help manufacturers compete in a global economy, retool to be more efficient and effective businesses, and retrain the workforce so that skill-sets utilized in declining sectors can be transferred to those that are expanding. Industry outlooks through 2018 in the State of Rhode Island indicate that certain sectors of the manufacturing industry are projected to decline over the next several years. Those sectors that could experience the largest decline include manufacturing of apparel, textiles, plastics, rubber, paper, and machinery. However, those sectors that are projected to experience growth include manufacturing of computer and electronic products, food, chemicals, and transportation equipment.

Through the Hollings Manufacturing Extension Partnership, small and medium sized manufacturing firms are given the tools and expertise to improve productivity and competitiveness. Since 1996, 750 manufacturers have worked along-side partners and experts at Rhode Island Manufacturing Extension Services (RIMES) – that is more than 40% of all manufacturers in state. Partnering with state economic development and workforce agencies, as well as private-sector entities, RIMES has produced astounding economic benefits for the state and our manufacturing industry. Independent, third-party surveys show that over the last four

years, RIMES has helped generate more than \$16 million in increased sales, 320 new jobs, and 805 retained jobs. Even during the midst of the worst economic downturn since the Great Depression, thanks to the work of RIMES, more than \$6 million in increased sales were achieved and 586 jobs created.

During this time when Congress must make the tough choices required to lower the deficit and cut spending, we must sustain those investments that help us create jobs, innovate for the future, and remain competitive in the global marketplace. The Hollings Manufacturing Extension Partnership helps strengthen our economy, enhances our competitiveness and leads to robust job growth. For every \$1 of federal investment, the Manufacturing Extension Partnership delivers \$32 in economic growth. Furthermore, the MEP is not just a funding program; rather, it is an initiative that is designed to help companies develop sound business improvement plans, increase productivity, and generate measurable results.

Yet, beyond helping American manufacturers retool and increase efficiency, if our nation is going to compete in the global economy we must guarantee that manufacturers are not disadvantaged by an uneven playing field in foreign trade, and we must ensure they have the export assistance services they need in order to access foreign markets.

According to the World Institute for Strategic Economic Research, in 2009 Rhode Island's manufactured exports totaled \$1.5 billion, comprised of more than \$178 million in manufactured commodities, more than \$184 million in computer and electronic products, and more than \$135 million in machinery. If businesses, particularly manufacturers, are going to be able to compete in the global economy they must have increased access to the global market.

The International Trade Administration (ITA) within the Department of Commerce provides America's businesses with access to trade specialists and industry and market access experts through their Export Assistance Centers. Moreover, the ITA plays a critical role in monitoring the compliance of foreign countries with trade agreements with the United States, while also working to identify potential obstacles American businesses may confront in accessing foreign markets. In Rhode Island in 2010, the export assistance center was working with almost 1,000 active company contacts. Between 2008 and 2009, Rhode Island manufactured exports increased by 36% to \$1.5 billion. Research from the Department of Commerce indicates that for every additional \$100,000 in annual export sales, one new job is created. For Rhode Island, that meant 5,400 jobs created or retained in our economy in 2009.

Through the Hollings Manufacturing Extension Partnership and the ITA, as well as programs conducted through the Economic Development Administration, federal funds are effectively leveraging resources from state and local governments as well as the private sector. Again, as we work to cut spending we have to be sure it's not at the expense of initiatives that create jobs, bolster our economy, and allow American manufacturers and businesses to innovate and compete. While we look for ways to reduce our spending, we have to make sure that we're doing it in a way that invests in our future. America cannot compete in the short-term if we cannot innovate, and we cannot innovate in the long-term if we fail to make the necessary investments in science, technology, and capacity building – such as those authorized through the America COMPETES Reauthorization Act.

The economic recovery of my District, the State of Rhode Island, and the nation as a whole demands that we work collaboratively and focus our energy and resources on those initiatives that will help spur job growth now, while providing our workers, our entrepreneurs, and our businesses – particularly smaller enterprises and manufacturers – with the tools they need to compete in the global economy. I respectfully urge this subcommittee to fully fund these critically important economic initiatives at the levels requested in the President's Fiscal Year 2012 Budget.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. Let me thank you. I had a chance to meet you in your great area of Providence. I want to thank you for your testimony. There is no more important priority in this bill, and I say that notwithstanding everything else in this manufacturing initiative.

I heard from similar programs in Michigan and I have met with the ones in Philadelphia who are doing great work with manufacturers. So it is my highest priority.

Thank you very much for your testimony.

Mr. CICILLINE. Thank you very much.

Mr. WOLF. Thank you very much for your testimony.

We are expecting a vote momentarily. What we are going to try to do is just keep this, because of people having airplanes, keep this thing moving.

So, Mr. Fattah, there might be a time that you will chair a minute and Mr. Culberson and we will just keep moving around.

Marine Conservation Biology Institute, Bill Chandler, vice president, Government Affairs.

FRIDAY, MARCH 11, 2011.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION CONSERVATION PROGRAMS' FUNDING

WITNESS

BILL CHANDLER, VICE PRESIDENT, GOVERNMENT AFFAIRS, MARINE CONSERVATION BIOLOGY INSTITUTE

Mr. CHANDLER. Good morning, Mr. Chairman, Mr. Fattah, and Members of the committee. Thank you for this opportunity to testify.

Chairman Wolf, you and I have crossed paths in the past in my capacity as representative of the Nature Conservancy and the National Parks Conservation Association on a number of conservation issues. And I know of your interest in them.

Today, however, I am representing Marine Conservation Biology Institute of Seattle Washington whose mission it is to protect our marine ecosystems.

My testimony is going to focus on the need to sustain funding for the conservation oriented programs of NOAA. And my point is simple. Without a living ocean, we are not going to have healthy economies because a good deal of our large coastal economy depends on things that live in the ocean. Whether it is people going to beaches, fishermen, commercial, recreational, people want a living ocean.

It may not matter to the maritime industry who can just ply a ship on any body of water, but living oceans are critically important to the American people.

In my statement, I have outlined nine such programs within NOAA that we would like to call to your attention that focus on conserving and managing marine ecosystems and sea life.

We understand the pressures that you are under and I 100 percent agree with statements you made about getting control of the entitlement programs. As a citizen, I would vote for that and I sup-

port that. But in terms of these programs, we have recommendations, some of which would support the request as is for 2012, some of them we are requesting slightly more than is in the budget because we think they are very important. And I would like to focus on three of these programs.

First of all, I think you may have heard that our oceans are becoming more acidic. This is a huge problem and may be a real sleeper in terms of its effect on America and America's economy as the oceans absorb more and more carbon dioxide and become more acidic. Marine resources are already being damaged.

Let me give you one example. A private shellfish hatchery on the West Coast suffered a 75 percent reduction in its ability to put out larvae that would set and produce shellfish that could then be harvested. And this was all due to the acidity of the water killing the larvae. They finally figured that out and now they are trying to take some mitigation steps to correct that problem, but that is a real-world example about why ocean acidification needs to be studied, monitored, and we need to come up with mitigation measures.

Congress did pass the Ocean Acidification Act a couple of years ago and they authorized \$20 million for this activity today. The President has requested \$11.6 million. We are comfortable with that recommendation in the budget as it stands.

Secondly, the national ocean policy. The Administration has issued a new policy to significantly improve the way we manage our oceans. The problem in the past has been that we have too many agencies managing separate sectors without communicating with each other or effectively planning where these uses occur and how they affect the environment.

The policy calls for regional planning bodies to be set up who will try to sort all of these uses and needs out within a region with stakeholder input. We think that is a vital program to change the failed way we have managed the oceans and we are recommending \$10 million to NOAA for its share. That is slightly higher than what they are getting in the request.

Finally, I want to thank the committee for its support in the past of the recovery of the Hawaiian monk seal. This is one of the most critically endangered marine mammals in the world and it is all ours. It does not live anywhere else except in American waters. The Seal Recovery Program has benefitted greatly from your plussing up that budget to a decent size in the last couple of years. We would just urge you to keep it steady as she goes. They are making tremendous progress with the money that they have gotten from this subcommittee in the past.

That concludes my testimony, Mr. Chairman, and thank you so much again for having us in.

[The information follows:]



Marine Conservation Biology Institute

William Chandler, Vice President for Government Affairs

March 3, 2011

The Honorable Frank R. Wolf, Chairman
 Subcommittee on Commerce, Justice, Science, and Related Agencies
 Committee on Appropriations
 United States House of Representatives, H-307
 Washington, DC 20515

Mr. Chairman and Members of the Subcommittee:

Marine Conservation Biology Institute (MCBI), based in Bellevue, WA, is a nonprofit conservation organization whose mission is to protect vast areas of the ocean. We use science to identify places in peril and advocate for bountiful, healthy oceans for current and future generations. I wish to thank the members of the Commerce, Justice, Science, and Related Agencies Appropriations Subcommittee for the opportunity to submit written testimony on the FY 2012 appropriations for the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA). We are requesting an increase of \$46 million to maintain current research and management capabilities, while also implementing the National Ocean Policy.

America's oceans provide jobs, energy resources, food, recreation and tourism opportunities, as well as play a vital role in our Nation's economy, trade, and transportation. According to the National Ocean Economics Program, the US ocean economy contributes more than \$138 billion to our nation's Gross Domestic Product from living marine resources, tourism, recreation, transportation, construction, and mineral extraction. Additionally, over 2.3 million jobs in the US depend on the marine environment. Tourism and recreation alone account for over \$69 billion and over 1.7 million jobs of this total amount. Beyond the recreational services that oceans and waterways provide, US commercial fishing generated \$103 billion in national sales and supported 1.5 million jobs in 2008.

Keeping in mind the hard economic times our nation is in, I would like to highlight the importance of maintaining or moderately increasing funds for eight of NOAA's programs. MCBI recommends the following funding levels in 2012:

- National Marine Fisheries Service, Hawaiian monk seal recovery, \$5.5 million
- National Marine Fisheries Service, Deep Sea Coral Research and Technology Program, \$2.5 million
- National Ocean Service, Marine Debris Program, \$5 million
- National Ocean Service, National Marine Sanctuary Program, \$62 million
- National Ocean Service, Marine Protected Areas Program, \$4 million
- National Ocean Service, Coral Reef Conservation Program, \$32 million
- National Ocean Service, Coastal & Marine Spatial Planning, \$10 million
- National Ocean Service, Regional Ocean Partnerships, \$30 million
- Office of Oceanic & Atmospheric Research, Ocean Acidification, \$11.6 million.

Hawaiian Monk Seal Recovery

The Hawaiian monk seal is one of the most critically endangered marine mammals in the world. It is also the only marine mammal whose entire distribution range lies within our national jurisdiction; thus the US has sole responsibility for its continued survival. Over the last 50 years, the Hawaiian monk seal population has declined to an all time low of less than 1200 individuals. The majority of the Hawaiian monk seals reside in the remote Papahānaumokuākea Marine National Monument; however, a smaller (but growing) population resides in the Main Hawaiian Islands (MHI). The MHI population may serve as the “insurance” population for this species.

The recovery program has benefited greatly from the subcommittee’s decision to more than double the funds for the program since 2008. Your action has created crucial momentum to protect the Hawaiian monk seal from extinction by enabling NOAA to establish year round research field camps, conduct outreach to fishermen and the general public concerning the seal’s ecological and cultural importance, provide urgent care and supplies, and continue vital research studies on disease and mortality mitigation.

The Administration has recommended \$2.5 million for the monk seal account. In order to guarantee that the seal recovery effort continue apace, MCBI strongly recommends a minimum of \$5.5 million for continued Hawaiian monk seal recovery efforts. This amount maintains the current level of funding to the program.

A severe decrease in funding would devastate NOAA’s current efforts to protect this iconic Hawaiian marine mammal. This decrease would severely handicap the research and management efforts of the program by reducing the number of field camps, outreach campaigns, and urgent care needs.

Deep Sea Coral Research and Technology Program

The discovery of widespread deep sea coral ecosystems within US waters has challenged scientists to learn the extent of these important ecosystems and develop strategies on how to protect them. The Deep Sea Coral Research and Technology Program was established by NOAA under the *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA) of 2006*. NOAA is charged with mapping and monitoring locations where deep sea corals are likely to occur, developing technologies designed to reduce interactions between fishing gear and deep sea corals, and working with fishery management councils to protect coral habitats.

MCBI was pleased to see increased funding for the National Marine Fisheries Service Deep Sea Coral Program to a level of \$2.5 million in FY 2010 and would like to see that level sustained in FY 2012. Previous funding has allowed for coral habitat mapping in the SE Atlantic region. Sustained funding will permit the continued mapping of coral areas off the West Coast, as well as the initiation of coral mapping in Alaska waters. There is a great need for habitat assessments to inform management and development decisions; reduced funding levels would severely hamper the compilation of this information.

Marine Debris Program

Marine debris has become one of the most widespread pollution problems affecting the world's oceans and waterways. Recently, much attention has been given by the press to the huge floating garbage patch in the Pacific Ocean and its impacts on ocean life and places like Hawaii. Research has shown that debris has serious effects on the marine environment, wildlife, the economy, and human health and safety. An estimated 4.2 million pounds of debris was recovered from US beaches in 2009.

Marine debris in the Northwestern Hawaiian Islands (NWHI) contributes to avian and marine wildlife decline through ingestion and entanglement, and is one of the chief causes of death for the critically endangered Hawaiian monk seals that live there. An estimated 700 metric tons (mt) of marine debris, primarily derelict fishing gear, was removed from NWHI coral reefs and beaches by NOAA between 1996 and 2006. However, removal efforts are not keeping up with accumulation and marine debris continues to be a perpetual threat to the Hawaiian monk seal and seabirds in Papahānaumokuākea Marine National Monument.

The Marine Debris Research, Prevention and Reduction Act was enacted in 2006. The act established a national program led by NOAA to identify, assess, reduce and prevent marine debris and its effects on the marine environment. The Marine Debris Program has been level funded at \$4 million since 2008. MCBI recommends NOAA's Marine Debris Program receive a minimum of \$4 million in FY 2012 to maintain marine debris removal and mitigation efforts. However, MCBI recommends the program receive an additional \$1 million to ramp up efforts to prevent and reduce the loss of fishing gear by the industry. Greater than 30 tons of derelict fishing gear is removed annually in the NWHI every year which causes damage to coral reefs and threatens the survival of many key species.

Reduced funding would decrease marine debris collection efforts in the NWHI, terminate outreach and education partnership grants both regionally and nationally, and reduce basic research efforts to better understand the impacts of marine debris on our ecosystems and human health.

National Marine Sanctuaries

Presently, the Office of National Marine Sanctuaries is responsible for managing the nation's 13 marine sanctuaries and Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands. Collectively, these 14 units cover more area than the National Park System.

MCBI recommends \$64 million to operate and maintain management capabilities for the National Marine Sanctuary System. This amount maintains FY 2010 funding levels, but funnels all funds to the Operations, Research, and Facilities (ORF) Account. This increase in the ORF account will allow the Office of National Marine Sanctuaries to fulfill its responsibilities as a leader in ocean management and conservation. The funding would not only restore reduced operations, but would also support better monitoring and enforcement, education and outreach programs, vessel and visitor center operations, and scientific research, including climate monitoring and historical ecology.

A decrease in funding would be detrimental to the program by terminating valuable science,

education/outreach, and resource management positions, reducing collaborative efforts among partners, ceasing upkeep measures needed for vessel operations, and reducing management efforts within sanctuaries and monuments.

Marine Protected Areas Program

NOAA is charged with implementing Executive Order 13158, *Marine Protected Areas*, which directs federal agencies to develop a national system of marine protected areas (MPAs). These areas are critical to maintaining biological diversity, protecting ocean habitats, and effectively managing fish populations. Under the program, NOAA is tasked with undertaking a gap analysis to identify which additional types of marine areas should be protected.

Given the ongoing loss of our marine resources, the implementation of the executive order has moved too slowly, partly due to insufficient funding. MCB I recommends \$4 million for the MPA Center in FY 2011, a slight increase above the enacted FY 2010 level, but below the FY 2004 enacted level of \$4.9 million. Critical program needs to be addressed with these additional funds include developing and expanding the national system of MPAs, allowing for stakeholder involvement in gap analyses and regional planning efforts, and developing a methodology to collect data on human uses of the ocean throughout the country and prepare maps of where these uses occur, and how they conflict with one another or with marine conservation needs. This information is vital to decisions about managing ocean uses.

Coral Reef Conservation Program

NOAA's Coral Reef Conservation (CRCP) Program manages NOAA's coral reef programs including both deep sea corals, as directed by the Deep Sea Coral Research and Technology Program, and shallow water corals. Deep sea corals research and conservation is funded under the National Marine Fisheries Service (discussed above) and shallow water corals research and conservation activities are funded under the National Ocean Service.

CRCP's shallow water coral activities focus on improving understanding of tropical coral reef ecosystems and minimizing the threats to their health and viability. Due to limited resources, CRCP has narrowed its efforts to better understand and address the top three global threats: climate change, fishing, and pollution. MCB I recommends \$32 million to sustain and enhance the Coral Reef Conservation Program. These funds will aid in addressing the top three global threats by monitoring and forecasting climate change impacts on coral reefs, reducing additional threats to coral reef ecosystems, and combating land-based sources of pollution.

Coastal & Marine Spatial Planning

Coastal and marine spatial planning (CMSP) is the tool adopted to implement the President's National Ocean Policy (2010). CMSP is a comprehensive, integrated, ecosystem-based approach that addresses conservation, economic activity, user conflict, and the sustainable use of ocean, coastal, and Great Lakes resources. A strong National Policy will help our nation rebuild overexploited fisheries, protect endangered species, restore vulnerable habitats, and develop measures to address marine impacts of climate change, all of which will strengthen our nation's economy.

Coastal and marine spatial planning requires a long term commitment, as well as adequate and sustained resources. MCBI is encouraged by the Administration's recommendation of \$6.7 million for coastal and marine spatial planning, but recommends an increased funding level of \$10 million to ensure the proper set up of key programs. This funding will support habitat mapping and characterization using existing data sets at NOAA; human use patterns mapping and user conflicts analysis; identification of current management authorities and jurisdictions; development of decision support tools; initial regional planning; and coordination of multiple agency efforts. A failure to support this initiative will impede our nation's efforts to manage our oceans in a more sustainable manner.

Regional Ocean Partnerships

Regional Ocean Partnerships (ROP) are a component of the *Framework for Coastal and Marine Spatial Planning*. Coastal states have already established regional ocean partnerships, many of which will inform the regional planning bodies that will implement CMSP. These partnerships will be used as place-based lenses through which funding can be focused for marine and coastal priorities at a state and regional level.

MCBI recommends \$30 million for regional ocean partnerships to provide competitive grants to address priority marine and coastal issues within each region.

Ocean Acidification

Ocean acidification is the process by which seawater becomes corrosive to calcium carbonate structures found in many of the shells and skeletons of marine organisms, such as oysters and corals. It is a major marine impact associated with elevated carbon dioxide levels in the atmosphere. Ocean acidification has already begun to negatively impact commercial and recreational fishing, as well as coastal communities and economies.

The Federal Ocean Acidification Research and Monitoring (FOARAM) Act that passed in early 2009 calls upon NOAA to coordinate research, establish a monitoring program, identify and develop adaptation strategies and techniques, encourage interdisciplinary and international understanding of the impacts associated with ocean acidification, improve public education outreach, and provide critical research grants to understanding the ecosystem impacts and socioeconomic effects of ocean acidification. Ocean acidification research was appropriated at \$6 million in FY 2010. MCBI supports the presidential recommendation of \$11.6 million in FY 2012 to more fully understand the impacts of ocean acidification on our coastal communities.

In summary, MCBI respectfully requests that the subcommittee maintain or slightly augment funding for the conservation side of the National Oceanic and Atmospheric Administration's budget by the amounts discussed above.

Sincerely,



William Chandler

Mr. WOLF. Great. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. Thank you very much for your work in this area.

Mr. CHANDLER. Thank you.

Mr. WOLF. Thank you.

Our next witness, Gulf of Mexico Reef Fish Shareholders' Alliance, David Krebs.

Mr. Krebs, welcome.

FRIDAY, MARCH 11, 2011.

**NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION BUDGET**

WITNESS

DAVID KREBS, PRESIDENT, GULF OF MEXICO REEF FISH SHAREHOLDERS' ALLIANCE

Mr. KREBS. Thank you. Good morning, Chairman Wolf and Ranking Member Fattah.

My name is David Krebs and I am honored to be invited to testify today on NOAA's budget, specifically in support of the \$54 million in funding for the National Catch Share Program in fiscal year 2012, and in opposition to any provisions that would prohibit funding for Catch Share programs in the U.S.

Before the option of a catch share, the early strategy by the government was to issue permits, yet there was no restriction on how many permits were issued. In fact, it was several years before any permit moratorium started to go into place to try to govern a fleet that was not wearing out, a fleet that had been growing for nearly 15 years.

To address the fact that there were too many vessels and too few fish, there were calls for government buyouts to reduce this oversized fleet, but then that did not happen and the fleet just kept growing.

To explain the benefits of a catch share, let me tell you the story about gulf red snapper, a fishery that has historically been overfished. The commercial management plan for red snapper in the Gulf of Mexico began in 1991. It started as a pure derby fishery with an overall catch limit and a season that opened and closed when that quota was met.

Under this system, each individual fisherman would race to catch as many fish as possible during the season. This was similar to the old halibut and salmon derbies in the northwest and had about the same outcome, a season as short as 53 days, low prices, and a market void of domestic red snapper the remainder of the year.

The next attempt was a 14-day mini season with a 2,000 pound trip limit that began the beginning of each month. This method later changed to a 10-day mini season which included size limits. The boats would try to make a trip every day regardless of weather or price to get their share. The result was always the same, too much fish at the beginning of the month and none in the last two weeks. And we still only had 66 to 95 red snapper fishing days per year.

Fishermen were increasingly discarding small fish that did not meet the size limits. It was an unsafe, inefficient, and uneconomic way to manage the fishery and it did little to improve the conservation of the resource.

As early as 2001, the increasing number of discarded fish associated with the size limits and closed seasons from both the recreational and commercial fleets began to take its toll on the fishery. Consumers could not depend on a stable supply of fresh gulf red snapper. We had to have a better system.

The commercial stakeholders and the fishery at the council level began the process of developing a red snapper individual fishing quota or IFQ which is a form of catch share or limited access privilege program. The stakeholders voted on the program by referendum and it was implemented in January 2007. For the first time in 16 years, the consumer would have year-round access to fresh gulf red snapper.

The red snapper IFQ and other catch share programs have proven to improve the management and conservation which was the intended result of such programs when Congress authorized them in 2007. Both the Bush administration and the Obama administration have recognized the value of catch share programs and increasingly provided funding to NOAA so that the stakeholders in the fishery can develop and implement such programs.

In fiscal years 2011 and 2012, \$54 million in funding has been requested for the National Catch Share Program. That funding is not only crucial to programs that are already on the water such as the red snapper IFQ but also to the development of new programs to further improve the management of our Nation's fisheries.

Well-designed catch share programs feature improved monitoring systems and an improved collaborative science. Catch shares quickly outperform traditional approaches both scientifically and in terms of access to fish for fishermen.

As discussed in the President's budget request, an investment in the National Catch Share Program represents an investment in improvements in fishery dependent data collection systems, fishery data management, social and economic data collection, or analysis and stock assessments. These help improve the scientific data necessary to analyze and better manage fisheries.

I urge the committee to oppose provisions that would limit the ability of the regional fishery management councils to consider the use of catch share programs and to support funding for the National Catch Share Program.

Thank you.

[The information follows:]

**Testimony Submitted to the
Appropriations Committee
Subcommittee on Commerce, Justice, Science and Related Agencies
of the
U.S. House of Representatives
by
David Krebs
Commercial Fisherman from Destin, Florida
and President of the Gulf of Mexico Reef Fish Shareholders' Alliance
March 11, 2011**

My name is David Krebs. I am honored to be invited to testify today on the National Oceanic and Atmospheric Administration's budget, specifically in support of the \$54 million in funding for the National Catch Share Program in Fiscal Year 2012 and in opposition to any provision that would prohibit funding for catch shares programs in the U.S.

I started fishing in 1969 as a teenage boy on Florida's Gulf coast. Boats were mostly constructed of wood and commercial captains had an extraordinary ability to follow the contours of the sea floor with a paper bottom machine. The snapper boats were scattered along the Gulf coast, mostly owned by the bigger fish houses that could afford them. Things started changing in the late '70s with fiberglass boats starting to replace the aging wooden boats, with even a few carrying a Loran-A machine to navigate back to rich fishing grounds. By 1980, Loran-C arrived, with a much more user-friendly display that could be coupled to video plotters and digital fish finders. In 1981, I captained my first fiberglass longline vessel fishing for deepwater grouper and golden tilefish out of Destin, Florida. Fishing was easy in this new frontier of setting a longline across the bottom in 600-1200 ft. of water; so easy that I remarked to an elder captain how easy it would be to capture all the fish to which he replied, "That's right. That's why we must fish harder to get our share."

And so goes the saga of modern-day fishing: Catch up one species and move on to the next, an endless cycle of boom and bust. When the grouper and tile fish played out in my area I switched to surface longline for tuna and swordfish, eventually leaving the Gulf to fish in South and Central America looking for the next rich area.

An early strategy by the government was to issue permits, yet there was no restriction on how many or what size boat the permit was on. In fact, it was well into the '90s before any permit

moratorium started to go into place to try to govern a fiberglass fleet that wasn't wearing out, and that had even better technology such as GPS. So then came overall catch limits for the entire fleet of fishing vessels to try to protect the stocks. However, the fleet had been growing for nearly 20 years. So even with catch limits in place there was still a race to get your share of the resource. To address the fact that there were too many vessels and too few fish, there were calls for government buyouts to reduce this oversized fleet. But that didn't happen, and the fleet just kept fishing. Today, fishermen in the Gulf of Mexico, like those in the Gulf of Mexico Reef Fish Shareholders' Alliance, are working diligently to correct this situation and improve the economics of the fishery and the conservation of the resource using catch shares.

The Gulf Red Snapper Story

To explain the benefits of catch shares, let me tell you the story about Gulf Red Snapper, a fishery that has historically been overfished.

The management plan for red snapper in the Gulf of Mexico began in 1991. It started as a pure derby fishery with an overall catch limit and a season that opened and closed when that quota was met. Under this system, each individual fisherman would race to catch as many fish as possible during the season. This was similar to the old halibut and salmon derbies in the Northwest and had about the same outcome—short season (less than 3 months), low prices, and a market void of domestic red snapper the remainder of the year. It was an unsafe, inefficient, and uneconomic way to manage the fishery. It also did little to improve the conservation of the resource.

The next attempt was a 14-day mini-season with a 2,000 lb. trip limit that began at the beginning of each month. This method extended the season to around 5 months, and was later abandoned to a 10-day mini-season, which included size limits. The boats would try to make a trip every day, regardless of weather, to get their share. The result was always the same: too much fish at the beginning of the month and none in the last two weeks. Fishermen were increasingly discarding smaller fish that did not meet the size limits and had died. When coupled with closed-season discards that also did not survive, the resource was being depleted. Again, it was an unsafe, inefficient, and uneconomic way to manage the fishery, and it did little to improve the conservation of the resource.

As early as 2001, the increasing number of discarded fish associated with the size limits and closed seasons from both the recreational and commercial fleets began to take its toll on the fishery. This was due to the fact that discards that were assumed to have lived had not. We had to have a better system.

The stakeholders in the fishery, at the Council level, began the process of developing a red snapper individual fishing quota (IFQ) – a form of catch share or limited access privilege program. The stakeholders voted on the program by referendum, and it was implemented in January 2007.

The red snapper fishery is better now than I have seen in my lifetime. It has a longer season. It is better economically. And we are seeing a resurgence of red snappers. The difference was that by, assigning an individual his own quota, the collateral damage was reduced since he could now keep fish that he was discarding while he was fishing for other reef fish species during the other 20-day closures. It is my belief that an IFQ designed by the stakeholders is a very important tool in the fishery management strategy. It is the only tool that allows fishermen the individual flexibility to meet their needs. And since individual fishing quotas are considered a form of catch share, I feel that it is imperative that this tool remain in the budget for future consideration.

Importance of Funding Catch Share Programs Such as the Red Snapper IFQ

The Red Snapper IFQ and other catch share programs have been proven to improve the management and conservation of the fishery, which was the intended result of such programs when Congress authorized them in 2007. Both the Bush Administration and the Obama Administration have recognized the value of catch share programs, and have increasingly provided funding to NOAA so that the stakeholders in the fishery can develop and implement such programs. In fiscal years 2011 and 2012, \$54 million in funding has been requested for the National Catch Share Program. That funding is not only crucial to programs that are already on the water, such as the red snapper IFQ, but also to the development of new programs to further improve the management of our nation's fisheries.

Well-designed catch share programs feature improved monitoring systems and improved and collaborative science, so that catch shares quickly outperform traditional approaches, both scientifically and in terms of access to fish for fishermen. As discussed in the President's budget request, an investment in the National Catch Share Program represents an investment in "improvements in fishery-dependent data collection systems, fishery data management, social and economic data collection or analysis ... [and] stock assessments." These help improve the scientific data necessary to analyze and better manage fisheries.

I urge the Committee to oppose provisions that would limit the ability of the regional fishery management councils to consider the use of catch share programs, and to support funding for the National Catch Share Program.

Thank you again for the opportunity to testify on this important issue.

Mr. FATTAH [presiding]. Thank you very much.

I do not want anyone to think that this is an exercise in futility. It is important that we build a record for the actions that the committee is going to take. So even though we are running in and out and voting, what you are saying is important so that we can justify when we fund the things that you want us to fund that there is a congressional record to support this.

So thank you for your testimony.

And let us invite the next witness, Paul Lumley, representing the Columbia River Inter-Tribal Fish Commission.

Welcome.

Mr. LUMLEY. Thank you.

Mr. FATTAH. And your complete statement will be part of the record and you are invited to make whatever comments you would like to make between the green light and the red light.

Thank you.

FRIDAY, MARCH 11, 2011.

COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

WITNESS

PAUL LUMLEY, EXECUTIVE DIRECTOR, COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

Mr. LUMLEY. It is a great pleasure to be here. Thank you, Mr. Fattah. This is a very distinguished committee and it is a great honor to be here.

I do represent the views and recommendations of the Columbia River Inter-Tribal Fish Commission. It is made up of four tribes. Yakama, Umatilla, Warm Springs, and Nez Perce are the tribes in the Pacific Northwest.

Each of those four tribes have the same treaty rights language, that is to fish and hunt at all usual and accustomed fishing places. And that treaty rights language has been litigated in numerous courts and eventually to the United States Supreme Court where it has been accepted.

I am here to talk about three important programs, the Columbia River Mitchell Act, the Pacific Coastal Salmon Recovery Fund, and the Pacific Salmon Treaty.

Regarding the Mitchell Act, we support an increase to \$26.6 million with \$6.7 million directed to the Tribes for Hatchery Reform Practices.

I would like to take a moment to talk about those hatchery reform practices. The tribes have a philosophy on how hatcheries should be managed and that is to use natural fish in the hatchery and then out-plant the fish from the hatchery into the natural environment and to keep the fish biologically the same. In that way, we can increase naturally-spawning runs and mitigate for all the dams that were built along the Columbia River.

We have shown that we have made some success. I am going to give you one example. In my testimony, there are other examples. But one in particular is the Snake River fall chinook which are listed under the Endangered Species Act.

Fifteen years ago, the tribes were allowed to experiment with their program and we increased the naturally-spawning fish from just a few hundred fish near extinction to over 10,000 last year and we are expecting double that next year.

Last year's return alone was three times the ESA delisting level. So we have shown that this kind of a philosophy and the way these hatchery programs can be used works.

Now, the Mitchell Act Program is largely not managed that way. It is managed for the benefit of non-Indian fisheries. They employ a practice of marking the salmon much like cattle and, therefore, they can keep the hatchery fish and when they catch the wild fish, they throw them back. But in the process of doing that, a lot of wild fish are killed. So this is not a wild stock recovery program.

What we want to see are reforms to that program so that we can see delisting in our future. And we have seen that with great success with the Snake River Fall Chinook Program.

I want to commend this committee for their conference report language that they entered into the record in 1991. In 1991, the conference report language stated Mitchell Act hatcheries be operated in a manner so as to implement a program to release fish in the upper Columbia River basin, above Bonneville Dam to assist in rebuilding of naturally-spawning salmon runs.

That language was very important to us. We have tried very hard to convince the state and federal agencies to use that language seriously to reform hatcheries. We have made some success, but the success has been very slow. And I request that you also repeat this language into the current conference report if possible. Your support for this kind of hatchery reform is extremely important to the tribes.

In addition to our request for Mitchell Act, we request \$110 million for the Pacific Salmon Recovery Program. This is a program that is vitally important to all the tribes along the West Coast including the states of Oregon, Washington, California, and Alaska.

We need this program level to be increased because these are the funds that we use for increasing naturally-spawning fish that are not necessarily listed but are really important to exercising our treaty rights.

I support the recommendations made earlier by Jeff Koenings on the Pacific Salmon Treaty. He recommended a total of \$11.6 million. We support that as well as the \$9.8 million for the states that he recommended and the \$1.9 million for necessary research and management activities.

I thank you for the opportunity to testify.

[The information follows:]


COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

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Babtist Paul Lumley, Executive Director
Columbia River Inter-Tribal Fish Commission
Testimony on Fiscal Year 2012 Budget
Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies
United States House of Representatives
March 11, 2011

The Columbia River Inter-Tribal Fish Commission (CRITFC) is pleased to share our views on the Department of Commerce NOAA Fisheries' FY2012 budget and has identified the following funding needs:

- \$26.6 million for the Columbia River Mitchell Act hatchery program to implement reforms of which \$6.7 million (or 25% of the enacted amount) is directed to the tribes to enhance supplementation (natural stock recovery) programs;
- \$11,603,000 for the Pacific Salmon Treaty Program, of which \$9,759,000 is for the implementation of the 2009-2018 Agreement, and previous base programs, and \$1,844,000 is for the Chinook Salmon Agreement Implementation;
- \$110 million for the Pacific Coastal Salmon Recovery Fund to support on-the-ground salmon restoration activities

BACKGROUND: The Columbia River Inter-Tribal Fish Commission (CRITFC) was founded in 1977 by the four Columbia River treaty tribes: Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated Tribes and Bands of the Yakama Nation, and Nez Perce Tribe. CRITFC provides coordination and technical assistance to the tribes in regional, national and international efforts to protect and restore the fisheries and fish habitat.

In 1855, the United States entered into treaties with the four tribes¹. The tribes' ceded millions of acres of our homelands to the U.S. and the U.S. pledged to honor our ancestral rights, including the right to fish. Unfortunately, a long history of hydroelectric development, habitat destruction and over-fishing by non-Indians brought the salmon resource to the edge of extinction with 12 salmon and steelhead trout populations in the Columbia River basin listed under the Endangered Species Act (ESA).

Today, the CRITFC tribes' are among the most successful fishery managers in the country leading restoration efforts and working with state, federal and private entities. CRITFC has, and is currently updating, a plan that outlines principles and objectives designed to halt the decline of

¹ Treaty with the Yakama Tribe, June 9, 1855, 12 Stat. 951; Treaty with the Tribes of Middle Oregon, June 25, 1855, 12 Stat. 963; Treaty with the Umatilla Tribe, June 9, 1855, 12 Stat. 945; Treaty with the Nez Perce Tribe, June 11, 1855, 12 Stat. 957.

**Testimony of the Columbia River Inter-Tribal Fish Commission
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salmon, lamprey and sturgeon populations and rebuild the fisheries to levels that support tribal ceremonial, subsistence and commercial harvests. To achieve these objectives, the plan emphasizes strategies that rely on natural production, healthy rivers and collaborative efforts.

Several key regional agreements were completed in 2008. The Columbia Basin Fish Accords set out parameters for management of the Federal Columbia River Power System for fish passage. New agreements in *U.S. v. Oregon* and the Pacific Salmon Commission established fishery management criteria for fisheries ranging from the Columbia River to Southeast Alaska. The *U.S. v. Oregon* agreement also contains provisions for hatchery management in the Columbia River Basin. The terms of all three agreements run through 2017. We have successfully secured other funds to support our efforts to implement these agreements, including funds from the Bonneville Power Administration (BPA), the Department of Interior, and the Southern Fund of the Pacific Salmon Treaty, to name just few. Continued federal funding support is needed to accomplish the management objectives embodied in the agreements.

Columbia River (Mitchell Act) Hatchery Program: Restoring Pacific salmon and providing for sustainable fisheries requires using the Columbia River Mitchell Act hatchery program to supplement naturally spawning stocks and populations. To accomplish this goal, \$26.6 million is requested for the tribal and state co-managers to jointly reform the Mitchell Act hatchery program. Of this amount, \$6.7 million, or 25% of enacted funding, will be made available to the Columbia River Treaty Tribes for supplementation (natural stock recovery) programs. The Mitchell Act program provides regional economic benefits. NOAA – Fisheries estimates that the program generates about \$38 million in income and supports 870 jobs.

Since 1982, CRITFC has called for hatchery reform to meet recovery needs and meet mitigation obligations. In 1991 this subcommittee directed that “Mitchell Act hatcheries be operated in a manner so as to implement a program to release fish in the upper Columbia River basin above the Bonneville Dam to assist in the rebuilding of upriver naturally-spawning salmon runs.” Since 1991, we have made progress in increasing the upstream releases of salmon including Mitchell Act fish that have assisted the rebuilding and restoration of naturally-spawning of upriver runs of chinook and coho. These efforts need to continue.

We now face the challenges of managing for salmon populations listed for protection under the ESA, while also meeting mitigation obligations. The Draft Environmental Impact Statement (DEIS) for operation of Columbia River basin hatcheries released by NOAA in 2010 illustrates the conundrum we face. While the DEIS, which assumes level funding for Mitchell Act hatcheries, points out the need for hatchery reform, the implementation scenarios for the proposed alternatives to the status quo all call for substantial reductions in hatchery releases. From the tribal perspective the proposed alternatives will not result in the delisting of salmon populations or meet mitigation obligations. Under the proposed alternatives the future is increased regulation under the ESA, resulting in more constrained fisheries along the West Coast. The funding for the Mitchell Act program should be increased along with natural stock recovery program reform (supplementation) so that we can make progress towards ESA delisting. This would transition the Mitchell Act program to a much more effective mitigation program.

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We support hatchery reform to aid in salmon recovery, while meeting mitigation obligations. The CRITFC tribes are leaders in designing and managing hatchery facilities to aid in salmon restoration and believe similar practices need to be implemented throughout the basin to reform current hatchery production efforts. Additional funding is necessary to reform Mitchell Act hatcheries to accomplish conservation and mitigation objectives. The Administration's proposed FY 2012 funding level continues years of inadequate funding. The result is deteriorating facilities that do not serve our objectives.

Evidence to Support Tribal Salmon Restoration Programs under the Mitchell Act: The tribes' approach to salmon recovery is to put fish back in to the rivers and protect the watersheds where fish live. Scientific documentation of tribal supplementation success is available upon request. The evidence is seen by the increasing returns of salmon in the Columbia River Basin. Wild spring chinook salmon are returning in large numbers in the Umatilla, Yakima and Klickitat tributaries. Coho in the Clearwater River are now abundant after Snake River coho were declared extinct. Fish are returning to the Columbia River Basin and it is built on more than thirty years of tribal projects.

Once considered for listing under the Endangered Species Act where only 20,000 fall chinook returned to the Hanford Reach on the Columbia River in the early 1980's. This salmon run has been rebuilt through the implementation of the Vernita Bar agreement of mid 1980s combined with a hatchery program that incorporated biologically appropriate salmon that spawn naturally upon their return to the spawning beds. Today, the Hanford Reach fall chinook run is one of the healthiest runs in the basin. Supporting fisheries in Alaska, Canada, and the mainstem Columbia River, over 200,000 Fall Chinook destined for the Hanford Reach returned to the mouth of the Columbia River 2010.

In the Snake River Basin, fall chinook has been brought back from the brink of extinction. Listed as threatened under the Endangered Species Act, the estimated return of naturally-spawning Snake River fall chinook averaged 328 adults from 1986-1992. In 1994, fewer than 2,000 Snake River fall chinook returned to the Columbia River Basin. Thanks to the Nez Perce Tribe's modern supplementation program fall chinook are rebounding. Snake River fall chinook are well on their way to recovery and ESA delisting. Over 40,000 fall chinook made it past Lower Granite Dam in 2010. Over 10,000 of those fish were wild, nearly twice the previous record return since the dam was constructed in 1975.

Pacific Salmon Treaty Program: CRITFC supports the U.S. Section recommendation of \$11,603,000 for Pacific Salmon Treaty implementation. Of this amount, \$9,759,000 is for the Pacific Salmon Treaty base program with Alaska, Oregon, Idaho, Washington, and NOAA to share as described in the U.S. Section of the Pacific Salmon Commission's Budget Justification for FY 2012. In addition, we support \$1,884,000 as first provided in 1997 to carry out necessary research and management activities to implement the abundance based management approach of the Chinook Chapter to the Treaty. The recommended amount represents an increase of about \$4,100,000 for the Pacific Salmon Treaty program for the states to implement the provisions and management and technical changes adopted by the U.S. and Canada in 1999 and continuing in

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the 2009-2018 Agreement. These funds are subjected annually to a strict technical review process.

Pacific Coastal Salmon Recovery Program (PCSRF) / Watershed Restoration: Beginning in 1996, additional funding has been sought by the State of Alaska, the Pacific Northwest states, and the treaty tribes to serve critical unmet needs for the conservation and restoration of salmon stocks shared in these tribal, state, and international fisheries. The PCSRF program provides a significant role in accomplishing the goals of this shared effort. We recommend restoring the PCSRF FY2012 funding level to the FY2002 appropriated level of \$110 million. Long-term economic benefits can be achieved by making PCSRF investments on the ground to rebuild sustainable, harvestable salmon populations into the future.

The state and tribal co-managers have responded to concerns raised by Congress regarding accountability and performance standards to evaluate and monitor the success of this coast wide program. The co-managers have developed an extensive matrix of performance standards to address these concerns which includes the use of monitoring protocols to systematically track current and future projects basin-wide. Tribally sponsored watershed projects are based on the best science, are competently implemented and adequately monitored, and address the limiting factors affecting salmon restoration. Projects undertaken by the tribes are consistent with CRITFC's salmon restoration plan and the programmatic areas identified by Congress.

Department of Justice: The Justice Department maintains Tribal government-specific grant programs administered by the Office of Justice Programs, the Office of Community Oriented Policing Services and the Office on Violence Against Women. These programs are critically important to the Commission's member tribes. The importance of these programs was underscored by passage of the Tribal Law and Order Act, signed into law on July 29, 2010. Preserving the FY 2010 enacted budget for these programs is vital to maintaining law enforcement programs of the Commission and its member tribes. We also support the Yakama Nation request for a DOJ needs assessment grant in FY 2012.

In summary, the CRITFC and its four member tribes have developed the capacity and infrastructure to lead in restoring and rebuilding salmon populations of the Columbia Basin. Our collective efforts protect our treaty reserved fishing rights and we also partner with the non-Indian community to provide healthy, harvestable salmon populations for all citizens to enjoy. This is a time when increased effort and participation are demanded of all of us and we ask for your continued support of a coordinated, comprehensive effort to restore the shared salmon resource of the Columbia and Snake River Basins. We will be pleased to provide any additional information that this subcommittee may require.

CRITFC contact: Charles Hudson, (503) 731-1257, hude@critfc.org

Mr. FATTAH. Well, I want to thank you and the tribes involved for the great work that you are doing. Thank you very much.

Mr. WOLF [presiding]. Thank you very much for your testimony. Next witness will be Cowboy Charters, Michael Jennings.

FRIDAY, MARCH 11, 2011.

NATIONAL CATCH SHARE PROGRAM

WITNESS

MICHAEL W. JENNINGS, OWNER, COWBOY CHARTERS

Mr. JENNINGS. Hello, Chairman Wolf. Good morning to the committee.

My name is Michael Jennings. I am a charter boat owner and operator. I operate two federally permitted charter boats in the Gulf of Mexico.

And I have been in the charter industry for a little over 25 years and we provide a service in the Gulf to a little over a million anglers a year to provide access to the Gulf fisheries.

As you may know, several of the species critical to the recreational fishery had become depleted over time and even today under the recovery of these species, we are still subject to increasingly restrictive management measures that have caused shorter and shorter bag limits, shorter seasons, and causing a lot of strain on our fisheries and our fishing communities.

Fortunately there is a solution that can simultaneously provide increased access to the fishing resource while providing long-term conservation of those resources. That solution is catch shares. And I am in support of the \$54 million in the President's fiscal year 2012 budget for the National Catch Share Program.

The catch shares are a bottoms-up management process. They meet the biological goals and the management goals set forth by the Magnuson-Stevens Act and they also meet the economic goals of our industry and the much needed monies that come in through direct recreational fisheries for our coastal communities.

The one thing that I want to point out, I am going to make this short, I know you all have my full statement, is that all Catch Share programs have cost recovery measures. This is not a subsidy for an industry. This is an investment in an industry moving forward into the 21st century to use a management practice that fits the Magnuson-Stevens Act, not an antiquated practice that does not meet what Congress mandated that we do with these fisheries.

Under the Magnuson-Stevens Act, the Recreational Fishery Management Councils now have the option to implement Catch Share programs where the stakeholders and the fisheries want a program. Where I am at, it requires a 50 percent referendum to implement any kind of a Catch Share Program. That is the bottoms-up management process that I am talking about.

Unfortunately, a recent amendment passed by the House would strip the ability of the fishermen to implement any Catch Share Program even if the majority of the industry wanted this program.

I just would like to urge the subcommittee to support the \$54 million in the National Catch Share Program in fiscal year 2012

and to oppose any provisions that would prevent the Regional Councils from implementing these new programs or going forth with the current programs and pilot programs that are currently in place.

And I appreciate you all's time and the ability to speak in front of you.

[The information follows:]

**Testimony Submitted to the
Appropriations Committee
Subcommittee on Commerce, Justice, Science and Related Agencies
of the
U.S. House of Representatives
by
Capt. Mike Jennings, For-Hire Recreational Fisherman and
Owner of Cowboy Charters, Freeport, TX**

* * *

March 11, 2011

My name is Mike Jennings and I appreciate the opportunity to testify today in support of the \$54 million in funding for the National Catch Share Program in Fiscal Year 2012, and to express my opposition to any provision that would strip fishermen of the ability to decide for ourselves what types of programs are best suited to manage the fisheries in which we participate.

I have been a licensed charter boat captain fishing the Gulf of Mexico off Texas for over 25 years. I grew up fishing Texas's inshore and offshore waters and I am proud to make a living by taking my clients fishing and giving them access to the fisheries in the Gulf of Mexico. In fact, the for-hire industry in the Gulf of Mexico provides access to millions of fishermen every year.

As you know, several species of fish that are critical to the recreational fishing industry in the Gulf have become depleted and are subject to increasingly restrictive management measures. Fishing seasons have gotten shorter, size limits for the fish we can keep have gotten longer, and bag limits have gotten smaller. These factors make it very difficult for charter boat operators like me to stay in business. The service we provide to our clients is access to ocean fisheries, but in recent years government regulations have prevented us from providing this access. Either the seasons are closed, in which case going fishing is not even an option, or the size and bag limits are so restrictive that clients cannot justify the expense of going fishing. These increasingly stringent measures are blocking public access to fishery resources, and in the process hurting our businesses and local economies.

Fortunately, there is a solution that can simultaneously provide increased access to fishery resources while also providing for the long-term conservation of those resources. That solution is catch share programs. Under a catch share program, the amount of fish available to be caught is divvied up among the participants in that fishery, who can then decide when, where and how best to make use of their harvesting privileges. The participants also have a long-term stake in the fishery, the value of which increases as the fishery becomes more healthy and productive.

We have seen how effective catch share programs can be for the commercial sector in reducing bycatch, providing reliable and timely data needed to manage fisheries, extending fishing seasons and helping fishermen lower their operating expenses. Simply put, catch share programs have enabled commercial fishermen to earn more for their fish while spending less time to catch them. Under catch share programs, everyone wins – our fisheries are healthier, fishermen make more money, and consumers get better quality product.

Charter boat operators in the Gulf like me want to enjoy the same benefits from catch share programs that our counterparts in the commercial sector have experienced. For example, charter boat operators

could schedule their trips to coincide with tourism peaks instead of when the federal government says we can fish. We are now in the process of exploring a voluntary individual fishing quota (IFQ) pilot program for recreational fishing headboats that target red snapper. We believe that IFQ programs in the for-hire recreational sector could be the best way to achieve conservation objectives while helping all of us earn a better living. Designing an IFQ program for the for-hire fishery has its challenges, but this pilot program will help us begin to address those challenges.

I support the \$54 million in funding for the National Catch Share Program in FY12. Cutting this funding would reduce NOAA's ability to fund cooperative agreements with our state Parks and Wildlife Department. Now is the time to expand these types of programs to realize even greater benefits and to provide our fishing communities with the added flexibility that comes along with these types of programs.

Under the Magnuson-Stevens Act, the regional fishery management councils now have the option to implement a catch share program where the stakeholders in a fishery want such a program. In my region of the country – the Gulf of Mexico – any new IFQ program is subject to a referendum and must be approved by 50% of the participants in the fishery.

Unfortunately, a recent amendment passed by the House would strip the ability of fishermen to implement a catch share program, even if a majority of them voted for such a program. . It appears that some people are confusing a potential solution to the problem (catch shares), with the cause of the problem (the targeted species have been overfished). I do not understand why Congress would reduce the flexibility that exists in the law by taking one management tool away from us – especially a tool that has been proven more effective than all the others in improving the conservation and economics of our fisheries. Fishermen are already struggling from poor economic conditions – our clients simply have fewer resources to devote towards hiring people like me to take them fishing. Now we also have to contend with Congress taking away our options to manage our own fisheries. Now should be the time when Congress is giving us more tools to manage our fisheries, not less. We need all the options at our disposal.

I urge the Subcommittee to support the \$54 million for the National Catch Share Program in FY12 and to oppose any provision that would prevent the regional councils from implementing a new catch share program.

Thank you for the opportunity to provide my input on these important issues.

Mr. WOLF. Sure. Thank you very much.

Mr. FATTAH.

Mr. FATTAH. I appreciate what you do.

Did you say you had two boats and you did over a million—

Mr. JENNINGS. No. Our industry does.

Mr. FATTAH. Oh, industry.

Mr. JENNINGS. Right. Our industry. I apologize if I confused you.

Mr. FATTAH. I was thinking this was a biblical proportion. You know what I mean?

Thank you very much.

Mr. JENNINGS. Thank you.

Mr. WOLF. Mr. Culberson, yes.

Mr. CULBERSON. Very quickly, Mr. Jennings—

Mr. JENNINGS. Yes, sir.

Mr. CULBERSON [continuing]. I wanted to ask what, if any, has been the impact on the quality of the fish. Was there any damage to the fishing stocks as a result of the blowout?

Mr. JENNINGS. Not really. Actually, where I am at, I am located 40 miles south of Galveston, Texas, so I was not directly impacted by the oil spill, but I am fairly, yes, sir, I am fairly active throughout the—

Mr. CULBERSON. Oh, excuse me. So you are Galveston?

Mr. JENNINGS. Yes, sir. I am south of Galveston, 40 miles south of Galveston. Where I am at, I am also pretty active with the councils and through the management processes, a couple of advisory panels for our Gulf Council. So I have been active in that. And, actually, the science so far and the sampling that has been taken has been very encouraging. Very little has been found within our fish and our fisheries.

Mr. CULBERSON. Throughout the entire Gulf?

Mr. JENNINGS. Throughout the entire Gulf, it has been excellent.

Mr. CULBERSON. So it is fair to say there is virtually no impact on fishing stocks from the oil spill?

Mr. JENNINGS. I think that—

Mr. FATTAH. But there was an impact on the industry.

Mr. JENNINGS. There was a huge impact on the industry, yeah, yeah.

Mr. CULBERSON. But the fish themselves—

Mr. JENNINGS. I think it is too early to say if there is going to be any long-term impacts. We saw some cobia migration pattern changes due to the lack of fishing effort and the closures up north.

Mr. CULBERSON. Right.

Mr. JENNINGS. There was no one fishing for them, so we do not know if it hurt the fish or they just did not migrate that year.

Mr. CULBERSON. For the record, there appears to be no impact on the fish—

Mr. JENNINGS. Correct, yes.

Mr. CULBERSON [continuing]. The ecosystem? Mother nature absorbed whatever oil there was rather rapidly and—

Mr. JENNINGS. Yes, sir.

Mr. CULBERSON [continuing]. They are thriving?

Mr. JENNINGS. Very correct, yes, sir.

Mr. WOLF. Thank you.

Mr. JENNINGS. Thank you.

Mr. WOLF. Next witness will be Vaisala, Incorporated, Scott Sternberg.

FRIDAY, MARCH 11, 2011.

**NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION 2012 BUDGET**

WITNESS

SCOTT STERNBERG, PRESIDENT, VAISALA, INCORPORATED

Mr. STERNBERG. Mr. Chairman, Members of the subcommittee, thank you for the opportunity to testify today.

My comments will focus primarily on a strong and vibrant National Oceanic and Atmospheric Administration budget for fiscal 2012.

My name is Scott Sternberg and I am president of Vaisala, Incorporated. Vaisala is a global leader in environmental and industrial management systems specifically focused on weather and climate observation equipment.

In 1998, the National Academy of Sciences provided a report entitled the Fair Weather Report which identified and brought to the attention of the general public the importance of a three-tiered weather enterprise system comprised of the public sector, the private sector, and academia.

Vaisala strongly represents as does many other companies here in a \$2 billion industry that third arm in the private sector.

I am appearing today both as president of Vaisala, Incorporated as well as a member of the Friends of the NOAA Coalition, the Friends of NOAA Coalition. The Friends of NOAA are supporters, stakeholders, and partners of NOAA that educate and inform interested audiences about the full range of NOAA activities so that the agency can carry out its responsibilities relative to our oceans, coasts, fisheries, weather, and climate.

Vaisala strongly supports the funding requested by the Administration for NOAA in fiscal 2012. The \$5.5 billion budget requested by NOAA falls short of what truly is needed by NOAA to carry out its important missions, but we also appreciate that federal spending must be restrained as part of a broader effort to put this Nation's fiscal house in order.

Referencing yet another National Academy report that was released late last year entitled When Weather Matters, the report predicts that there is approximately \$31 and a half billion of societal impacts due to weather-related incidents. Compared to the \$5.1 billion it costs from a business perspective, a six-to-one return on investment is quite a good investment for anyone involved.

This information does not include, however, the benefits to both government and industry which would be compounded on top of that figure.

To list a couple of facts, between 1980 and 2009, 96 weather disasters in the United States caused at least \$1 billion in damages with total losses exceeding \$700 billion.

Between 1999 and 2008, there was an average of 629 direct weather fatalities per year. The annual impact of adverse weather

on our Nation's highway systems are staggering, 1.5 million related crashes, 7,500 fatalities, and over 700,000 injuries are experienced on our roadways.

This in total adds up to \$42 billion in economic losses. In addition, in our airspace, \$4.2 billion annually is lost due to weather-related air traffic delays. Better forecasts and warnings can and do reduce these numbers, but much more can be done.

In the last 15 years, we have seen a marked increase in the progress of understanding and observing and predicting the weather. At the same time, the U.S. has failed to match or surpass progress in numerical weather prediction achieved by other nations and failed to realize our own production potential.

As a result, the Nation is not mitigating the cost of weather impacts to the fullest extent possible. Such mitigation costs are but a fraction of the cost of the weather impacts themselves.

I offer the savings society may accrue by reducing the cost of weather impacts as one rationale for making a strong investment in NOAA and making this a high priority for the subcommittee.

Thank you very much.

[The information follows:]

Testimony of Mr. Scott Sternberg
President, Vaisala, Inc.
Louisville, Colorado
Before the
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
House of Representatives
Washington, D.C.
March 11, 2011

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to testify today as a witness in support of a strong and vibrant National Oceanic and Atmospheric Administration (NOAA).

My name is Scott Sternberg and I am the President of Vaisala, Inc. Vaisala is a global leader in environmental and industrial measurement. Building on more than 70 years of experience, Vaisala contributes to a better quality of life by providing a comprehensive range of innovative observation and measurement products and services for meteorology, weather critical operations and controlled environments. Vaisala employs over 1400 professionals worldwide and 350 in the U.S.

I am appearing today as both President of Vaisala, Inc. and as a member of the Friends of NOAA Coalition. The Friends of NOAA are supporters, stakeholders and partners of NOAA that educate and inform interested audiences about the full range of NOAA activities so that the agency can carry out its responsibilities relative to our oceans and coasts, fisheries, weather, and climate.

NOAA is one of the premier science-based agencies in the Federal Government, providing decision makers with critically important data, products and services that promote and enhance the nation's economy, jobs, security, environment, and quality of life. For example, it was NOAA, and their partners in the weather enterprise that enabled the delivery of accurate and timely information regarding the impending landfall of Hurricane Katrina in 2005. This one set of weather forecasts alone literally saved tens of thousands of lives.

Vaisala strongly supports the funding requested by the Administration for NOAA in FY 2012. The \$5.5 billion budget request for NOAA falls short of what is truly needed by NOAA to carry out its important missions but we also appreciate that federal spending must be restrained as part of a broader effort to put this Nation's fiscal house in order.

With fiscal restraint in mind, I appreciate the difficulty this Subcommittee faces in terms of allocating very scarce public resources among and between important yet very different programs under your jurisdiction. Deciding between law enforcement, the space program, and the census bureau, for example, seems to be impossibly difficult. Yet, on the matter of NOAA – let me suggest by using the weather enterprise as an example, the kinds of costs or expenses we as a society might be able to avoid, if we adequately supported NOAA.

A recent report by the National Academy of Sciences entitled, *When Weather Matters*, says the goal of weather prediction is to provide information to people and organizations that can be used to reduce weather-related losses and enhance societal benefits. In economic terms, the benefit of the investment in public weather forecasts and warnings is substantial: the estimated annualized benefit to the public is about \$31.5 billion, compared to the \$5.1 billion cost of generating the information; this estimate does not include the comparable benefits to government and industry.

Between 1980 and 2009, 96 weather disasters in the U.S. caused at least \$1 billion in damages, with total losses exceeding \$700 billion. Between 1999 and 2008, there was an average of 629 direct weather fatalities per year. The annual impact of adverse weather on the national highway system is staggering: 1.5 million weather-related crashes with 7,400 deaths, more than 700,000 injuries, and \$42 billion in economic losses. In addition, \$4.2 billion is lost each year as a result of weather-related air traffic delays.

Better forecasts and warnings can and do reduce these numbers, but much more can be done. The past 15 years have seen marked progress in observing, understanding, and

predicting weather. At the same time, the U.S. has failed to match or surpass progress in numerical weather prediction achieved by other nations and failed to realize our own prediction potential. As a result, the nation is not mitigating the cost of weather impacts to the extent possible. Such mitigation costs are but a fraction of the cost of weather impacts. I offer the savings society may accrue by reducing the cost of weather impacts as one rationale for making a strong investment in NOAA a subcommittee priority for FY 2012 and beyond.

I would imagine that each of the other areas of the NOAA portfolio could make a similar case – that an adequate federal investment would provide society with both cost reductions and benefits that far exceed the incremental investment of scarce public resources. I hope the Subcommittee – even when confronted with the severe constraints of today’s budget environment – will see that by investing in NOAA, the public payoff will be substantial, valuable, and, literally, life saving.

I thank you for the opportunity to present this testimony and I would be happy to answer any questions the Members may have.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah is not there, so do you have anything?

Mr. CULBERSON. No thank you.

Mr. WOLF. Okay. Great.

Thank you very much.

Mr. STERNBERG. Thank you.

Mr. WOLF. We are going to go by the order, but if you would kind of come in, we will bounce back and forth. Since there are votes and there are people who have airplanes, we do not want to waste any time.

Geological Society of America, director for geoscience policy, Dr. Schiffries; is that correct?

Mr. SCHIFFRIES. That is correct.

Mr. WOLF. Go ahead.

FRIDAY, MARCH 11, 2011.

NATIONAL SCIENCE FOUNDATION APPROPRIATIONS

WITNESS

CRAIG M. SCHIFFRIES, DIRECTOR FOR GEOSCIENCE POLICY, GEOLOGICAL SOCIETY OF AMERICA

Mr. SCHIFFRIES. Thank you, Mr. Chairman and Members of the committee, for this opportunity to testify today in support of increased appropriations for the National Science Foundation.

My name is Craig Schiffries and I serve as director of Geoscience Policy for the Geological Society of America.

Today's historic earthquake in Japan emphatically demonstrates the need for increased NSF investments in fundamental earth science research that stimulates innovations and natural hazards monitoring and warning systems that will reduce losses from future natural hazards.

The Geological Society of America supports strong and growing investments in earth science research and education at NSF and other federal agencies. Substantial increases in federal funding for earth science research and education are needed to ensure the health, vitality, and security of society and for stewardship of earth.

Science and technology are engines of economic prosperity, environmental quality, and national security. Federal investments in scientific research pay substantial dividends.

According to the National Academies' report *Rising Above the Gathering Storm*, economic studies have shown that as much as 85 percent of measured growth in U.S. per capita income were due to technological change. And, of course, technological change is driven by science and technology.

However, the Academies issued a new report saying it would be impossible not to recognize the great difficulty of carrying out the *Gathering Storm* recommendations such as doubling the research budget in today's fiscal environment.

However, it is emphasized that actions such as doubling the research budget are investments that will need to be made if the Nation is to maintain the economic strength to provide for its citizens' healthcare, Social Security, national security, and more.

One seemingly relevant analogy is that a non-solution to making an overweight aircraft flight worthy is to remove an engine. Likewise, the National Commission on Fiscal Responsibility and Reform headed by Erskine Bowles and Alan Simpson said we must invest in high-value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs.

I would like to focus on just two examples of earth science research. Natural hazards such as earthquakes, tsunamis, volcanic eruptions remain a major cause of fatalities and economic losses worldwide and improved scientific understanding of geologic hazards will reduce future losses through better forecasts of their occurrence and magnitude.

The historic earthquake in Japan this morning, the devastating earthquake in Haiti last year that killed more than 200,000 people and the small volcanic eruptions in Iceland that disrupted global air travel in April 2010 emphatically demonstrate the need for increased NSF investments in fundamental earth science research that stimulate innovations in natural hazards monitoring and warning systems.

Secondly, energy and mineral resources are critical to the function of society and to national security and have positive impacts on local, national, and international economies and quality of life.

I would like to focus on important linkages between mineral and energy resources. For example, widespread deployment of new energy technologies can reduce our dependence on foreign oil, reduce greenhouse gas emissions, and mitigate climate change.

However, many emerging technologies such as wind turbines, solar cells, and electric vehicles depend on rare earth elements and other rare elements that currently lack diversified sources of supply.

China accounts for 95 percent of world production of rare earth elements, although it has only 36 percent of identified world resources.

Mr. CULBERSON. Good point. I want to make sure the chairman heard that. Could you repeat that?

Mr. SCHIFFRIES. Absolutely. China accounts for 95 percent of world production of rare earth elements, although it has only 36 percent of identified world reserves. A renewed federal commitment to innovative research and education on minerals is needed to address these issues.

The America COMPETES Act set the stage to double the NSF budget over seven years. Despite overwhelming bipartisan support for the initial passage of the America COMPETES Act, appropriations fell short of the doubling path during the regular appropriations bills for fiscal years 2007 to 2011.

The Geological Society of America recommends an appropriation of \$7.76 billion for NSF in fiscal year 2012. This funding level would uphold the President's budget request and is consistent with the authorized funding level under the newly-reauthorized America COMPETES Act.

Thank you very much for the opportunity to testify today.
[The information follows:]



Testimony of the
Geological Society of America
Dr. Craig M. Schiffries
Director for Geoscience Policy

Regarding the
National Science Foundation
FY 2012 Budget Request

To the
U.S. House of Representatives
Committee on Appropriations
Subcommittee on Commerce, Science, Justice, and Related Agencies
March 11, 2011

Summary

The Geological Society of America urges Congress to appropriate at least \$7.767 billion for the National Science Foundation (NSF) in fiscal year 2012, an increase of \$894 million or 13.0 percent compared with the FY 2010 enacted level. This funding level would uphold the President's FY 2012 budget request for the National Science Foundation and is consistent with the FY 2012 authorized level of \$7.800 billion under the America COMPETES Act.

The Geological Society of America supports strong and growing investments in earth science research and education at NSF and other federal agencies. Substantial increases in federal funding for earth science research and education are needed to ensure the health, vitality, and security of society and for stewardship of Earth. These investments are necessary to address such issues as energy resources, water resources, climate change, and natural hazards. Earth science research forms the basis for training and educating the next generation of earth science professionals.

The Geological Society of America, founded in 1888, is a scientific society with over 23,000 members from academia, government, and industry in all 50 states and more than 90 countries. Through its meetings, publications, and programs, GSA enhances the professional growth of its members and promotes the geosciences in the service of humankind. GSA encourages cooperative research among earth, life, planetary, and social scientists, fosters public dialogue on geoscience issues, and supports all levels of earth science education.

SCIENCE ■ STEWARDSHIP ■ SERVICE

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Rationale

Science and technology are engines of economic prosperity, environmental quality, and national security. Federal investments in scientific research pay substantial dividends. According to the National Academies' report *Rising Above the Gathering Storm* (2007), "Economic studies conducted even before the information-technology revolution have shown that as much as 85% of measured growth in U.S. income per capita was due to technological change." In 2010, the National Academies issued an updated report, *Above the Gathering Storm, Revisited*, which says:

It would be impossible not to recognize the great difficulty of carrying out the *Gathering Storm* recommendations, such as doubling the research budget, in today's fiscal environment...with worthy demand after worthy demand confronting budgetary realities. However, it is emphasized that actions such as doubling the research budget are investments that will need to be made if the nation is to maintain the economic strength to provide for its citizens healthcare, social security, national security, and more. One seemingly relevant analogy is that a non-solution to making an over-weight aircraft flight-worthy is to remove an engine.

Likewise, the National Commission on Fiscal Responsibility and Reform, headed by Erskine Bowles and Alan Simpson, said:

Cut and invest to promote economic growth and keep America competitive. We should cut red tape and unproductive government spending that hinders job creation and growth. At the same time, we must invest in education, infrastructure, and high-value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs.

The earth sciences are critical components of the overall science and technology enterprise. Growing investments in earth science research are required to stimulate innovations that fuel the economy, provide security, and enhance the quality of life. Substantial increases in federal funding for earth science research are needed to ensure the health, vitality, and security of society and for Earth stewardship. Earth science research provides knowledge and data essential for developing policies, legislation, and regulations regarding land, mineral, energy, and water resources at all levels of government.

Broader Impacts of Earth Science Research and Education

It is critically important to significantly increase NSF's investments in earth science research and education to meet challenges posed by human interactions with Earth's natural system and to help sustain these natural systems and the economy. Increased investments in NSF's earth science portfolio are necessary to address such issues as natural hazards, energy, water resources, and climate change.

- Natural hazards – such as earthquakes, tsunamis, volcanic eruptions, floods, droughts, and hurricanes – remain a major cause of fatalities and economic losses worldwide. An improved scientific understanding of geologic hazards will reduce future losses through better forecasts of their occurrence and magnitude. The devastating earthquake in Haiti on January 12, 2010 that killed more than 200,000 people, the damaging earthquake in New Zealand on February 21, 2011, and the small volcanic eruptions in Iceland that disrupted global air travel in April 2010 emphatically demonstrate the need for increased NSF investments in fundamental earth science research that stimulate innovations in natural hazards monitoring and warning systems.
- Energy and mineral resources are critical to the functioning of society and to national security and have positive impacts on local, national, and international economies and quality of life. These resources are often costly and difficult to find, and new generations of geoscientists need the tools and expertise to discover them. In addition, management of their extraction, use, and residue disposal requires a scientific approach that will maximize the derived benefits and minimize the negative effects. Improved scientific understanding of these resources will allow for their better management and utilization while at the same time considering economic and environmental issues. This is particularly significant because shifting resource demands often reframe our knowledge as new research-enabling technologies become available. For example, widespread deployment of clean energy technologies can reduce greenhouse gas emissions, mitigate climate change, and reduce dependence on foreign oil. Many emerging technologies – such as wind turbines, solar cells, and electric vehicles – depend on rare earth elements and other scarce elements that currently lack diversified sources of supply. China accounts for 95 percent of world production of rare earth elements although it has only 36 percent of identified world reserves (U.S. Geological Survey, 2010). A renewed federal commitment to innovative research and education on minerals is needed to address these issues.
- The availability and quality of surface water and groundwater are vital to the well being of both society and ecosystems. Greater scientific understanding of these critical resources—and communication of new insights by geoscientists in formats useful to decision makers—is necessary to ensure adequate and safe water resources for the future. NSF’s new program solicitation on water sustainability and climate is designed to address major gaps in our basic understanding of water availability, quality, and dynamics, and the impact of both a changing and variable climate, and human activity, on the water system.
- Forecasting the outcomes of human interactions with Earth’s natural systems, including climate change, is limited by an incomplete understanding of geologic and environmental processes. Improved understanding of these processes in Earth’s history can increase confidence in the ability to predict future states and enhance the prospects for mitigating or reversing adverse impacts to the planet and its inhabitants.
- Research in earth science is also fundamental to training and educating the next generation of earth science professionals.

Increased NSF investments in earth science education at all levels are needed because knowledge of the earth sciences is essential to science literacy and to meeting the environmental and resource challenges of the twenty-first century.

Earth science research and education should be a component of broader initiatives to increase overall public investments in science and technology. For example, earth science research should be included in a recommendation by the National Academies to “increase the federal investment in long-term basic research by 10% each year over the next 7 years...” (*Rising Above the Gathering Storm*, 2007). Likewise, implementation of the America COMPETES Act, which authorizes a doubling of the budgets of key science agencies in seven years, should encompass earth science research and education.

Extraordinary Scientific Opportunities in the Earth Sciences

In October 2009, NSF’s Advisory Committee for Geosciences released a major report, *GEO Vision: Unraveling Earth’s Complexities Through the Geosciences*. “Society stands at a crossroads. With the growing problems of resource depletion, energy sustainability, environmental degradation, and climate change, we wonder if protecting the health of the planet while achieving widespread economic prosperity can become a reality,” the report says.

The NSF report provides a vision for the future of research in the geosciences as focused on fostering a sustainable future through a better understanding of our complex and changing planet. The report articulates a path to achieving its vision. It recommends a new emphasis on interdisciplinary research in order to achieve reasoned and scientifically sound insights for policy makers. The challenges ahead for the geosciences, the report says, are understanding and forecasting the behavior of a complex and evolving Earth; reducing vulnerability and sustaining life; and growing the geosciences workforce of the future. Substantial increases in resources are needed to meet these challenges.

Extraordinary scientific opportunities in the earth sciences have been summarized in a series of reports, including:

- *Understanding Earth’s Deep Past: Lessons for Our Climate Future* (National Research Council, 2011)
- *Landscapes on the Edge: New Horizons for Research in Earth Surface Processes* (National Research Council, 2010)
- *GEO Vision: Unraveling Earth’s Complexities Through the Geosciences* (NSF Advisory Committee for Geosciences, 2009)
- *Seismological Grand Challenges in Understanding Earth’s Dynamic Systems* (Incorporated Research Institutions for Seismology, 2009)
- *Origin and Evolution of Earth: Research Questions for a Changing Planet* (National Research Council, 2008)
- *Hydrology of a Dynamic Earth* (Consortium of Universities for the Advancement of Hydrologic Science, 2007)

- *Future Research Directions in Paleontology* (Paleontological Society and Society for Vertebrate Paleontology, 2007)

NSF's Earth Sciences Division regularly receives a large number of exciting research proposals that are highly rated for both their scientific merit and their broader impacts, but many meritorious projects have not been funded due to budget constraints. Additional investments in earth science research can have significant positive impacts on society.

EarthScope is producing transformative science while being developed on time and on budget. When this major project was being developed, it was widely expected that the NSF budget would experience a sustained period of robust growth as indicated by the NSF Authorization Act of 2002 and the America COMPETES Act. If NSF's budget growth is not robust, some members of the earth science community are concerned that EarthScope expenses could put downward pressure on budgets and success rates for other time-sensitive research opportunities in the earth sciences.

Conclusion

The America COMPETES Act set the stage to double the NSF budget over seven years. Despite overwhelming bipartisan support for the America COMPETES Act, appropriations for NSF fell short of the authorized doubling path in the regular appropriations bills for fiscal years 2007-2011. NSF received \$3.0 billion in economic stimulus funds under the American Recovery and Reinvestment Act of 2009. This one-time injection of funding was very helpful, but sustained growth in NSF's budget is needed to achieve the objectives of the America COMPETES Act.

The Geological Society of America recommends an appropriation of at least \$7.767 billion for NSF in fiscal year 2012, an increase of \$894 million or 13.0 percent compared with the enacted level for FY 2010. This funding level would uphold the President's FY 2012 budget request of \$7.767 billion for the National Science Foundation and is consistent with authorized funding level of \$7.800 billion under the America COMPETES Act.

The Geological Society of America is grateful to the House Appropriations Subcommittee on Commerce, Science, Justice, and Related Activities for its past leadership in increasing investments in the National Science Foundation and other science agencies. Thank you for your thoughtful consideration of our recommendations.

For additional information or to learn more about the Geological Society of America – including GSA Position Statements on water resources, energy and mineral resources, natural hazards, climate change, and public investment in earth science research – please visit www.geosociety.org or contact Dr. Craig Schiffries at cschiffries@geosociety.org.

Mr. WOLF. Doctor, thank you very much.

Before we go to Mr. Fattah, we agree with you. I cannot speak for everyone here, but on this issue, we agree with you.

Mr. FATTAH. We speak for me, Mr. Chairman, and my side.

Mr. WOLF. Okay. We agree with you. I may see something that maybe they do not agree with, but——

Mr. FATTAH. We do agree with you.

Mr. WOLF [continuing]. I would plus it up more. I have heard the first panel. Is UVA here? UVA put out a thing kind of criticizing the committee for cutting some programs.

The universities and all of your associations are going to have to urge the President to come forward and adopt the Erskine Bowles-Simpson Commission which I will vote for if it comes up or what Senator Mark Warner, a Democrat, and Tom Coburn, a Republican, and Saxby Chambliss, and Dick Durbin are doing.

If this is not done by the end of this year, all of your programs will be drastically cut. I do not want to see them cut. This committee is given an allocation and it is painful to reach it.

So I agree with you. China is buying up all over Africa doing certain things. I completely agree. You do not have to convince me—and if I agree, he triply agrees. He is the science guy for the committee. But we must deal with the entitlements this year so that we can then free up the resources to do what we have to do.

So we are with you. I would urge all of your associations to do a letter, say that we would urge the White House to come forward with Erskine, with Bowles, with Simpson, with Mark Warner, with Saxby Chambliss, and Tom Coburn to come together to deal with this. We must deal with it.

The stock market dropped the other day, dropping again today. People are beginning to see what is taking place. Math, science, physics, chemistry, biology, investing in the sciences is the way to get us out of this and create a renaissance, but we have got to get control of the entitlements.

Mr. Fattah.

Mr. FATTAH. I agree with the chairman and I also agree that the President of the United States needs to be at the very forefront position in our country for continued world leadership. And this is an important area. Notwithstanding how we got ourselves into this mess, for which I think both parties share——

Mr. WOLF. I agree.

Mr. FATTAH [continuing]. Equal blame, we have to lead now, not just the President, but the Congress. And I would add the fact that what we are dealing with now is the one and a half percent cut, if we would take the majority's viewpoint, Democrats are somewhere around one percent. Neither of them address the trillion and a half deficit that we have this year or the \$14 trillion debt.

The President's Commission, and I would vote for Erskine Bowles and Simpson's plan, but that plan does not balance the budget in ten years. It takes us to \$350 billion in deficit. We need an aggressive plan to get on the right fiscal footing because we have to make these investments or we are going to be stewards of a country in decline. That is not the country that I want to be a steward or have any responsibilities for. We want to lead and, therefore, we have to make these investments.

Thank you very much.

Mr. CULBERSON. Mr. Chairman—

Mr. WOLF. Mr. Culberson.

Mr. CULBERSON [continuing]. If I may very quickly, and we are all arm in arm in this in our support for the sciences, and I think if I may, Mr. Chairman and Mr. Fattah, it looks like we have got a lot of scientific organizations in the room, National Ecological Observatory is next, I think they are here, I hope.

Mr. SCHIMEL. Yes, sir.

Mr. CULBERSON. The Federation of American Societies for Experimental Biology, are they here? We have got the Federation. It is the University of California Berkeley, American Mathematical Society, plant biologists, science, Mathematical Association of America.

Scientists as a general rule have not ever been active in pushing for support for the sciences and we all love you guys. We are devoted to you, but traditionally you—and we love you, but you come down and make the request and then there is no follow-up with Members of Congress. There are no visits. There are no letters. There are no e-mails. There is no organized effort.

You are going to have to do that now more than ever to protect not just the National Science Foundation but, frankly, the NASA and the NOAA funding for the sciences because of the entitlement problem Mr. Wolf is correctly focused on is so bad.

The way to think about it, very quickly, is if we in our private lives set aside our mortgage payment, just automatically made sure that whatever your income is, you set aside the mortgage before you even budget for anything else, everybody does that.

If you consider America's entitlement programs, Social Security, Medicare, Medicaid, interest on the national debt, or veterans as America's mortgage payment, the mortgage payment consumes a hundred percent of our income.

In fact, at midnight, Mr. Chairman, we calculated—a UVA graduate who is about to get married, I am going to lose her, she does a spectacular job—but my brilliant UVA graduate calculates that at midnight on the first day of the fiscal year—Kristin—we have already borrowed \$105 billion? At midnight on the first day of the fiscal year, America is already \$105 billion in debt because the entitlement programs are consuming a hundred percent. Every penny that comes into the Treasury, Mr. Chairman, goes right out the back door to pay for the entitlement programs.

So if we do not, as the chairman said, deal with it immediately, aggressively, begin to rein in the growth of the entitlement programs, there is nothing left. I mean, America really is—we could become Spain or Greece. It is very scary.

So we are with you. We love you. We support you, but please get active. There is a reason the Jewish community is so strong in America. They are a hundred percent registered to vote and they are a hundred percent of them out there all the time. Pick any really successful group of people that make a big impact politically based on their numbers, it is because they are all organized, they all register to vote, and they all make it real clear what is going to happen on election day. And you need to do the same thing. Essentially pretend you are the Jewish community.

Mr. SCHIFFRIES. We will be sure to do more as a scientific community. I will send you invitations to the 16th annual science, engineering, technology congressional visits days coming up in April and there will be about 250 scientists from across the country making visits to their congressional delegation. And then in May, we have the Coalition for National Science Funding's 17th annual reception, I think it is, and we will hope to get a good turnout there.

Mr. CULBERSON. There are two messages, though, and forgive me. And I will not do this to the other witnesses, Mr. Chairman, because I know we have got a lot of folks to come in.

Number one, of course advocate for increases in science funding, but, number two, please follow the chairman's advice and Mr. Fattah's advice; that is, you are also advocating that we have simply got to get the debt under control and that means getting the entitlements under control.

Mr. SCHIFFRIES. Absolutely.

Mr. CULBERSON. Thank you.

Mr. SCHIFFRIES. Thank you very much.

Mr. WOLF. Thanks, Mr. Culberson.

Thank you, sir.

Next witness, the National Ecological Observatory Network, Dr. David Schimel.

FRIDAY, MARCH 11, 2011.

NATIONAL SCIENCE FOUNDATION 2012 BUDGET

WITNESS

DAVID SCHIMEL, CHIEF EXECUTIVE OFFICER, NATIONAL ECOLOGICAL OBSERVATORY NETWORK, INC.

Mr. SCHIMEL. Chairman Wolf, Ranking Member Fattah, and Members of the subcommittee, thank you for this opportunity to testify.

My name is Dr. David Schimel. I am CEO of NEON, Inc., the National Ecological Observatory, Incorporated, which is an implementing organization supported by the National Science Foundation.

I appreciate the opportunity to discuss funding for the NSF and the National Ecological Observatory which is part of NSF's fiscal year 2012 budget request and deeply appreciative of the support this subcommittee has provided NSF and NEON in previous years and certainly hope that that will continue.

The funding in this year will continue the construction of the National Ecological Observatory consistent with the schedule developed by the NSF over the previous five years including the full major research equipment and facilities construction account review cycle leading to National Science Board approval last year.

The NSF is charting an exciting course, broadening the scope of science with enhanced observational capabilities, managing the extremely large amounts of data produced by these new observational tools and transforming this data into knowledge that provides both basic science and important applications for the growth of our society.

The new NSF director describes this journey as entering into an era of observation and data and information. And at NEON, we applaud NSF for taking proactive steps towards a vision where the creative capacities of private industry, academia, and government have unfettered access to data and information generated through targeted investments at the frontiers of science.

This vision also recognizes the growing marketplace for access to environmental and scientific information to aid those with resource management responsibilities at local, state, regional, and national levels.

NEON belongs to a class of NSF observatories that contribute to that vision. NEON provides advanced infrastructure for the study and the analysis of living systems at regional to continental scales. These living systems that we depend on are experiencing some of the greatest rates of change caused by multiple changes in the environment both human driven and natural. These changes affect ecosystems, air quality, water resources, agriculture, and other goods and services that living organisms provide.

Understanding how these changes impact our natural resources requires an integrated, multi-scaled system to detect, understand, and forecast changes so that citizens and managers of national resources can act on those forecast changes.

NEON will be an advanced network system of 60 sites plus airborne assets across the continent to monitor the pulse of our Nation's ecosystems and it represents the first scientific enterprise to measure a suite of hundreds of variables in the same manner across an entire continent.

Data provided by the observatory will be available freely for science, education, and decision support purposes.

Environmental observatories like NEON represent targeted investments in research infrastructure that will maintain U.S. leadership in linking research to national challenges in managing natural resources.

There is great synergism between this program and other major NSF initiatives such as the science, engineering, and education for sustainability and the cyber infrastructure framework for 21st century science.

I recognize the severe budget constraints facing the Congress and that you all have just spoken so eloquently on and I ask you to think of NEON as a key part of the investment strategy in research and education that will fuel the Nation's long-term competitiveness and innovation strategy.

Thank you for the opportunity to appear before you today and, of course, I would be happy to answer any questions.

[The information follows:]

Testimony of Dr. David Schimel
Chief Executive Officer, National Ecological Observatory Network (NEON), Inc.
before the
UNITED STATES HOUSE OF REPRESENTATIVES
Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
on
The National Science Foundation's (NSF)
Major Research Equipment and Facilities Construction (MREFC) NEON Project
March 11, 2011

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee, thank you for the opportunity to testify. My name is Dr. David Schimel, CEO of NEON, Inc. I appreciate the opportunity to discuss funding for the National Science Foundation and the National Ecological Observatory Network (NEON) which is part of NSF's FY12 Budget Request. We are deeply appreciative of the support this Subcommittee has provided NEON in previous years and hope it will continue as you consider the FY 12 budget request for the Major Research Equipment and Facilities Construction account in the amount of \$224.7M. This funding will continue the construction of NEON consistent with the schedule developed by the NSF over a five-year period, including the full MREFC review cycle leading to National Science Board review last year.

NSF is charting an exciting course, broadening the scope of science with enhanced observational capabilities, managing the data produced by new observational tools, and transforming data into knowledge. NSF Director Suresh describes this journey as entering into an "Era of Observation" and an "Era of Data and Information". We applaud NSF for taking proactive steps towards a vision where the creative capacities of private industry, academia, and government have unfettered access to data and information generated through targeted investments at the frontiers of science. That vision also recognizes the growing marketplace for access to environmental information to aid those with resource management responsibilities at the local, state, regional and national levels.

NEON belongs to a class of NSF environmental observatories that contributes to that vision. NEON is an advanced research infrastructure for the study and analysis of the biosphere at regional to continental scales. Living systems are experiencing some of the greatest rates of change caused by multiple changes in the environment, both human-driven and natural. These changes affect ecosystems, air quality, water resources, agriculture, and other goods and services. Understanding how these changes impact our natural resources requires a fully integrated, multi-scale system to detect, understand, and forecast changes. NEON is an advanced networked system of 60 sites plus airborne assets across the continent that monitors the pulse of the Nation's ecosystem. NEON represents the first scientific enterprise to measure a carefully selected suite of hundreds of variables in the same manner across an entire continent. Data collected by the Observatory will be provided free over the web for science, education, and decision-support purposes. Just as weather models are continually improved with data from atmospheric and ocean sensors, scientists and resource managers require data at various scales of time and space to improve forecast models of complex natural systems that are intimately connected with the human enterprise. NEON is also designed to enable the integration of ground, airborne, and space-based data, giving this country an unprecedented means to assess ecosystem health at very high resolutions.

Environmental observatories like NEON represent targeted investments in research infrastructure that will maintain U.S. leadership in linking research to national challenges. There is great synergy between enhanced observational capabilities and other NSF initiatives like the Science, Engineering, and Education for Sustainability (SEES) and the Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21) portfolios. Such initiatives build the capacity to empower individuals and enterprises with the tools, data, and information that maintain the health of the environmental sciences broadly described and support informed environmental decision-making. Both objectives are vital contributions to our economic growth and environmental health.

I recognize the severe budget constraints facing the Congress. I ask you to think of NEON as key part of the Nation's investment strategy in research and education that will fuel the Nation's long-term competitiveness and innovation agenda.

Thank you for the opportunity to appear before you today. I would be happy to answer any questions you might have.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. I agree with the witness and thank you for your testimony.

Mr. SCHIMEL. Thank you very much, Mr. Fattah.

Mr. WOLF. Next witness will be Federation of American Societies for Experimental Biology, Dr. William Talman.

FRIDAY, MARCH 11, 2011.

NATIONAL SCIENCE FOUNDATION 2012 BUDGET

WITNESS

WILLIAM T. TALMAN, M.D., PRESIDENT, FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

Dr. TALMAN. Chairman Wolf, Mr. Fattah, Members of the committee and staff, first of all, thank you very much for the opportunity to testify.

My name is Bill Talman. I am a biomedical scientist and neurologist who practices at the University of Iowa.

I come before you to propose that the budget for the National Science Foundation or NSF for 2012 be set at \$7.8 billion. That particular figure is consistent with the President's budget as well as that from the bipartisan America COMPETES Reauthorization Act of 2010.

There is a general agreement that our Nation's future is inextricably linked to its capacity for innovation. That capacity demands that we have an educated populous, a cadre of world-class scientists and engineers, a well-developed research infrastructure capable of supporting competitive research projects, and indeed federal funding for those projects.

There has been broad bipartisan support which we applaud for this increased investment in science and technology including a consensus for the proposal to double the NSF budget by 2016. Cutting investments in research on the other hand to balance the budget in Iowa terms and in terms of farmers from my native State of Virginia would be akin to one's eating his seed corn. It might taste good at first, but it damages the future.

A recent investment in NSF has already paid tremendous dividends in new projects, increased graduate training, and expanded capacity for innovation. A reduction of that effort would mean that fewer university researchers would do critical research in education projects and our capacity for innovation would be substantially diminished.

A strong and sustained investment in NSF will enable transformational research and training essential to future success and competitiveness for the United States.

Furthermore, the interdisciplinary nature of the scientific research makes the entire federal research and development portfolio of which NSF is a part more important than ever to our Nation's prosperity.

NSF-funded research creates the foundation for new technologies and therapeutics. With just four percent of the federal research and development budget, NSF funds over 60 percent of non-biomedical-

like science research in fields such as mathematics, geosciences, computer science, and social sciences. NSF also plays a significant role in advancing biological research.

Through rigorous peer review in which experts identify the best and most promising research to be funded, NSF has a history of identifying scientific talent early and funding ground-breaking discoveries.

Forty-two Nobel Prizes have been awarded to NSF-funded scientists for contributions in physiology or medicine. One of those Nobel Prizes was awarded for work that led to the development of magnetic resonance imaging or MRI which, as you probably know, has improved diagnosis of many diseases and done so with greater safety and without the need for hospitalization.

Recently researchers led by an NSF-funded synthetic biologist to genetically engineer yeast to produce a precursor of artemisinin, an anti-malaria drug.

Other NSF-funded research into advanced robotics, information technology, and biomedicine has led to devices that improve surgical procedures, lessen the risk of those procedures to patients, and shorten recovery time after surgery.

But NSF does not just contribute to scientific discovery. The agency is also committed to achieving excellence in science technology, engineering, and math education at all levels. It is the only federal agency that promotes the full range of science as well as science education.

Thank you for the opportunity to offer FASEB's support for NSF. I give that support with confidence that NSF itself and funding for it is in our country's best interest. And I would be pleased to answer any questions.

[The information follows:]

Testimony of
William T. Talman, M.D., President
Federation of American Societies for Experimental Biology
 On
FY 2012 Appropriations for the National Science Foundation
 Before the
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Congressman Frank Wolf, Chair
Congressman Chaka Fattah, Ranking Member

March 11, 2011

Chairman Wolf, Mr. Fattah, and members of the Subcommittee, thank you for the opportunity to testify today. My name is Bill Talman. I am the President of the Federation of American Societies for Experimental Biology. My organization represents 23 biomedical research societies with a combined membership of over 100,000 individual scientists and engineers – we are the largest life science organization in the United States. I am here on their behalf to request a fiscal year (FY) 2012 budget of \$7.8 billion for the National Science Foundation (NSF). This is the same funding level contained in the President's FY 2012 budget request and recommended by the bipartisan *America COMPETES Reauthorization Act of 2010*.

I am a biomedical scientist and a neurologist practicing medicine both at a Veterans Administration and a university hospital. Though I am a biomedical scientist, I come before you not on behalf of biology alone, but in support of investment in all fields of science. The world we live in is vastly improved by the research of scientists, engineers, and mathematicians studying a broad range of topics. It is also abundantly clear to me that the work we do in medicine and life sciences has been tremendously enriched by discoveries in physics, mathematics, chemistry, and engineering, fields that must be supported by NSF.

As you know, NSF is the only federal research agency dedicated to supporting basic research and education across all fields of science and engineering. With just four percent of the federal research and development budget, NSF funds over 60 percent of non-biomedical life science research at academic institutions in fields such as mathematics, geosciences, computer science, and social sciences. NSF also plays a significant role in advancing biological research; forty-two Nobel Prizes have been awarded to NSF-funded scientists for contributions in physiology or medicine. In fact, one of these Nobel Prizes was awarded for work that led to the development of magnetic resonance imaging (MRI), which is now a key diagnostic tool in hospitals around the world. NSF-funded research truly creates the foundation from which new technologies and therapeutics emerge.

Through its rigorous peer-review that enables experts to identify only the best and most promising research to be funded, NSF has a history of identifying scientific talent early and funding some of our most important discoveries. For example, a team of researchers led by a NSF-funded synthetic biologist has genetically engineered yeast to produce a precursor to artemisinin, an effective anti-malaria drug. Before this scientific breakthrough, a slow and

expensive process was required to extract the chemical from its natural source, the sweet wormwood plant. Researchers hope that scaled-up production of yeast-derived artemisinin will eventually provide an adequate and affordable supply of the drug to people worldwide. Using this groundbreaking technique, yeast and bacteria may soon be employed to synthesize other therapeutics, such as vaccines. Another example of NSF-funded research with medical applications is the use of robotics, information technology, and biomedicine to develop devices that revolutionize surgical procedures. Robotic arms remotely controlled through a system of levers and 3D high-resolution images of the operative site are enabling surgeons to execute more precise movements, reducing the physical impact of operations on patients, and shortening recovery time. The increased accuracy of robotically-enhanced surgery has the potential to improve the effectiveness of treatments, such as the removal of cancerous tumors from the eye.

NSF is also committed to achieving excellence in science, technology, engineering, and math education at all levels. The agency supports a wide variety of initiatives aimed at preparing science teachers, developing innovative curricula, and engaging students in the process of scientific discovery. One of many NSF programs to prepare future scientists, the Graduate Research Fellowship Program (GRFP) annually awards approximately 2,000 three-year fellowships to outstanding graduate students pursuing advanced degrees in science, technology, engineering, or mathematics. NSF graduate research fellows are making important scientific contributions, including research to improve preclinical testing of artificial heart valves and a study to understand how neuronal networks enable the brain to carry out its problem-solving functions. Past recipients of NSF GRFP awards have gone on to become leading scientists and Nobel Prize winners. In this way, NSF helps foster creative thinking in science, engineering, and mathematics by supporting the next generation of researchers. Moreover, by funding research projects and education initiatives at institutions across the country, NSF ensures that future generations will be able to meet the technical demands of 21st century jobs.

There is wide agreement that our nation's future is inextricably linked to our capacity for innovation. We need an educated populace, a cadre of world-class scientists and engineers, and a well-developed research infrastructure capable of supporting competitively funded research projects. We have broad, bipartisan support for increased investment in science and technology, including a consensus on the proposal to double the NSF budget by 2016. Recent investment in NSF programs has resulted in new projects, increased graduate training, and an expanded capacity for innovation. Reduction of that effort would mean that fewer university researchers would receive support for critical research and education projects, jeopardizing the jobs of many scientists, engineers, and technical personnel. The NSF budget has both immediate and long-term consequences for our economy, security, and quality of life. Strong and sustained investment in NSF will enable the transformational research and training essential to the future success and competitiveness of the U.S. Furthermore, because of the collaborative work of science agencies and the increasingly interdisciplinary nature of scientific research, support for the entire federal research and development portfolio has never been more important to our nation's prosperity.

Thank you for the opportunity to offer FASEB's support for NSF. I would be happy to answer any questions the committee has at this time.

Mr. WOLF. Thank you very much, Doctor.

Mr. Fattah.

Mr. FATTAH. Well, I am very interested in your field of work in neuroscience and I see that you are one of the best doctors in the country over the last eight years as at least documented by your peers.

Thank you for your testimony.

Dr. TALMAN. Thank you, sir.

Mr. WOLF. Thank you.

Next witness will be the University of California, Berkeley, Dr. Graham Fleming.

FRIDAY, MARCH 11, 2011.

UNIVERSITY OF CALIFORNIA, BERKELEY

WITNESS

GRAHAM FLEMING, VICE CHANCELLOR OF RESEARCH, UNIVERSITY OF CALIFORNIA, BERKELEY

Mr. FLEMING. Chairman Wolf, Mr. Fattah, thank you for the opportunity to testify today.

As vice chancellor for research at the University of California, Berkeley and on behalf of the university I urge the subcommittee to support the President's proposed increases for the federal science agencies in fiscal year 2012, including the \$7.8 million for the National Science Foundation.

In particular I want to address the importance of NSF's contribution and future role in the development of a deep underground science and engineering laboratory in South Dakota known as DUSEL.

For the past four years the University of California in partnership with NSF and the Department of Energy has led a nationwide team of scientists and engineers designing DUSEL at Homestake Mine in Lead, South Dakota. This collaboration involves over 1,000 scientists and engineers from universities and labs in 33 states as well as international partners from Europe, Asia, and Canada.

Consistent with the principles of the NSF and as recommended by numerous expert studies, DUSEL would be a national resource to be open on a peer reviewed competitive basis to projects sponsored by U.S. federal agencies and to cooperative national activities.

The Homestake Gold Mine operated for 125 years, but it was also home to pioneering physics research for which Dr. Raymond Davis, Jr. received the Nobel prize in physics in 2002. Dr. Davis built his lab deep underground at Homestake to shield his experiments from cosmic radiation.

The scientific questions to be addressed in DUSEL are intimately connected to the NSF's fundamental purpose of supporting cutting edge research in physics, biology, geology, and engineering. The envisioned DUSEL program in physics and astrophysics will address fundamental questions about the universe and its fundamental laws such as why the universe contains matter but no antimatter, the nature of dark matter, the origin of neutrino mass, and the

genesis of chemical elements. Biological, geoscience, and engineering fields have projects of equal significance.

The flagship program is in the area of fundamental subatomic physics with four ambitious experimental programs that will be at the international forefront in the research area.

I am not here to explain the concepts like neutrinoless double-beta decay to you, but be assured that in each of these areas of science the DUSEL science program will be a leading edge in a worldwide scientific campaign putting our country at the forefront of subatomic physics for decades to come.

The knowledge generated by underground science at DUSEL, the largest and deepest underground laboratory in the world, will benefit the nation's environment, safety, and national security. For example, studies conducted at DUSEL will help scientists improve methods for waste isolation, better understand earthquakes, and develop radiation detection methods used for national security purposes.

We are currently completing the DUSEL preliminary design report that will inform future federal plans with its facility. This spring and summer the DOE and the National Research Council are each completing reviews of options and further evaluating the scientific capabilities of such a facility, one in which I believe future Nobel prizes will be won.

NSF should leverage the ongoing DOE investment in fiscal year 2012 and beyond and insure that the broadest array of scientific questions is addressed with its truly one of a kind opportunity.

Why should the National Science Foundation continue to support the development of this project? DUSEL's impact goes way beyond the science discoveries themselves. Education outreach programs will inspire young investigators and as many as 10,000 scientists will benefit each year. Further DUSEL's location in an economically disadvantaged region with a Native American population of 8 to 10 percent gives DUSEL a unique opportunity to effect change in this area, bringing world leading experts from around the globe to a state which participates in NSF's experimental program to stimulate competitive research, EPSCoR.

In these times of fiscal austerity NSF must be a reliable and responsible partner with other federal agencies if U.S. leadership in science is to be maintained. It is more important than ever for the U.S. and the NSF to be leveraging financial commitments made by other partners demonstrating a sustainable development process to keep facilities costs down.

With more than \$250 million invested to date from federal, state, and private sources and hundreds of jobs already created, DUSEL is the type of leveraged investment which Congress should be encouraging.

NSF must successfully construct the large interagency facilities needed for national leadership in science in a timely, efficient, and cost effective manner.

I have been and remain significantly concerned at the manner in which the NSF and the National Science Board are working together to insure NSF, in concert with other federal agencies, can play a key role in developing these critical national facilities.

In conclusion, the University of California, Berkeley remains solidly committed to working with all agency partners to develop this cutting edge scientific program, but it is essential that the NSF coordinate with and contribute to the Department of Energy's efforts in order to create a facility that will provide unique capabilities at the frontiers of science and engineering in support of the missions of both agencies.

[The information follows:]

**Testimony Regarding the FY 2012 Budget Request
Submitted March 3, 2011 to the
Subcommittee on Commerce, Justice, Science, and Related Agencies
U.S. House Committee on Appropriations by
Graham Fleming, Vice Chancellor for Research
University of California, Berkeley**

This testimony is submitted for the record on behalf of the University of California, Berkeley, a non-profit public institution of higher education located in Berkeley, CA.

As the Vice Chancellor for Research and on behalf of the University of California, Berkeley, I urge the Committee to support the President's proposed increases for the federal science agencies in the fiscal year (FY) 2012 budget, including \$7.767 billion for the National Science Foundation (NSF). Increases to NSF as authorized in the America COMPETES Reauthorization Act of 2010 will help universities make grand discoveries, conduct critical research, help solve national challenges, and power our innovation economy.

In particular, I want to address the importance of NSF's contribution and future role in the development of a deep underground scientific facility in South Dakota.

For the past four years, the University of California, Berkeley has led a nationwide team of scientists and engineers designing a Deep Underground Science and Engineering Laboratory (DUSEL), in partnership with NSF and the Department of Energy (DOE), at Homestake mine in Lead, South Dakota. In total this collaboration numbers in excess of 1,000 scientists and engineers from universities and labs in 33 states as well as international partners from Europe, Asia and Canada. Consistent with the principles of the NSF, DUSEL would be a national resource to be open, on a peer-reviewed, competitive basis, to projects sponsored by U.S. federal agencies and to cooperative international activities.

The Homestake mine in Lead, South Dakota operated for 125 years as a gold mine, but it was also a home to pioneering physics research. Dr. Raymond Davis, Jr. conducted a pivotal neutrino-detection experiment at Homestake during the late 1960's and through to 1995 for which he received the Nobel Prize in Physics in 2002. Dr. Davis built his lab deep underground at Homestake to shield his experiment from cosmic radiation.

The envisioned program in physics and astrophysics will address fundamental questions about the Universe and its fundamental laws, such as the question of why the universe contains matter but no antimatter, the nature of dark matter, the origin of neutrino mass, and the genesis of the chemical elements. The biology program will study life in extreme conditions underground to shed light on the origin and evolution of life. The geosciences program will have opportunities to study directly at depth a variety of the thermal, hydrologic, mechanical, chemical, biological-mass, and energy-transport phenomena on a scale not done before. The engineering program will study rock properties *in situ* to enable better design and use of underground space.

The flagship scientific program for DUSEL is in the area of fundamental subatomic physics, with four ambitious experimental programs:

1. Experimental detection of dark matter particles
2. Neutrinoless Double Beta Decay
3. Nuclear astrophysics
4. Long-Baseline Neutrino Experiment (LBNE) and Proton Decay

In each of these areas of science, the DUSEL experiment would represent a unique contribution to a world-wide campaign. With this scientific program, the Deep Underground Science and Engineering Laboratory will be at the forefront of fundamental subatomic physics worldwide for decades.

Scientific questions to be addressed in an underground facility such as DUSEL are intricately connected to the fundamental purpose of NSF to support cutting-edge basic research through directorates such as Biology (BIO), Geosciences (GEO), Engineering (ENG), and the Math and Physical Sciences (MPS).

The knowledge ultimately generated by underground science at DUSEL would also provide benefits for the nation's environment, safety, and national security. For example, studies conducted at DUSEL could potentially help scientists improve methods for waste isolation and carbon dioxide sequestration, better understand earthquakes, and develop radiation detection methods used for national security purposes.

The former Homestake mine consists of 370 miles of existing tunnels and dozens of shafts, raises, ramps and caverns much of which would be available for deep underground science. The laboratory under development at Homestake has the capacity to house experiments at levels as deep as 8,000 feet beneath the surface, making it the largest and deepest underground laboratory in the world. In fact, it would more than double the world's total inventory of underground lab space.

A robust team of leading minds from around the country is currently completing the DUSEL Preliminary Design report which will help inform future federal plans with this facility. Moreover, this spring and summer DOE and the National Research Council respectively are completing reviews of options and further evaluating the scientific capabilities of such a facility – in which I believe future Nobel prizes will be won – *vis-à-vis* other opportunities in science. NSF should leverage the ongoing DOE investment in FY 2012 and beyond and ensure that the broadest array of scientific questions is addressed with this truly one of a kind opportunity.

Why should the National Science Foundation continue to support the development of the project?

Major advances in science and engineering often require facilities in extreme environments to investigate processes under conditions that are not available in normal laboratories. Over the last decade, a series of reports outlined compelling questions in modern science that can be answered only in a deep underground environment. In response to this, the science community has overwhelmingly supported the construction and operation of a national underground laboratory. Recent reports from organizations such as the DOE/NSF High Energy Physics Advisory Panel's (HEPAP's) Particle Physics Project Prioritization Panel and the National Research Council have

identified the benefits of deep underground laboratories and highlighted compelling scientific questions that can only be answered by experiments conducted in this extreme setting.

Research communities in physics, geosciences, engineering, biology, and other fields have further refined the questions and defined the critical experiments that would require access to scientific facilities deep underground. Recognizing the importance of this facility and the overwhelming support of the scientific community, the National Science Foundation, which supports research across science and engineering fields, established a formal process through which the detailed scientific goals for an underground laboratory could be defined and the characteristics and benefits of various potential sites and experiments could be evaluated. NSF has also sponsored workshops and funded 15 awards across the research spectrum to study initial experiments for early science which could be conducted in such a unique underground laboratory environment.

The implications of the future research at DUSEL go far beyond the science discoveries themselves, as opportunities to attract students at all ages have been built into the plan, with the potential to redirect future scientists to the U.S. rather than our foreign competitors. A major benefit to a deep underground facility in South Dakota will be the education and outreach programs about the ground-breaking science which will inspire young investigators and promote the development of the next generation of U.S. scientists and engineers. As many as 10,000 scientists will benefit from DUSEL each year through education and outreach opportunities.

At its core, the vision developed by the nationwide team addressing this deep underground laboratory is focused on creating innovative and revolutionary methods of teaching science that will have national applications. DUSEL will help train the next generation of young scientists and engineers, consistent with the goals of NSF to enhance training in science, technology, engineering, and math disciplines as well as the overall commitment to education and public outreach. The anchor of the education and outreach effort will be the Sanford Center for Science Education in Lead. The facility will accommodate school children, K-12 teacher development groups, and casual visitors and also will include a distance education component, research experience, and other programs. Further, DUSEL's location in an economically disadvantaged region with an American Indian population of 8-10 percent gives the Sanford Center for Science Education a unique opportunity to affect change in this area.

Most importantly, the impact this facility will have can be seen from the impact it is already having in the State of South Dakota and the region. Summer scholarships, intern programs for students in science to conduct research at DOE's Fermi National Accelerator Laboratory in Batavia, Illinois, and a new Master's degree and doctoral degree program in physics within the South Dakota university system have all been developed as a result of the future DUSEL facility. This national leading facility will bring world leading experts from around the globe to a state which participates in NSF's Experimental Program to Stimulate Competitive Research (EPSCoR) – the goals of which are to provide strategic programs and opportunities for participants that stimulate sustainable improvements in their R&D capacity and competitiveness and to advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation and overall knowledge-based prosperity.

Should the U.S. be making an investment in a national underground facility at a time of significant budgetary pressures?

As this Committee is well aware, investments in science and engineering are precisely the types of investment which ought to be protected to ensure our nation's ability to compete in future global economic markets. More than half of our economic growth in the United States since World War II can be traced to science-driven technological innovation and the seed corn for this innovation has been scientific research conducted at universities and supported by the federal government through agencies such as the National Science Foundation.

As the former Deputy Director of the Lawrence Berkeley National Laboratory and someone who has been involved with the U.S. energy and intensity physics programs for decades as well as supporting Berkeley's underground research efforts in far flung sites in Japan, Canada and Italy, I know these scientific frontiers hold the promise for revolutionary discoveries that could fundamentally change the way the U.S. can understand, interact with, and harness elements of our universe. During this time in which the energy frontier and some of our brightest minds have been shifting to Europe for the development, operation, and promise of science from the Large Hadron Collider, the U.S. must not cede our leadership in another discovery frontier. A robust national program in elementary particle physics is a central component of both the NSF and DOE contributions to fundamental physics research and it is required for the U.S. to remain competitive on the international scale.

As a top scientific priority for NSF as well as the Department of Energy, DUSEL was being planned into out-year budgets for both agencies as recently as this fiscal year. An investment in the development of a deep underground facility and the research to be conducted therein will have precisely the kind of catalytic impact for our nation that we need to ensure our future competitive standing. It's this country's conventional, ongoing, and future commitment to the investment in science and basic research that has and will continue to drive innovation and the creation of jobs around the nation.

In addition, it is more important than ever for the U.S. and NSF to be leveraging financial commitments made by other partners and demonstrating a sustainable development process to keep facilities costs down. With more than \$250 million invested to date from federal, state, and private sources, and hundreds of jobs already created, DUSEL is the type of leveraged investment which Congress should be encouraging the U.S. to make in these fiscally constrained times. Beyond the large commitment by South Dakota, there are ongoing contributions from California to study early science issues for developing experiments underground and even educational exchanges in place. For instance, a South Dakota School of Mines and Technology student is currently at the University of California, Davis testing sensors for the Long Baseline Neutrino Experiment being developed the DOE, and NSF is funding 15 teams of investigators for early science. DUSEL is truly driving national collaboration and investment, and it is increasingly becoming international by attracting more and more interest from other countries as the facility design takes shape.

NSF needs to be able to successfully construct the large interagency facilities needed for national leadership in science in a timely, efficient, and cost effective manner. If complications arise due to abrupt changes in NSF planning despite decades of effort or due to disconnects between

components that oversee or control aspects of the project, preventable increases in long term expenses and unnecessary midyear adjustments occur.

Given the size and commitment increasingly required for cutting-edge science to be successful and the complexity of the federal planning, review, and approval processes, the U.S. must be able to demonstrate its ability to construct large scale science facilities which will define the future of specific fields. Moreover, our nation's ability to deliver on these facilities portends important implications for multi-lateral international scientific collaborations on projects such as DUSEL and future projects around the globe.

Increasingly, the construction of these large facilities not only requires non-federal contributions but multi-agency collaboration within the federal government. In particular, in the America COMPETES Act enacted in 2010 Congress recognized the need for NSF to, "in its planning for construction and stewardship of large facilities, coordinate and collaborate with other Federal agencies, including the Department of Energy's Office of Science, to ensure that joint investments may be made when practicable." Building on joint efforts and commitments to date by both NSF and DOE, it is more important than ever that NSF join DOE in its role to steward DUSEL.

In December, the National Science Board made a disappointing and unforeseen decision to not provide any additional funding for DUSEL beyond the Preliminary Design Review, and despite support from the National Science Foundation and commitments made to the project. As DUSEL continues its planning and development, it is my impression that 2010 illustrated the strongest level of collaboration and coordination yet among the Administration, DOE, NSF, and the project team. The level of interagency collaboration that had become central to this project was unprecedented. Further collaboration between DOE and NSF on DUSEL will be a valuable example for future scientific programs and projects.

Because of the intricate scope and complex design structure involved with carrying out a large facility designed to house a wide range of scientific projects, it is important to ensure that this steady forward movement continues. If complications arise, for example, due to future disconnects between various components that oversee or control aspects of the project, results could include preventable increases in long term expenses and unnecessary midyear adjustments as well as significant setbacks to the scope of the scientific discoveries and to the future of large interagency collaborations.

In conclusion, the University of California, Berkeley is committed to working successfully with all agency partners to develop this cutting-edge scientific laboratory, but it is essential that the NSF coordinate with and contribute to the Department of Energy's efforts in order to create a facility that will provide unique capabilities at the frontiers of science and engineering, in support of the missions of both agencies.

Mr. CULBERSON. Thank you very much for your testimony.

Mr. Fattah, any questions on this?

Mr. FATTAH. No questions, but let me thank you for your service. I note that you work at one of our premier national labs. I was able to visit two of our labs last weekend, Sandia and Los Alamos, and I want to note for the record that there is some disagreement with the NSF's viewpoint about how to proceed on DUSEL, and the committee will have to factor that in.

Thank you very much.

Mr. CULBERSON. If I may, I wanted to ask if I could, has anybody detected a neutrino yet? As I recall no one has done it yet.

Mr. FLEMING. Oh, yes.

Mr. CULBERSON. They have detected neutrinos.

Mr. FLEMING. They have detected neutrinos. We do not know how much they weigh, but we know that they have some mass.

Mr. CULBERSON. They do not interact with anything.

Mr. FLEMING. Very weakly, yes.

Mr. CULBERSON. Right.

Mr. FLEMING. They go right through the earth.

Mr. CULBERSON. Before many of you all came in the room Chairman Wolf pointed out quite correctly how urgent it is that the scientific community get active politically, visible, out in support with members of Congress for obviously maintaining and strengthening investment in the National Science Foundation, but also to press for entitlement reform, that we get a handle on the growth of the entitlements.

Before you came in I mentioned that if you think of the entitlement payments and interest on the national debt as America's mortgage payment, our mortgage payment as a country consumes 100 percent of our income. Interest on the debt, Social Security, Medicare, Medicaid, and veterans benefits consume the entire—all revenue goes right out the back door to pay for them, therefore all the money we spend all year long, all the money this committee spends is borrowed, 100 percent of it is borrowed, so it is an urgent problem that has got to be dealt with immediately, so I urge all of you that are here in the room to please speak to your members, communicate with members of Congress and encourage them to get entitlement funding and the deficit and the debt under control, or we are just going to be out of money.

Thank you.

Dr. Andrews, the committee welcomes you on behalf of the American Mathematical Society, thank you very much, sir, and we look forward to your testimony.

FRIDAY, MARCH 11, 2011.

AMERICAN MATHEMATICAL SOCIETY

WITNESS

GEORGE ANDREWS, PhD, PAST-PRESIDENT, AMERICAN MATHEMATICAL SOCIETY

Mr. ANDREWS. Thank you, Chairman Wolf, Ranking Member Fattah, and members of the committee, I am George Andrews,

past-president of the American Mathematical Society, I am a professor at Penn State University.

The American Mathematical Society is an organization of over 30,000 professional mathematicians, and I am here today to request support for the fiscal year 2012 budget of \$7.767 billion for the NSF. This budget level is consistent with the administration's fiscal year 2012 budget request, and with the budget authorized in the bipartisan America COMPETES Act signed into law on January 4 of this year.

I would like to thank the committee for its past support of the NSF, this support has been very important for maintaining our nation's scientific enterprise, which as you have remarked is critical for innovation and technological development.

I recognize that Congress faces the difficult and unenviable challenge of reducing the federal budget deficit. This task is made especially problematic in troubled economic times. I sympathize fully with how hard it is, you have my admiration for your dedication to protecting our future and your eloquent remarks this morning make it clear that this is topmost in your mind. I do hope that you will be able to wield the budget cutting ax judiciously.

The National Commission on Fiscal Responsibility and Reform made the point that even when it was necessary to make budget cuts at the same time we must invest in education infrastructure and high value research and development to help our economy grow and to keep us globally competitive and make it easier for businesses to create jobs. The NSF is the perfect agency through which investments in education and high value research can be made and it is the only federal agency that supports research in education across all fields of science, engineering, and mathematics, and at all educational levels.

Research in education programs supported by the NSF are fundamental for increasing and developing the knowledge base needed for pushing forward the frontiers of science, mathematics, and engineering disciplines, developing new fields of inquiry, and supporting technological innovations.

Society has benefited from the many products, procedures, and methods resulting from NSF supported research, research performed over many years, and not always predetermined per its specific applications. These benefits include well-known innovations and surprises such as Google, magnetic resonant imaging and bar code technology.

Today the NSF portfolio includes research that contributes to finding cures for certain types of cancer, aids the improvement and development of arterial stents and artificial heart valves, increases the possibility of fabricating 3-D computer memory chips, and promotes understanding of how atoms and molecules interact with surfaces thereby aiding the development of nanoscale devices.

In fiscal year 2010 over 70 percent of the NSF's budget went to support research and education projects in colleges and universities in all 50 states. The agency evaluated over 50,000 proposals through its merit review process funding 13,000 of these. This is a success rate of 23 percent and indicates how competitive it is to receive an NSF grant. If NSF had more funds the agency could support many more highly rated proposals. In fact each year on av-

erage over \$1.7 billion is requested for declined proposals that receive ratings at least as high as the average rating for all awarded proposals. These declined proposals have the potential to produce substantial research in education results.

The U.S. must maintain its leadership in high level research in education, and NSF is an agency that contributes substantially to this endeavor. Even under tight budget constraints it is important to make adequate yearly investments in the NSF a predictable pattern of funding facilitates a continuous stream of high level research and researchers.

I ask the committee to give strong consideration to providing the fiscal year 2012 budget of \$7.767 billion for the NSF and I thank you for this opportunity to speak to you for your support of the NSF.

[The information follows:]

Testimony of
George Andrews, Ph.D., Past-President of the
American Mathematical Society
On
FY 2012 Appropriations for the National Science Foundation
Before
The House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Congressman Frank R. Wolf, Chair
Congressman Chaka Fattah, Ranking Member

Chairman Wolf, Ranking Member Fattah, and members of the committee, I am George Andrews, Past-President of the American Mathematical Society, an organization of over 30,000 professional mathematicians. I am here today to request an FY 2012 budget of \$7.767 billion for the National Science Foundation (NSF). This investment will allow the NSF to continue to support innovative and transformational scientific research that fuels the American economy, upholds national security, maintains our global competitiveness, and improves health and quality of life for millions of Americans. This budget level is consistent with the Administration's FY 2012 Budget Request and with the FY 2012 budget authorized in the bipartisan American COMPETES Act (P.L. 111-358), signed into law on January 4 of this year.

I would like to thank the Committee for its past support of NSF. This support has been very important for maintaining our Nation's scientific enterprise, which is critical for innovation and technological development.

I recognize that Congress faces the difficult and unenviable challenge of reducing the federal budget deficit. This task is made especially problematic in troubled economic times. I sympathize fully with how hard this is, and you have my admiration for your dedication to protecting our future. It is my hope that you will be able to wield the

budget cutting axe judiciously. The National Commission on Fiscal Responsibility and Reform made the point that even when it is necessary to make budget cuts, “at the same time we must invest in education, infrastructure, and high value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs.”

NSF is the perfect agency through which investments in education and high value research can be made. It is the only federal agency that supports research and education across all fields of science, engineering, and mathematics and at all educational levels. Research and education programs supported by NSF are fundamental for increasing and developing the knowledge base needed for pushing the frontiers of science, mathematics, and engineering disciplines, developing new fields of inquiry, and supporting technological innovation.

Society has benefitted from the many products, procedures, and methods resulting from NSF supported research – research performed over many years and not always predetermined toward specific applications. These benefits include well known innovations such as Google, magnetic resonance imaging (MRI), and bar code technology. Today, the NSF portfolio includes research that contributes to finding cures for certain types of cancer; aids the improvement and development of arterial stents and artificial heart valves; increases the possibility of fabricating 3-D computer memory chips; and promotes understanding of how atoms and molecules interact with surfaces thereby aiding the development of nanoscale devices.

NSF is important to the mathematical sciences, as over 45 percent of federal funding for mathematical sciences research comes from NSF, with the remainder of support split among three other agencies. NSF accounts for 65 percent of federal support for academic research in the mathematical sciences and it is the only agency that supports mathematics research broadly across all fields.

In FY 2010 over seventy percent of NSF's budget went to support research and education projects in colleges and universities in all fifty states. The Agency evaluated over 55,600 proposals through its merit review process, funding 13,000 of these proposals. This is a success rate of 23 percent and indicates how competitive it is to receive an NSF grant. If NSF had more funds, the Agency could support many more highly rated proposals. In fact, each year on average, over \$1.7 billion is requested for declined proposals that receive ratings at least as high as the average rating for all awarded proposals. These declined proposals have the potential to produce substantial research and education results.

The U.S. must maintain its leadership in high level research and education and NSF is an agency that contributes substantially to this endeavor. Even under tight budget constraints, it is important to make adequate yearly investments in NSF. Dependable funding will enable the scientific community to plan, develop infrastructure, create a manageable pipeline of graduate and postdoctoral students, and have feasible expectations. A predictable pattern of funding facilitates a continuous stream of high level research and researchers.

I ask that the Committee give strong consideration to providing an FY 2012 budget of \$7.767 billion for NSF. Thank you for this opportunity to speak to you and for your support of NSF.

Mr. CULBERSON. Dr. Andrews, thank you. And I hope each one of you when you come up and talk to us will also add to your testimony that you are going to communicate to your members that you are going to urge them to get up here on the hill and get to work to protect the NSF and to deal with entitlements, because there is no money. Critical. Absolutely critical.

Mr. ANDREWS. It is quite clear that is the elephant in the room.

Mr. CULBERSON. The other thing I would ask very quickly is if one of you could be thinking about whether it is in your testimony which is I know brief, you may do it separately, is to communicate to each one of us, Chairman Wolf, Mr. Fattah, and me as well, because the sciences are—one of my greatest joys in life is the support that we can give to the sciences, so talk to us about also how would you reform the NSF.

The inspector general for NSF came in and gave us some distressing testimony that NSF is not adequately, for example, Dr. Fleming, I am sorry I did not ask you about this because you will know, on big capital projects that NSF is building these giant observatories, for examples, the neutrinos which I gather I missed the first part, but I think it is deep in a mine under the earth and using big tanks of water and watching for flashes of light I think as the neutrinos allegedly interact with water molecules or some heavy something that you are injecting into the water, I forget the details, very expensive, big, big capital projects that apparently NSF is not managing very well, so we would appreciate suggestions, advice, and guidance from you on the outside talking to us privately and let us know how can we improve NSF's management of those big projects following up and making sure the grants that they award are actually being—the grant research is being done in a way that the money is not being wasted and it is actually being used properly, because the inspector general was concerned about frankly NSF's oversight over all these areas, and because money is so critical we really need your input as outside objective people who work with NSF to give Chairman Wolf and all of us suggestions on how to make sure NSF's precious dollars go further.

Mr. Chairman, I was just asking to make sure they communicate to their members to get active and talk about not just increasing funding but to deal with entitlements, and also to give us ideas on how to improve NSF management, as the inspector general pointed out the flaws and the oversight of big capital construction projects, grant programs; these are the folks that will be able to tell us directly where the problems lie and how to fix them.

Mr. WOLF. Thank you. Thank you very much.

Mr. CULBERSON. And I did not have a chance for Mr. Fattah.

Mr. WOLF. Okay, Mr. Fattah.

Mr. FATTAH. Thank you. I spent a number of years on the board of trustees of Penn State University and I want thank you for your fine work.

I want to note for the record since your focus is mathematics that the federal budget has two sides to it, income and spending, and both are discretionary. The one thing that is not discretionary is the question of where we want to end up in this competition in the world and we want to be number one, and that will require the po-

litical will to do both, have the necessary revenue and make the correct spending decisions.

Thank you very much.

Mr. ANDREWS. Thank you.

Mr. WOLF. Did Mr. Fattah say you went to Penn State?

Mr. ANDREWS. I am a professor at Penn State.

Mr. FATTAH. No, the professor is at Penn State, I said I served on the board of trustees of his great university for a number of years.

Mr. WOLF. What is the name of your football coach?

Mr. ANDREWS. Let me think. He is a national icon, Joe Paterno.

Mr. WOLF. Yeah, I am a graduate of Penn State and when I was there—

Mr. ANDREWS. Actually I knew that, yes.

Mr. WOLF [continuing]. The assistant coach had the same name as the current coach.

Mr. ANDREWS. That is right.

Mr. WOLF. And it is the same coach.

Mr. ANDREWS. That is right.

Mr. WOLF. And he is a great man and he has made a great contribution not only to football but to the university.

Mr. ANDREWS. To the university and to the state and to the nation.

Mr. WOLF. If you see him tell him that Congressman Wolf said hello.

Mr. ANDREWS. I will do that.

Mr. FATTAH. The creamery is still the best known treasure of the university. Thank you.

Mr. WOLF. Thank you. Okay. The next witness is American Society of Plant Biologists, Dr. Elizabeth Hood.

FRIDAY, MARCH 11, 2011.

AMERICAN SOCIETY OF PLANT BIOLOGISTS

WITNESS

**DR. ELIZABETH HOOD, MEMBER, PUBLIC AFFAIRS COMMITTEE,
AMERICAN SOCIETY OF PLANT BIOLOGISTS**

Ms. HOOD. Good afternoon and thank you for giving me this opportunity to testify on behalf of the National Science Foundation fiscal year 2012. I am hearing lots of things that are very similar from all of us in our presentation to you.

I am Elizabeth Hood, I am a distinguished professor of agriculture at Arkansas State University and I am here today representing the American Society of Plant Biologists, we call ourselves the ASPD, I am on that Public Affairs Committee, and I would like to report to you that I visited my entire delegation this week and we have pushed for science funding and to balance the budget, and I told them I would pay more taxes too, but they were not very excited about that.

So ASPD is an organization of approximately 5,000 faculty, postdoc graduate students and the educators across all 50 states and worldwide. We are very much the advocates for plant biology,

we communicate plant research, and we are trying to promote the interest of plant biologists in general.

We recognize that there is a terrible fiscal environment and we are very much in support of the National Science Foundation funding.

Plants as you know are the only thing on earth that keeps us all alive because they are the only thing that can harvest the sun's energy and give us food, fabrics, materials, fuel, security—not just oil, but fuel security and biofuels—and promote health through nutrition, and we are absolutely in support of the \$7.76 billion budget that is being proposed.

NSF has had a significant impact on my life. I was a program director there in the recent past and witnessed firsthand the absolute positive effects that it can have and the wonderful projects that it funds.

Also the State of Arkansas where I am coming from today has received two experimental program grants for stimulating competitive research and we have used those tremendous investments in the state to promote research and the reputation of the scientists in the State of Arkansas, and even though they were large grants we took very good care of them, we spent the money very wisely.

So the bio directorate is the most important one to the plant biologists. Within the plant directorate is the Plant Genome Research Program and we advocate bringing that back as a line item for full funding in the coming year.

The discoveries will be delayed if we do not have this investment, and of course we all know that tremendous discoveries lead to tremendous innovations for the state and the nation and the world.

So the NSF also invests in the education and training as well as innovation and research and is one of the few foundations that actually funds innovations in education as well as in research.

We urge you to revitalize the programs in graduate research fellowships, career grants, as well as graduate student stipends. We are very dedicated in our organization to promoting diversity in the workforce and especially in the STEM disciplines, and so we are working very strongly with NSF to improve diversity in our workforce in science and technology.

So America's challenges in energy, agriculture, and health will not be resolved in a year, an administration, or a generation, but it is going to take decades of investment and hard work to get to where we need to do. And we realize that we need this investment to get the great results and that the economics of the nation depend on the innovations that are going to come out of the science and technology fields.

And I thank you very much for your consideration of my testimony and I would be happy to answer any questions.

[The information follows:]



American Society of Plant Biologists

Cultivating a better future through plant biology research

Official Written Testimony for Fiscal Year 2012 Budget

Submitted to the Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
U.S. House of Representatives
Washington, DC

Submitted by
Dr. Nicholas Carpita, President, American Society of Plant Biologists
&
Dr. Elizabeth Hood, Member of the Public Affairs Committee, American Society of Plant Biologists

March 3, 2011

On behalf of the American Society of Plant Biologists (ASPB), we submit this testimony for the official record to support the requested level of \$7.767 billion for the National Science Foundation (NSF) for Fiscal Year (FY) 2012. ASPB and its members recognize the difficult fiscal environment our nation faces, but believe that investments in scientific research will be a critical step toward economic recovery.

ASPB would like to thank the Subcommittee for its consideration of this testimony and for its strong support for the research mission of the National Science Foundation.

Our testimony will discuss:

- Plant biology research as a foundation for addressing food, fuel, environment, and health concerns;
- The rationale for robust funding for the National Science Foundation to maintain a well-proportioned science portfolio with support for all core science disciplines, including biology; and
- The rationale for continued support for NSF education and workforce development programs that provide support for the future science and technical expertise critical to America's competitiveness.

The American Society of Plant Biologists is an organization of approximately 5,000 professional plant biology researchers, educators, graduate students, and postdoctoral scientists with members in all 50 states and throughout the world. A strong voice for the

global plant science community, our mission—achieved through work in the realms of research, education, and public policy—is to promote the growth and development of plant biology, to encourage and communicate research in plant biology, and to promote the interests and growth of plant scientists in general.

Food, Fuel, Environment, and Health: Plant Biology Research and America's Future

Plants are vital to our very existence. They harvest sunlight, converting it to chemical energy for food and feed; they take up carbon dioxide and produce oxygen; and they are the primary producers on which all life depends. Indeed, plant biology research is making many fundamental contributions in the areas of energy security and environmental stewardship; the continued and sustainable development of better foods, fabrics, and building materials; and in the understanding of biological principles that underpin improvements in the health and nutrition of all Americans.

In particular, plant biology is at the interface of numerous scientific breakthroughs. For example, with the increase in plant genome sequencing and functional genomics supported by the National Science Foundation, plant biologists are using computer science applications to make tremendous strides in understanding complex biological systems ranging from single cells to entire ecosystems. Understanding how plants work will ultimately result in better and more productive crops, new sources of fuel, and the development of better medicines to treat diseases like cancer.

Despite the fact that basic plant biology research—the kind of research funded by the NSF—underpins so many vital practical considerations, the amount invested in understanding the basic function and mechanisms of plants is relatively small when compared with the impact plants have on our economy and in addressing some of the nation's most urgent challenges such as food and energy security.

Robust Funding for the National Science Foundation

The American Society of Plant Biologists encourages the Subcommittee to fund the National Science Foundation at robust levels that would keep the Foundation's budget on a doubling path over the next several years.

The FY 2012 NSF budget request would fund the NSF at \$7.767 billion, keeping the Foundation budget on a path for doubling. ASPB supports this request and encourages proportional funding increases across all of the science disciplines supported by the NSF. As scientific research becomes increasingly interdisciplinary with permeable boundaries, a diverse portfolio at the NSF is needed to maintain transformational research and innovation.

NSF funding for plant biology specifically enables the scientific community to address cross-cutting research questions that could ultimately solve grand challenges related to a sustainable food supply, energy security, and improved health. The idea that support for research in one area will impact a variety of applications is reflected in the National Research Council's report *A New Biology for the 21st Century*.

The NSF Directorate for Biological Sciences is a critical source of funding for scientific research, providing 68 percent of the federal support for non-medical basic life sciences research at U.S. academic institutions. The Biological Sciences Directorate supports research ranging from the molecular and cellular levels to the organismal, ecosystem, and even biosphere levels. These investments continue to have significant pay offs, both in terms of the knowledge directly generated and in deepening collaborations and fostering innovation among communities of scientists.

The Biological Sciences Directorate's Plant Genome Research Program (PGRP) is an excellent example of a high impact program, which has laid a strong scientific research foundation for understanding plant genomics as it relates to energy (biofuels), health (nutrition and functional foods), agriculture (impact of changing climates on agronomic ecosystems), and the environment (plants' roles as primary producers in ecosystems). *The American Society of Plant Biologists asks that the PGRP be restored as a separate funding line within the NSF budget, as in years past, and that the PGRP have sustained funding growth over multiple years to address 21st Century Challenges. For FY 2012 ASPB asks that PGRP be funded at the highest possible level.*

Without significant and increased support for the Biological Sciences Directorate and the NSF as a whole, promising fundamental research discoveries will be delayed and vital collaborations around the edges of scientific disciplines will be postponed, thus limiting the ability to respond to the pressing scientific problems that exist today and the new challenges on the horizon. Addressing these scientific priorities also helps improve the competitive position of the United States in a global marketplace.

Continued Support for NSF Education and Workforce Development Programs

The National Science Foundation is a major source of funding for the education and training of the American scientific workforce and for understanding how educational innovations can be most effectively implemented. The NSF's education portfolio impacts students at all levels, including K-12, undergraduate, graduate, and postgraduate. Importantly, the Foundation also offers programs focused on outreach to and engagement of underrepresented groups and of the general public.

The Integrative Graduate Education and Research Traineeship (IGERT) program is just one example of NSF's commitment to education. IGERT is successful in fostering the development of novel programs that provide multidisciplinary graduate training. As

discussed above, it is at the intersections of traditional disciplines that the greatest opportunities for scientific advancement can be found. *The American Society of Plant Biologists encourages expansion of the IGERT program in order to foster the development of a greater number of innovative science leaders for the future.*

Furthermore, *ASPB urges the Subcommittee to expand NSF's fellowship and career development programs—such as the Postdoctoral Research Fellowships in Biology, the Graduate Research Fellowship (GRF) and the Faculty Early Career Development (CAREER) programs—and, thereby, to provide continuity in funding opportunities for the country's most promising early career scientists. Additionally, such continuity and the broader availability of prestigious and well-supported fellowships may help retain underrepresented groups in the science, technology, engineering, and mathematics (STEM) fields. ASPB further encourages the NSF to develop “transition” awards that will support the most promising scientists in their transition from postdoctoral research to full-time, independent, tenure-track positions in America's universities.* The NSF might model such awards after those offered by the National Institutes of Health and initially championed by private philanthropies such as the Burroughs Wellcome Fund.

ASPB urges the NSF to further develop programs aimed at increasing the diversity of the scientific workforce by leveraging professional scientific societies' commitment to provide a professional home for scientists throughout their education and careers and to help promote and sustain broad participation in the sciences. Discreet focused training and infrastructure support programs for Hispanic Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities remain vitally important, as they foster a scientific workforce that reflects the U.S. population. These institutions are key producers of members of the STEM workforce; *therefore ASPB recommends that distinct funding amounts be specified for Hispanic Serving Institutions, Historically Black Colleges and Universities, and Tribal Colleges and Universities.*

ASPB urges support for education research that enhances our understanding of how educational innovations can be sustainably implemented most effectively in a variety of settings. NSF programs such as Transforming Undergraduate Education in STEM, Discovery Research K–12, and Research and Evaluation on Education in Science and Education provide opportunities to expand NSF's research and evaluation efforts to address scale-up and sustainability. Increasingly, the challenge is not only to understand what works but to determine how it can be best put into practice. *ASPB encourages continued support for education research programs within NSF's Education and Human Resources portfolio with a focus on understanding how previous investments in educational strategies can be made most effective. ASPB also encourages support for implementation of the recommendations made in the recent NSF-sponsored report on Vision and Change in Undergraduate Biology Education: A Call to Action.*

The National Research Council report *A New Biology for the 21st Century* has been cited numerous times in its first year in publication as a model of societal needs and describes

our continuing need to press ahead. These challenges will not be resolved in a year, an administration, or a generation, but will take continued attention and investment at federal research agencies, such as the National Science Foundation, over decades.

Thank you for your consideration of our testimony on behalf of the American Society of Plant Biologists. Please do not hesitate to contact the American Society of Plant Biologists if we can be of any assistance in the future.

Dr. Nicholas Carpita
Professor of Botany and Plant Pathology,
Purdue University; and
President,
American Society of Plant Biologists

Dr. Elizabeth Hood
Distinguished Professor of Agriculture,
Arkansas State University; and
Member of the Public Affairs Committee,
American Society of Plant Biologists

Mr. WOLF. Well, thank you very much. I agree with you, and I said when the earlier group was here that I think the answer is to deal with the entitlements. Senator Mark Warner from my state, who is a Democrat and Tom Coburn from Oklahoma who is a Republican along with Saxby Chambliss, a Republican from Georgia and Dick Durbin, a Democrat from Illinois have come together to put together a group and they are trying to adopt the Simpson Bowles, however it is referred to, as a vehicle, as an outline.

If we were to do that and do it in this year I think it is safe to say that the NSF budget would not only be fully funded, it would probably be increased. I think the only inhibiting factor will be if that is not done, and the concern is if it is not done by the end of this year you are going to get into a Presidential election, and not only President, but House and Senate. People do not want to go there.

So I think the answer is to come together in a bipartisan way, and I have said that I would support the recommendations in the commission. There are some that I have problems with that I would attempt to change, but having said that, everyone cannot just get whatever they want. There was a chart which I almost was going to bring, and I might bring for other hearings, showing that all of the cuts that are being proposed are basically coming out of about 15 percent, it is even less than that of the budget looking at a pie chart, and all of the others are really off limits, and a large portion is Medicare, Medicaid, social security, and interest on the debt. That number is getting worse each and every year.

So hopefully we can do that by the end of the year and I do appreciate your testimony.

And Mr. Fattah.

Mr. FATTAH. Well, I want to thank you for your testimony and your great work.

We are spending \$2 billion this week in Afghanistan. We did \$900 billion in tax cuts over the next two years to some of the wealthiest citizens in the country.

Since Singapore is spending \$5 billion on a national research foundation and they have less than 5 million people, they have a country of 300 million, I agree that we need to get the entitlements under control and am committed to voting to do that. But we also need to make a decision that we are prepared to spend the money, and that is raise it through revenue, to be a leading force in this world as we have been for a few hundred years. If we want to retain that, we are going to have to invest in science and innovation.

Thank you very much.

Mr. WOLF. Thank you. I am not responding to Mr. Fattah, we are really friends, but I do want to say this—

Mr. FATTAH. We agree with each other.

Mr. WOLF. We agree. I do not know, I assume maybe I know how Mr. Fattah voted, I voted against the tax extension package. Not that I was opposed to the extent of the tax cut package, but there was also a provision in there that they reduced—actually they reduced every one here's payroll tax. They gave a payroll tax break to Jimmy Buffett from Margaritaville and Warren Buffett from Nebraska, and I voted against that.

That one provision taking it aside of extending tax cuts, which I favor, that one provision will cost the treasury for one year \$112 billion.

If we could have taken a portion of that and put it into NASA, NSF, NOAA, and the sciences—now what is going to happen is at the end of this year there will be an effort probably not to extend that and they are going to pay for that \$112 billion by borrowing from the general fund. The general fund obviously is broke.

So I did vote against that. I think it is one of the best votes that I have cast, because as much as you wanted to extend the tax cuts, as I did, they went further and borrowed from the general fund and no one even knew. Then the President bragged this was an example of how he and the Republican Congress worked together. True, most Republicans supported it, but it is easy to work together if we are giving things away, and Mr. Fattah and I were going to say how much can we give you, but it is how much can we? So giving is not particularly courageous, it is dealing with it and it borders on the word called sacrifice, something that the nation has done, and I think if we come together on these entitlements we can do it in a way that hopefully we can allow this; we can fund the sciences. But \$112 billion; one year. In one year.

Thank you for your testimony.

The Soil Science Society of America, Ms. Gala.

FRIDAY, MARCH 11, 2011.

SOIL SCIENCE SOCIETY OF AMERICA

WITNESS

CARON E. GALA BIJL, SENIOR SCIENCE POLICY ASSOCIATE, SOIL SCIENCE SOCIETY OF AMERICA

Ms. GALA. Thank you for giving the Soil Science Society of America the opportunity to testify today.

Many of our members, scientists, fundamental research depends on grants from the National Science Foundation's BIO, GEO, and education and human resource directorates.

The Soil Science Society of America testifies today in support of funding the funding level put forth for the National Science Foundation and the President's budget request of \$7.8 billion as this budget level is consistent with the amount authorized in the recent America COMPETES Law.

We recognize that Congress faces a major challenge to reduce first of all budget deficits and bring the national debt under control. Cuts must be implemented strategically with an eye towards the future economic health of the U.S.

Continued strong funding of basic scientific research in NSF as well as investments in STEM education programs like those in EHR will help insure the economic growth needed to restore long-term fiscal strength and national prosperity occurs.

Food and energy security, human nutrition and health, water availability and quality, adaptation to variable weather patterns are some of the greatest challenges facing our Nation and the world today.

There are also major societal needs identified by the committee on new biology for the 21st Century which require solutions developed through the new biology initiative.

The soil provides numerous ecosystem services which will help play a role in addressing these challenges, including water purification necessary for potable and recreational water use, waste treatment essential for recycling waste products and nutrients, retention and treatment of chemical and biological agents from air, land, and biological systems, nutrient cycling in soils for food and energy security, among many others.

Life-supporting services provided by the soil can be enhanced by increasing the inherent resilience of soil and manage natural systems. Soil health however faces increasing human-linked threats from contamination, unplanned urban development, desertification, salinization, mismanagement, and erosion.

Research performed in programs like BIO's molecular and cellular biosciences is essential to understand processes at molecular, subcellular, and cellular levels that affect soil health.

The microbial observatories and microbial interactions and processes program allows us to build upon the information that we now have about microbial communities and to learn more about how industrial processes may be developed which can capitalize on the interactions between communities and plants.

Similarly the plant Genome Research Program also plays a critical role in understanding the basic biology of soil and plant relationships.

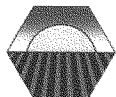
In GEO, the earth sciences division supports biological geo hydrologic sciences and the study of natural hazards. An important funding within this division is the critical zone observatories which focuses on watershed scale studies that advance understanding of the integration and coupling of earth surface processes as mediated by the presence and flux of fresh water.

Finally and not to be understated, the critical programs offered by EHR are essential to training a high-caliber scientific workforce.

We hope that you will continue to strongly support funding for NSF, especially the BIO, GEO, and EHR directorates.

Thank you for providing us with the opportunity to testify today, and I am free to answer any of your questions.

[The information follows:]



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Oral testimony of Caron Gala Bijl on behalf of the
Soil Science Society of America
regarding the National Science Foundation budget for Fiscal Year 2012.
Prepared for the U.S. House of Representatives, Committee on Appropriations,
Subcommittee on Commerce, Justice, and Related Agencies

Thank you for offering the Soil Science Society of America the opportunity to comment today. Many of our member scientists' fundamental research depends on grants from National Science Foundation's Biology (BIO), Geosciences (GEO), and Education and Human Resources (EHR) Directorates.

The Soil Science Society of America testifies today in support of the funding level put forth for the National Science Foundation (NSF) in the President's Budget request of \$7.767 billion as this budget level is consistent with the amount, \$7.8 billion, authorized in the recent America COMPETES law (P.L. 111-358).

We recognize that Congress faces a major challenge to reduce federal budget deficits and bring the national debt under control and find it critical that cuts be implemented strategically, with an eye toward the future economic health of the U.S. Continued, strong funding of basic and applied scientific research in NSF as well as investments in STEM education programs, like those in EHR, will help ensure the economic growth needed to restore long-term fiscal strength and national prosperity. The National Commission on Fiscal Responsibility and Reform stated it well saying:

"We should cut red tape and unproductive government spending that hinders job creation and growth. At the same time, we must invest in education, infrastructure, and high-value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs."

BIO, GEO, and EHR support research to increase food and energy security, human health, water quality, and adaptation of natural resource production to new environments.

Food and energy security, human nutrition and health, water availability and quality, and adaptation to variable weather patterns are some of the greatest challenges facing our nation and the world. They are also major societal needs identified by the Committee on New Biology for the 21st Century which will require solutions developed through the New Biology Initiative.


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The soil provides numerous ecosystem services including:

- carbon sequestration to mitigate greenhouse gas emissions;
- nutrient cycling for agricultural production and cultivation of natural resources;
- water purification necessary for potable and recreational water-use;
- waste treatment essential for recycling waste products and nutrients; and
- retention and treatment of chemical and biological agents from the air, land, and biological systems.

Life-supporting services provided by the soil can be enhanced by increasing the inherent resilience of soil in managed and natural systems. Soil health and resiliency, however, faces increasing human-linked threats from contamination, unplanned urban development, desertification, salinization, mismanagement and erosion. Research performed in programs like **BIO's Molecular and Cellular Biosciences** is essential to understand processes at the molecular, subcellular, and cellular levels that affect soil health. The *Microbial Observatories and Microbial Interactions and Processes* program allows us to build upon the knowledge that we now have about microbial communities and apply it to learn more about how industrial processes that may be developed which capitalize on the interactions between these communities and plants. Similarly, the *Plant Genome Research Program* also plays a critical role in understanding the basic biology of soil and plant relationships.

In **GEO**, the **Earth Sciences** division supports theoretical research, including the biological and geosciences, the hydrologic sciences, and the study of natural hazards. An important program funded within this division is the *Critical Zone Observatories* which focuses on watershed scale studies that advance understanding of the integration and coupling of Earth surface processes as mediated by the presence and flux of fresh water.

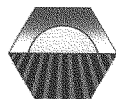
Finally, the critical programs offered by **EHR** are essential to training a high-caliber scientific workforce. The strengths of **BIO**, **GEO**, and **EHR** are many all of the programs within these directorates are essential for the continued growth and development of basic research to overcome the grand challenges that our society now faces.

The Soil Science Society of America's research priority areas

The Soil Science Society of America has identified the following research priority areas and corresponding critical knowledge gaps to guide interdisciplinary soil science research for the next 20 years and beyond. The support provided by the **BIO**, **GEO**, and **EHR** directorates will allow scientists to form effective interdisciplinary teams to perform research in these essential areas.

Human and Ecosystem Health:

- **Short Term (1-5 years):** Soil microbial communities are the greatest source of biological diversity in the world, yet only a small fraction have been studied despite their proven potential as sources of medicines and health agents.
 - o **Critical knowledge gap:** There is a need to harness the microbial diversity in soils for the development of new pharmaceuticals.



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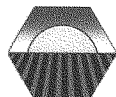
- **Medium Term (5-10 years):** Soil is both the source of and a means to eliminate disease. Exploration of the life cycle and management of soil-borne pathogens (*Salmonella*, *E. coli*) will reduce food contamination and improve human health.
 - o **Critical knowledge gap:** We need to understand the soil's capacity to treat and deactivate pathogens in waste materials and contaminated waters.
- **Long-term (10-20 years):** Agriculture contributes nitrogen, phosphorus and pesticides to surface and groundwater.
 - o **Critical knowledge gap:** There is a critical need to improve our understanding of the mechanisms controlling nutrient use efficiency to prevent impairment of watersheds as well as economic losses.

Waste Treatment and Water Quality

- **Short Term (1-5 years):** Water runoff from urban and rural soils results in nutrient and sediment contamination of watersheds and water shortages for urban and rural agriculture.
 - o **Critical knowledge gap:** We need to research the potential for soil-based re-use of waste industrial, and storm waters- in rural and urban environments to maximize water infiltration and storage and minimize damage to aquatic systems and reduce dependence on groundwater.
- **Medium Term (5-10 years):** Increasing applications of organic human and industrial waste to soils will strain soil treatment capacity.
 - o **Critical knowledge gap:** We need to optimize use of these materials to maximize soil carbon sequestration and nutrient availability, while minimizing fugitive gas emissions.
- **Long-term (10-20 years):** Knowledge is lacking concerning long-term impacts of applications of organic human and industrial waste to soils.
 - o **Critical knowledge gap:** We need to investigate the risk factors associated with soil-based treatment of land-applied human and industrial waste and identify scientific solutions to managing those risks.

Food and Energy Security

- **Short-term (1-5 years):** Obesity and malnutrition plague our urban population.
 - o **Critical knowledge gap:** We need to develop educational tools and soil quality controls to foster the development of urban agriculture, promoting improved nutrition for urban children.
- **Medium-term (5-10 years):** Sustainable agricultural systems that produce food, feed, fiber, and fuel are needed to maximize nutrient uptake while minimizing environmental impacts.
 - o **Critical knowledge gap:** Site-specific agronomic solutions need to be elucidated that maximize soil agroecosystem services, minimize soil disturbance, and concurrently increase soil carbon reserves and reduce the need for inputs.
- **Long-term (10-20 years):** Developing regions of the world lack basic agronomic tools and knowledge to sustainably produce food, feed, fiber and fuel.
 - o **Critical knowledge gap:** There is a need for international education on conservation production systems to promote food security and stability for these regions.


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Adapting to and Mitigating Climate Change

- **Short-term (1-5 years):** Alternative manure management practices have the capacity to increase soil carbon sequestration.
 - o **Critical knowledge gap:** There is a need to discover means to use manures to optimize plant yield, carbon sequestration, and soil tilth while minimizing nitrous oxide emissions.
- **Medium-term (5-10 years):** The cryosphere is thawing due to climate change, resulting in significant emissions of greenhouse gases.
 - o **Critical knowledge gap:** We need to determine the mechanisms controlling greenhouse gas emissions from organic soils, particularly tundra and permafrost soils, and identify methods to control those emissions.
- **Long-term (10-20 years):** U.S. agriculture contributes 6% of annual U.S. greenhouse gas emissions. Forests, cropland, and grass land have the capacity to be sinks if properly managed.
 - o **Critical knowledge gap:** We need to identify biological and geochemical soil processes controlling carbon storage and emissions of greenhouse gases (CO₂, CH₄, and N₂O) from managed ecosystems in order to develop management practices to reduce emissions and increase capture.

We hope that you will continue to strongly support funding for NSF and especially the BIO, GEO, and EHR Directorates. Thank you again for providing us with the opportunity to testify before the House Appropriations Subcommittee on Commerce, Justice, and Science Today.

Mr. WOLF. Sure. Well, thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. Thank you. I think that we have said it and we will say it again that we agree. Thank you.

Mr. WOLF. Thank you. Next the witness will be Mathematical Association of America, David Bressoud.

FRIDAY, MARCH 11, 2011.

MATHEMATICAL ASSOCIATION OF AMERICA

WITNESS

DAVID M. BRESSOUD, PH.D., PAST-PRESIDENT, MATHEMATICAL ASSOCIATION OF AMERICA

Mr. BRESSOUD. Chairman Wolf, Ranking Member Fattah, thank you so much for this opportunity to come before you today to speak on behalf of the National Science Foundation, and thank you especially for all of the support that you have given to science in the United States.

I am David Bressoud, I am past-president of the Mathematical Association of America. This is the largest professional association in the world that focuses on undergraduate level mathematics, and undergraduate teaching is what we are primarily concerned with.

I teach right now at Macalester College, but I will pull the Penn State card, I taught there for 17 years before moving to Minnesota in 1994.

I do not need to convince you how important it is to have a highly trained workforce in engineering and the sciences, the people who are—got the mathematics background in order to succeed in the kinds of jobs that we need to create for the 21st Century. Certainly many other countries realize this. You look at China, you look at India, you look at Singapore, they are invested heavily in their undergraduate science and mathematics and engineering programs, and unfortunately the United States has been slipping.

I have included in my written testimony some graphs. You go back 25 years, we were graduating more engineers 25 years ago—75 to 80,000 engineers each year—than we are going now. We are now graduating less than 75,000 engineers per year. And not only are we losing numbers in engineers, we are losing numbers in the sciences, and we are particularly losing numbers among women and students from underrepresented groups, historically underrepresented groups.

During the '80s and '90s we were very successful in increasing the percentage of women going into engineering, the same was true with Hispanic students and African American students. The past decade has seen these numbers slip. The number of women going into engineering, it got up as high as 21 percent of engineers were women, in the past decade it has now slipped back down to about 18 percent.

Very dramatic changes among African Americans. Twelve years ago we reached a peak in the number of African Americans majoring in mathematics and statistics, those numbers have dropped by 25 percent in the past decade.

Now, it does not have to be like this. We know the kinds of programs that are successful in getting students into these science and engineering fields and successfully through them, and the National Science Foundation's directorate for education and human resources is really the only federal agency that really focuses on undergraduate level science and mathematics, and the work is absolutely critical.

I am speaking generally for funding for National Science Foundation, but more specifically for EHR, because they have been able to identify the programs that are successful and show how to leverage that by helping other colleges and universities to adopt those programs and adapt them to their local needs.

Often it is a question of small amounts of money, sometimes 30, \$50,000 is enough to get a school to get people interested, willing to commit the time to start up one of these programs, like the Emerging Scholars Program that has been so successful, it is run out of the Dana Center at the University of Texas, Austin. Or you have got a great program as Arizona State University, the Mathematical and Theoretical Biology Institute that is run by Carlos Castillo Chavez. These are programs that provide the mentoring in order to be able to get students successfully in and through the math intensive majors.

So I want to thank you again for this opportunity to appear before you and I hope that you will seriously consider the funding, especially for EHR. Thank you.

[The information follows:]

STATEMENT OF DR. DAVID BRESSOUD, PAST-PRESIDENT OF THE
MATHEMATICAL ASSOCIATION OF AMERICA AND DEWITT WALLACE
PROFESSOR OF MATHEMATICS, MACALESTER COLLEGE

Chairman Wolf, Ranking Member Fattah, and distinguished Members of the Subcommittee, I greatly appreciate this opportunity to participate in today's hearing and to speak to the importance of national funding for science in general, and the advancement of science education in particular. On behalf of the Mathematical Association of America, I can state that the American mathematical community strongly supports the President's overall Fiscal Year 2012 budget request for the National Science Foundation, and urges that, given the need to improve undergraduate STEM education, funding for Education and Human Resources (EHR) should be supported at a similar level.

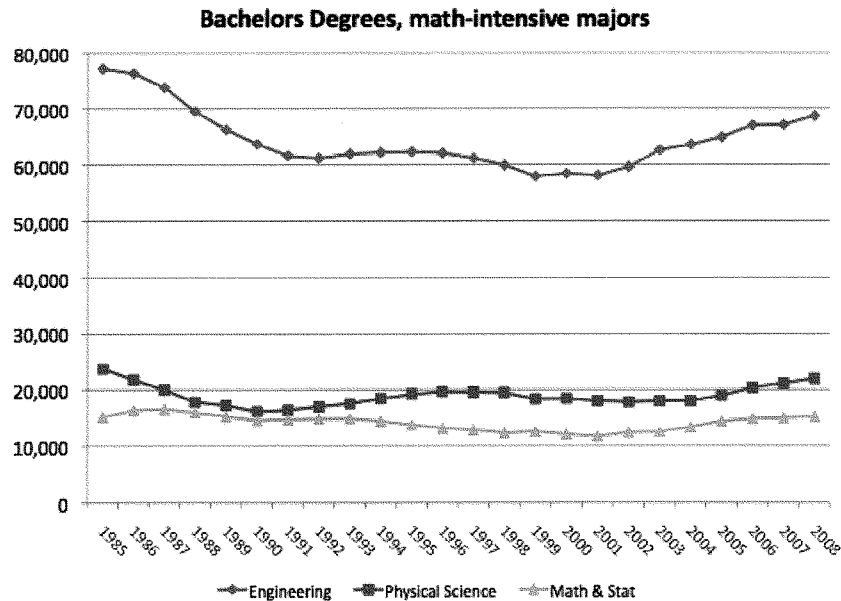
Much of America's competitive advantage in the world today is the result of its leadership in science and technology. This was made possible by decades of investment in the infrastructure of the scientific enterprise, both public and private. Our system of university, corporate, and foundational research centers is the envy of the world. The rest of the world has learned from our success. Emerging powerhouses such as China and India are investing heavily in their universities and scientific institutes. As they also realize, promoting scientific and technological innovation requires more than funding laboratories and institutes. It requires educating the next generation of scientists and engineers who will populate those centers of excellence.

As immediate Past-President of the Mathematical Association of America, the world's largest professional association providing expository mathematics, professional development for college mathematics faculty, and resources for the teaching and learning of college-level mathematics, I am intimately aware of the critical shortage of students choosing to pursue scientific, mathematical, and technological careers.

As I travel around this country, I find universities in serious financial straits, forced to replace regular faculty with part-time adjunct instructors, to increase class size, and to decrease support services. A quarter century ago, we regularly graduated 75,000 to 80,000 engineers a year. In 2008, we graduated 69,000 engineers. This has happened while our demand for a technologically savvy workforce has grown. Until now, we have been able to bridge the shortfall in the number of engineers and scientists that we need by drawing large numbers of highly talented immigrants to America. It is not clear that we can continue to do that. Both China and India, as well as other large developing countries such as Brazil and Indonesia, are improving their systems of higher education while sweetening the incentives for their graduates to stay home.

Focusing just on the most mathematically-intensive majors of engineering, the physical sciences, and the mathematical sciences (including statistics), the U.S. has seen no net gain in the past 25 years (see graph 1). The numbers dipped in the mid to late 1990s as we reached the trough in the college-age population between the baby boom generation

and its echo. The number of young people of college age today is essentially back to what it was in 1980. Yet, our production of scientists and engineers is lower than it was then.



Graph 1: Total number of Bachelors Degrees per year. Source: US Dept of Education, National Center for Education Statistics

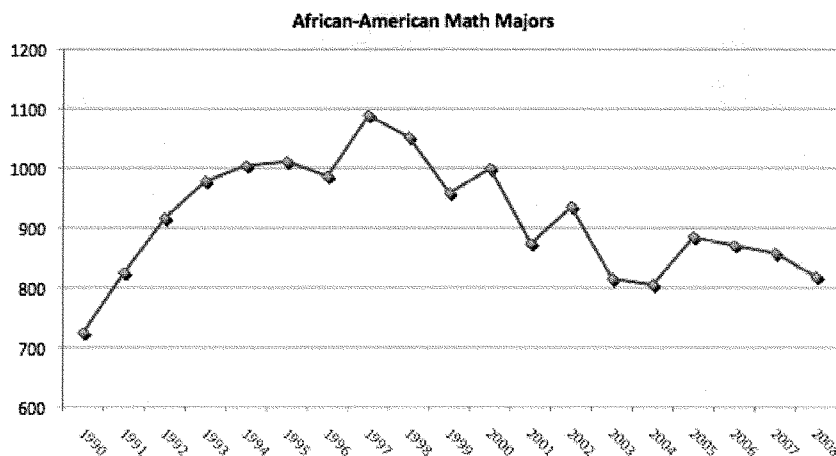
What I find particularly alarming is how many talented students aspire to careers in engineering or science, but fail to achieve their dream. This past fall, 210,000 students entered as full-time students in four-year undergraduate programs with the intention of majoring in engineering, a physical science, mathematics or statistics. We can expect that no more than half of them will graduate with one of these degrees.

At the same time, this country is undergoing a demographic change. Our college-age population is increasingly Hispanic and African-American. As recently as 1990, 87% of those graduating from college were White. By 2008, it was less than 75%. If we are to continue even to maintain current numbers of graduates with degrees in science, engineering, and mathematics, we must improve the rates of attraction and retention of students from traditionally underrepresented groups into science and engineering. We are doing a lousy job of this.

During the 1990s and early 2000s, there was real progress in U.S. institutions. Women reached 47% of mathematics majors, 42% of all physical science majors, and, from a very low base, climbed to just over 21% of all engineering majors. Today, despite the fact that they now receive 57% of all Bachelors degrees, women have fallen to 44% of

mathematics degrees, 41% of physical science majors, and, most discouragingly, only 18% of engineering degrees.

Furthermore, in 2008, Hispanic students earned 8% of all Bachelors degrees, but only 6% of math degrees and of engineering degrees, and only 5% of physical science degrees. The situation is even more problematic for African-Americans. In 2008, they earned 10% of all Bachelors degrees, but only 6% of degrees in the physical sciences, and 5% of math degrees and of engineering degrees. What is especially discouraging is that in mathematics, the absolute numbers of African-Americans earning bachelors has been falling (Graph 2). In the case of mathematics, there has been a 25% decrease since the high point of almost 1100 bachelors degrees in the mathematical sciences earned by African-Americans in 1997.



Graph 2. Number of Bachelors Degrees in Mathematics or Statistics earned by Black, non-Hispanic students. Source: US Dept of Education, NCES

It does not have to be this way. We know what works to support students into and successfully through science and engineering majors. In the Fall of 2009, Dr. Sylvia Bozeman of Spelman College came here to brief Congress on the success of their program, made possible through support from the NSF. By 2007, Spelman, a small liberal arts HBCU for women, was one of the top two producers of African-Americans earning degrees in Mathematics or Statistics. Their Chemistry Department today boasts 46 alumnae who have earned a doctorate degree in chemistry or a related STEM field, as well as hundreds of other chemistry graduates. As Dr. Bozeman said at the time, the key to their success was no more, and no less, than “creating a more welcoming environment, new pathways into science with additional courses of study, and a nurturing environment with exposure to role models and mentors.”

This same approach of attention to the additional courses that are needed together with a nurturing environment that includes role models and mentors has worked wonders under the directorship of Dr. Carlos Castillo-Chavez at the Mathematical and Theoretical Biology Institute (MTBI) of Arizona State University. Initially created under the NSF's Research Experiences for Undergraduates (REU) program, MTBI has grown into an extensive program that mentors and supports students from the moment they enter university through post-doctoral programs. In the over eleven years of its existence, it has sent 112 of its alumni from underrepresented minorities on to graduate school, 71 of them on to PhD programs in STEM fields.

These are only two examples of unique NSF programs that provide impetus and seed money for the development of good ideas that are beginning to work to spur the growth of the educated workforce that we need. Distinctive NSF programs such as Integrative Graduate Education and Research Traineeship (IGERT), the Louis Stokes Alliances for Minority Participation (LSAMP), Alliances for Graduate Education and the Professoriate (AGEP), Mentoring through Critical Transition Points (MCTP), and Enhancing the Mathematical Science Workforce for the 21st Century (EMSW21) have invested substantial public resources for the training of American graduate students in the STEM fields and been particularly effective at attracting students from underrepresented groups.

The NSF's Directorate for Education and Human Resources (EHR) also has been a leader in developing and promoting programs that work, and EHR stands virtually alone in supporting innovative approaches to undergraduate science education. This is particularly exemplified by the Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) program of the Division of Undergraduate Education (DUE). With very small sums of money, DUE is able to make a real difference in the quality of science instruction at many of our colleges and universities. The TUES program has encouraged and enabled some of our best scientists to work on the improvement of science education.

EHR's Division of Research on Learning in Formal and Informal Settings (DRL) has made it possible for science museums to actively engage with elementary and middle school students in our schools, building enthusiasm for science. DRL has also supported groups such as Dr. Phillip Sadler's Science Education Department within the Harvard-Smithsonian Center for Astrophysics that is learning what works—and what doesn't—in preparing high school students to succeed in science, engineering, or mathematics.

For these reasons, the Mathematical Association of America strongly supports the President's FY 2012 budget proposal to fund the NSF. We wish to bring to the attention of this Subcommittee that while this represents an increase of 13% over the enacted NSF funding for 2010, actual NSF funding has fallen behind the growth rates that both the current and prior administrations have proposed. Furthermore, EHR, the critical directorate that oversees the efforts of NSF in scientific education, has long been undervalued and underfunded. Even in this otherwise helpful Fiscal Year 2012 budget request, HER is proposed for a much lower 4.4% increase.

In these tough budget times, there are many worthy programs that must deal with cutbacks. But the maintenance and cultivation of a scientifically capable workforce is critical to our future. To reduce funding for science, and in particular for science education, really would be an act of eating our seed corn.

Thank you again for this opportunity to appear before the Subcommittee.

Mr. WOLF. Well, thank you. Well, we will. We were involved with the Gathering Storm report. Looking at the latest one, if my memory serves me, is we were graduating about 70,000 engineers and of that about 30,000 or 35,000 were foreign students; many who were not going to live here after graduation. In China the numbers were roughly 700,000, although it is not engineer for engineer, but it is still a number that sort of frightens you a little bit.

Mr. BRESSOUD. Yes.

Mr. WOLF. And the other figure was that we are graduating fewer Ph.D.s in physics now than we did in 1956.

Two years ago we asked the National Science Foundation to put together a program for the best practices, what is working, and frankly they dropped the ball. Now they are picking the ball up and running with it, so I would ask if you would call maybe the NSF, the staff can be in touch with you.

Mr. BRESSOUD. Yes.

Mr. WOLF. Because we are trying to get them to put together what are the very best practices with regard to teaching math and science, what age do you begin to lose people? Is it fourth grade, fifth grade, and you sounded like you were saying we pretty much know in that area.

Mr. BRESSOUD. Yes, we have got a pretty good idea of what works.

Mr. WOLF. Well, then if you could talk to them and a staff member will put you in touch with Joanne Freeney.

Mr. BRESSOUD. Oh, sure, she is a good friend.

Mr. WOLF. If you would call her and share it, because they are going to have a conference in May. Then there is going to be a roll out of whatever recommendations they make some time in the summer or the fall, and if you could help her. They were just going to look at two states when I thought maybe they should be looking at many different programs. So if you would do that and help us out we would appreciate that.

Mr. BRESSOUD. Yes, and of course one of the biggest challenges is to take successful programs at one institution and figure out how to translate them so that they will work at another institution.

Mr. WOLF. Well, you all are the experts and we are looking for you to tell us what you think is the best.

Mr. BRESSOUD. Okay.

Mr. WOLF. Mr. Fattah.

Mr. FATTAH. I agree with the chairman and I appreciate your input. You have crystallized and quantified where we are. Thank you.

Mr. BRESSOUD. Thank you.

Mr. WOLF. Thank you very much.

How is your football team there, pretty good? Are you in the big 50? Is that the big 50 or big 100?

Mr. BRESSOUD. Not quite.

Mr. WOLF. Why would you leave Happy Valley?

The next member of Congress we have Ms. Richardson from California.

Mr. FATTAH. You are being bumped for a second.

FRIDAY, MARCH 11, 2011.

JUSTICE AND SCIENCE**WITNESS****HON. LAURA RICHARDSON, A REPRESENTATIVE IN CONGRESS FROM
THE STATE OF CALIFORNIA**

Ms. RICHARDSON. Well, thank you, Mr. Chairman for having me. It is kind of ironic that you were before my committee yesterday, so now it is reversed roles and I am in this position. And my football team is doing just fine. I went to both UCLA and USC, so we are having our days.

I want to thank Chairman Wolf and Ranking Member Fattah for this opportunity to appear before the House Appropriations Committee on the issues of justice and science and really give you some of my thoughts about appropriations as we move forward in 2012.

As we begin to recover from the deepest recession that we have had since the great depression, it is important that our spending decisions reflect the needs of investments that we know have worked, because we have less money to do with the things that we need to achieve.

I am here to stress the support of a number of community, safety, criminal justice, economic and science research programs that are important not only to the 37th Congressional district, but to the nation as well.

Sir, I represent a very urban community. Long Beach is the very largest city that I live in and I also include Compton, Carson, and a part of Watts. I point that out to you because you have different interests in people here who are talking, but I wanted to put a face to you of what my district is about.

In my district one-third of the grandparents are raising their grandchildren. The average income is approximately \$32,000. When I first became an elected official in local government, my district was number one in murder, manslaughter, rape, and assault.

So when I come to you and I talk to you about the importance of these programs it is based upon that information that I sit here with you today.

The number one, the first program I wanted to discuss with you was the COPS Program. As you know, that program was started, it was not really intended initially to be a program that would be utilized for ongoing of paying for police officers. It was to initially get more officers on the street. And what we have found is even with the officers that we have, we are still struggling to maintain the pay of those that we have and to have enough officers to provide adequate safety in our communities. So I would urge your consideration of continuing to support that program.

The second one is the Debbie Smith DNA Backlog Grant Program. As you know, I believe I am—as much as I work to make sure we have safety in our communities—I am also very strong on being tough if people are violators of those laws. This DNA Backlog Grant Program is so important because we have assailants who are out there who would be caught on past crimes that they have already committed and future ones that they are engaging in at this time, and so I would urge your support in that area as well.

I have cut my comments back because I wanted to respect the time that I had before you.

Keeping our communities safe however demands not only responsive services, but preventative measures as well, and so I want to talk a little bit about the prisoner reentry programs that have benefited by community.

The recidivism rate in the United States is intolerable 67 percent. This is because too many prisoners are released without having learned appropriate skills that they could use coming out.

I would like to share with you, and if you are not familiar with Chef Jeff, Chef Jeff was in a prison in California. He actually learned how to become a professional chef, and ended up being a chef in the Bellagio and many of the very high name hotels in Las Vegas. He has written many books. I would be happy to share that information with you.

I have drafted a bill called the Chef Act, and it is Cooking Helps Elevate Futures Act. And what it basically would do is: prisoners are in prison, they are going to be eating. So we might as well, if they are going to be eating and if they are going to be helping in the cooking, they ought to be learning some of the skills so that that way if they come out they would have the ability to work in a place of business where they could actually have a job and therefore not coming back returning to prison and costing us more money that we do not have.

So as that moves forward I would hope that you would consider potential laws like that and other programs that currently exist that Danny Davis, Representative Davis brought forward: the Second Chance Act. That really has not received the appropriate funding that it so richly deserves.

In Los Angeles County, the average daily jail population is 19,000. Now I am moving to my last couple points. Twenty-two percent of those inmates are undocumented immigrants, and 17 percent of those are undocumented felons. The total State Criminal Alien Assistance Program, SCAAP, cost Los Angeles County in 2009 nearly \$117 million, and yet Los Angeles County only received \$15 million. States should not be expected to bear the burden of undocumented illegal immigrants who we are then left to house and have to pay for. So I strongly support the funding of SCAAP at \$950 million for the 2012 year coming forward.

As I close for both you Chairman Wolf and also Ranking Member Fattah, I want to say that, for all of us, public safety and economic security is clearly our top priority, but it is important that we support programs that have worked. I have a lot of programs that I believe in, but I respectfully came to you to highlight and to paint a picture of some of the very key ones that I would urge you to please consider granting it our full support in the House.

Underfunded programs negatively impact American's lives, and I would venture to tell you it will actually cost us more if we do not support them now.

I thank you for the time that you have given me and I will now pause for any questions that you might have.

[The information follows:]

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AND SCIENCE AND TECHNOLOGY
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PREPAREDNESS, AND RESPONSE

CONGRESSWOMAN LAURA RICHARDSON OF CALIFORNIA

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, AND SCIENCE

HEARING:
“MEMBER AND OUTSIDE WITNESS FY2012 APPROPRIATIONS PRIORITIES”

FRIDAY, MARCH 11, 2010
10:00 A.M.

I would like to thank Chairman Wolf and Ranking Member Fattah for the opportunity to appear before the House Appropriations Committee's Subcommittee on Commerce, Justice, and Science and share some of my appropriations priorities for Fiscal Year 2012.

As we begin to recover from the deepest recession since the Great Depression it is important that our spending decisions reflect the need for investments that strengthen our fragile recovery, as well as the seriousness of our mounting federal deficit. However, it is my belief that we cannot afford to underfund critical efforts to keep our communities safe and economically prosperous. I am here to stress the importance of robustly funding a number of community safety, criminal justice, economic development, and science research programs that are important not only to the 37th District of California, which I proudly represent, but also to the shared interests of our nation.

Cities across the country, specifically those in urban areas like the cities of Long Beach, Compton, and Carson in my district, rely upon efficient, well-funded criminal justice systems to keep drugs and guns off the streets, keep our children and schools safe, and hold bad actors accountable. Over the years, a number of Department of Justice (DOJ) programs have proven exceptionally important in our efforts to protect our communities and the families that inhabit them. One such program is the Community Oriented Policing Services (COPS) program, which provides assistance to state and local law enforcement agencies to help reduce crime. Another is the Debbie

Smith DNA Backlog Grant Program, which provides funds to help eliminate backlogs at crime labs and bring assailants to justice.

Unfortunately, the President's FY2012 Budget Request looks to reduce DOJ grants to state and local authorities for criminal justice programs by \$588 million. While I applaud the President's efforts to tackle our federal deficit, I do not support these cuts. I believe it is critical that we provide law enforcement authorities the resources that they need to protect the public safety and reduce crime.

In addition to funding efforts to reduce crime, we must also ensure that protections and services are available to aid the victims of crime. Our spending priorities are, fundamentally, a reflection of our national values, and I believe that as Americans we should always work to protect the most vulnerable members of our society and provide aid for innocent individuals whose rights have been violated. Initiatives such as the Violence against Women Act's (VAWA) STOP Formula Grant Program, the Sexual Assault Services Program, the Transitional Housing Assistance Grant Program, and the Jessica Gonzales Victim Assistance Program provide funds that help prevent cases of domestic abuse, as well as assist assault victims in finding safety and accessing recovery services. These programs represent the first line of defense and the first responders for many vulnerable populations, and the consequences of underfunding them would be dire.

I was pleased to see that the President's budget requests \$591 million to combat violence against women in the United States. I strongly support this funding increase. Again, I agree that the federal government must tighten its belt in areas where we can afford to do so, but trimming the budget cannot occur on the backs of those desperate for support. I urge the members of this subcommittee to meet the President's goal of funding vitally important criminal justice programs that protect and rehabilitate victims of assault and abuse.

Keeping our communities safe, however, demands not only response services, but also preventative measures. I have always believed that prisoner reentry programs are a key way to reduce crime. The recidivism rate in the United States is an intolerable 67 percent. This is because too many prisoners are released from prison without the networks of support or marketable skill sets needed to succeed economically, causing them to fall back into lives of crime and perpetuate the revolving door between the streets and the cell blocks. That is why I support robust funding for prisoner reentry programs like those authorized by the Second Chance Act, a bill that was passed with overwhelming bipartisan support in 2008.

In the 111th Congress I introduced (and will soon be reintroducing) the Cooking Helps Elevate Futures (CHEF) Act, a bill that aims to reduce re-incarceration rates by setting up programs to equip inmates with culinary skills that they can use to achieve gainful employment upon their release. If the CHEF Act were to be signed into law, I would hope to see this program receive full funding. Helping the formerly incarcerated stay on the right side of the law is in everyone's interest: doing so improves lives, strengthens communities and families, and removes a heavy financial burden from taxpayers.

In addition to funding programs that reduce crime, strengthening our community also requires investments in cutting edge science and technology with the potential to improve quality of life across the country. I support full funding for the National Science Foundation (NSF), which will allow NSF and universities to sustain and expand

their vital research and education programs, which range from improving science education to developing multimedia technologies that improve telemedicine. It is time to increase funding for academic research, which is critical to innovation and drives the competitiveness and general well-being of our nation.

Finally, I support robust funding for the NASA budget. NASA's mission to explore the unknown and answer basic questions about space and the natural world has enormous and tangible implications for our lives. NASA's mission is a key part of the President's goal of out-innovating the rest of the world and has the potential to yield new insights for ongoing problems such as global warming and create thousands of jobs. NASA is also committed to investing millions of dollars in STEM education, helping to ensure that our global competitiveness remains a top priority.

All of these investments are vitally important for our public safety and economic security. The above programs have substantial records of success at keeping our communities safe and creating jobs—two of our most critical obligations as a government. Underfunding these programs will have lasting negative impacts on the lives of thousands of Americans. Conversely, appropriate funding levels for these important programs will lay the foundation to ensure that we have strong communities and a strong economy now and for future generations.

I thank Chairman Wolf, Ranking Member Fattah, and the members of the Subcommittee on Commerce, Justice, and Science for the opportunity to testify on my appropriations priorities for Fiscal Year 2012.

Mr. WOLF. Well, I do not have any questions, just to thank you for your testimony. I think the committee is sympathetic. We are going to try to carry language to require more work in the prisons with the Bureau of Prisons.

Actually the Congress has voted to decrease the work in the prison industry system. If you want to give us a letter in detail, we can get it down to Director Lappin to see if we are able to convince them to increase this program. It may be easier to do it that way than it is to get the bill passed, so give us a copy and we will talk to Director Lappin.

Secondly, I was out in California a while back giving a speech at Pepperdine on human rights and there was a person there who had worked in the prosecuting attorney's office in Compton. They were telling me you really have a very, very, very serious gang problem with regard to that.

Ms. RICHARDSON. Yes, sir.

Mr. WOLF. I have been to Long Beach, and I do appreciate your testimony. I think we are meeting with Director Lappin on Tuesday. If you can get us something by next Tuesday we will ask him to take a look at your bill because he is coming before the committee next week.

Ms. RICHARDSON. Okay.

Mr. WOLF. But thank you for your testimony.

Mr. Fattah.

Mr. FATTAH. Thank you, and let me thank you for your great leadership in the Congress on a whole range of issues on behalf of California and the country and Compton.

But on this point, we are spending as you know over a billion dollars on police in Iraq, and on training their police we have spent billions. So the idea that we would cut the COPS Program—and the chairman's father was a Philadelphia policeman, so we know that he sympathizes on these issues.

I want to thank you for your testimony, we are going to work as hard as we can on the priorities that you have laid out. Thank you.

Ms. RICHARDSON. Thank you very much. And Chairman Wolf, I also want to stress, I look forward to working with you and we will get you that information. So far I have already co-signed onto six Republican bills, and the reputation I want to establish with you is I want to fix the problems, so I am happy to work with you.

Thank you, Mr. Fattah, as well for your kind comments.

Mr. WOLF. The next witness will be George Washington Institute of Public Policy, George Washington University, Dr. Andrew Reamer.

FRIDAY, MARCH 11, 2011.

GEORGE WASHINGTON INSTITUTE OF PUBLIC POLICY

WITNESS

DR. ANDREW REAMER, RESEARCH PROFESSOR, GEORGE WASHINGTON INSTITUTE OF PUBLIC POLICY, GEORGE WASHINGTON UNIVERSITY

Mr. REAMER. Mr. Chairman, Mr. Ranking Member Fattah, I am Andrew Reamer, research professor at George Washington Univer-

sity's Institute of Public Policy, I focus on federal policies to promote employment and competitiveness.

I appreciate the opportunity to comment on the proposed fiscal year 2012 budget for three statistical organizations under your purview. The Census Bureau, the Bureau of Economic Analysis, and NSF's National Center for Science and Engineering Statistics.

These agencies' data guide public and business decisions that determine the health of \$15 trillion in annual national economic activity which comes to \$48,000 a person in the country, and the future of \$71 trillion in U.S. household assets, and \$37 trillion in U.S. non-financial business assets which comes to over \$300,000 per person in national wealth.

Specifically agency data informed decisions by policy makers responding to national economic and fiscal conditions by millions of businesses regarding location, markets, products, investment, and hiring by thousands of education and training organizations determining program offerings and by thousands of regional economic development organizations addressing opportunities for business creation, retention, expansion, and attraction.

Consequently the nation's return on investment in these agencies will be extraordinarily high. Essentially \$1.1 billion in investment to protect the future of over \$100 trillion in national wealth on a per capita basis is investing \$3.67 per capita to protect the future of over \$300,000 per capita.

In particular I recommend one billion thirty-one point two million dollars for the Census Bureau, \$6.5 million above the President's request, and \$108.9 million for BEA, the President's request, \$38.01 million for NCSES, the President's request.

The President's request for the Census Bureau will allow the agency to operate its essential programs and add a timely low cost effort to gather data on state and local government pension programs, which includes unfunded liabilities, which have been in the news as of late.

I recommend that the subcommittee fund two programs slated for termination in the President's budget at a cost of six and a half million dollars or two cents per capita.

The first is the Consolidated Federal Funds Report which provides Congress and the public with annual data on federal expenditures and obligations for every state and county in all spending categories. CFFR's termination would leave members with a reduced understanding of the details of federal spending to the detriment of sound fiscal management.

I also ask the subcommittee to preserve the Current Industrial Reports Programs which surveys firms in 47 manufacturing sectors. The loss of the CIR program would result in less reliable economic statistics, not a good thing in these times.

Regarding BEA I strongly recommend the subcommittee endorse BEA's budget initiatives totaling \$13.2 million or four cents per capita. These initiatives will enhance the safety of the national wealth and soundness of the nation's economy in four ways. They will remove blind spots in macro economists' and financial markets' abilities to see emerging economic risks. BES says that the statistical system, quote, fell short in providing advance warning signs

of a building economic crisis, unquote. What BEA does not say is that the missing data would have cost about a nickel per person.

The statistical agencies have sought funding to get those data since the 1990s, and that absent the warning signs resulting economic crisis led to a 16 percent drop in household assets in one year coming to about \$42,000 in lost wealth per person.

Second the initiatives will result in more reliable forecasts of federal deficits.

Third, the new data will enhance the ability of corporations to make decisions more likely to lead to greater competitiveness, higher profits in jobs, and finally the new data will allow Congress and the administration to take actions that better support small business development.

Finally the work of the National Center for Science and Engineering Statistics is essential for guiding government, university, and corporate decisions regarding R and D innovation and education that will determine the nation's economic competitiveness going forward.

The President's request including four important low cost and high impact initiatives is worthy of the subcommittee's report.

Thank you very much, Mr. Chairman, for the opportunity to present my views.

[The information follows:]

Testimony of Andrew Reamer, Research Professor, George Washington Institute of Public Policy, George Washington University to the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies. Honorable Frank Wolf, Chairman. March 11, 2011.

Mr. Chairman and Members of the Subcommittee:

My name is Andrew Reamer and I am a research professor at the George Washington Institute of Public Policy, George Washington University. The focus of my work is on federal policies that promote national economic competitiveness and job creation.

I appreciate the opportunity to comment on the proposed FY 2012 budgets for statistical programs in three agencies under this subcommittee's jurisdiction:

- **Census Bureau – I recommend \$278.5 million for salaries and expenses and support the president's request for \$752.7 million for periodic censuses and programs**
- **Bureau of Economic Analysis – I support the president's request of \$108.9 million**
- **National Center for Science & Engineering Statistics – I support the president's request of \$38.01 million**

Data produced by these three agencies guide millions of public and business decisions that determine the safety of \$69 trillion in household assets and \$36 trillion in nonfinancial business assets and the health of the nation's \$14 trillion economy. Consequently, the nation's return on the proposed \$1.14 billion investment in these agencies will be extraordinarily high.¹

Federal statistics are essential to the nation's ability to emerge from the Great Recession and achieve growth and stability over the long-term. Current, accurate, detailed data are needed by

- federal economic and budget policymakers and independent research institutions to assess national economic conditions and propose policies that effectively stimulate growth, jobs, and profits
- state and local economic development organizations to identify and address concerns and opportunities for business creation, retention, expansion, and attraction
- education and training organizations to track labor market conditions and occupational supply and demand, including in science and engineering
- businesses to make decisions regarding location, markets, products and services, capital investments, research and development, and hiring

In the pre-Internet age, the primary purpose of federal economic statistics was to serve federal economic policy makers, particularly around economic cycle management. For nearly all non-federal users, data were not timely, readily accessible, or easily useful. Now, however, quantum leaps in information technology allow the federal government to quickly analyze and electronically disseminate large volumes of data for use in decision-making by a vast, diverse array of non-federal public and private sector users.

¹ For point of comparison, the 2010 payroll for Major League Baseball was \$2.75 billion.

Further, jumps in statistical agency IT capacities are just beginning to let federal policymakers have a deeper understanding of the structure and dynamics of the economy. If funded, these new data products are poised to contribute to more effective economic and fiscal policies.

Good federal economic statistics, then, make for more informed decision-making, enabling smarter public spending and business choices that enhance the nation's competitiveness and fiscal condition. Data-driven economic intelligence is like military intelligence, it is a necessity, not a luxury, if this nation is to sustain a stable path of economic growth.

Census Bureau

The Census Bureau is the nation's primary data collector, responsible by congressional mandate for a substantial array of demographic and economic statistics at the national, state, county, and neighborhood levels. Data products include the decennial census, annual population estimates, socioeconomic characteristics and conditions of our communities, economic activity by industry and type of owner, and revenue sources and uses at all levels of government.

Census Bureau data are critical to business and government decision-making. Small and large businesses use demographic data to select locations, understand markets, and determine products and services. State and local economic development organizations use socioeconomic data to shape business attraction and job creation strategies. The Census Bureau's data on business activity are the primary inputs to Bureau of Economic Analysis (BEA) estimates of Gross Domestic Product (GDP) and related indicators.

From an economics perspective, I support full funding of the Census Bureau and its key initiatives. Continuation of the 2010 Census data publication process will ensure that decision-makers have current population-based data. Research and testing for the 2020 Census need to begin in FY2012 in order for the Census Bureau to conduct a cost-efficient, accurate census in nine years. The sample size of the American Community Survey (ACS) needs to grow with our population so that estimates are reliable. The Census Bureau needs to prepare for the 2012 Economic Census and Census of Governments, as mandated by Congress. The Bureau's proposal to create a new set of in-depth measures, including unfunded liabilities, regarding state and local government pension programs and other post-employment benefits (e.g., health insurance) is necessary and timely. The preparation of supplemental poverty measures will give policy analysts alternative indicators to traditional poverty numbers based on the relative size of 1950s food budgets. The proposed effort to test the use of administrative records will boost the capability of the Bureau to take advantage of information in-hand, lessening reliance on costly, labor-intensive household surveys.

I also recommend that the Subcommittee provide funding for two programs slated for termination in the president's budget, at a cost of \$6.5 million above the president's request for salaries and expenses.

Current Industrial Reports (\$4 million): In existence for over half a century, the Census Bureau's Current Industrial Reports (CIR) program surveys 40,000 firms in 47 manufacturing sectors (e.g., computers, aircraft, chemicals, machinery, steel, and pharmaceuticals) on a regular basis regarding their production and shipment activities. These data are used by BEA to estimate GDP, by the Bureau of Labor Statistics (BLS) to develop price indices and estimate productivity, and

by Federal Reserve Board of Governors to estimate industrial production. The loss of the CIR program would result in the substitution of less frequent, less detailed data, resulting in less reliable economic estimates. I encourage the Subcommittee to retain this high impact, low-cost program.

Consolidated Federal Funds Report (\$2.5 million): For 30 years, the Census Bureau has produced the annual Consolidated Federal Funds Report (CFFR), which provides detailed data on federal expenditures and obligations in all categories (e.g., contracts, grants, federal salaries, Social Security and other federal retirement/disability programs, Medicare and other direct payments to individuals, loans, and insurance) for the nation and every state and county. This effort is an essential resource for members of Congress and the public (42,000 website visits in 2010) who want to see the categorical, programmatic, and geographic distribution of federal spending. While the 2006 Coburn-Obama bill mandated the creation of USASpending.gov, that web tool only covers federal grants and contracts, not other categories of federal spending. I believe that the termination of the CFFR will leave congressional members with reduced understanding of the details of federal spending at the national, state, and district levels, to the detriment of sound fiscal management.

The annual cost of producing the CFFR in its current state is minimal, \$700,000. However, for congressional purposes, the current state is not sufficiently accurate. The majority of federal grant funds “pass through” state governments, which then spend the money around the state. At present, the Census Bureau estimates the county distribution of pass-through funds on the basis of percentages identified in a 1995 survey of states. As state population and transportation patterns have changed greatly in the last 16 years, the Census Bureau’s distribution formulas are not reliable. For House members to have an accurate picture of federal spending in their districts, the Census Bureau needs to conduct a new state pass-through survey, at a cost of \$1.8 million. Further, I suggest that Congress instruct the Census Bureau to provide on-line CFFR tables by congressional district, which are not available now.

Bureau of Economic Analysis

The data produced by BEA are directly responsible for moving the direction of the nation’s economy: through the monetary policies of the Federal Reserve, through the budget decisions of the president and Congress, through the actions of financial markets, through the decisions of businesses, and through state and local economic development efforts. The president’s request for \$108.9 million for BEA is an excellent use of taxpayer funds and I ask this Subcommittee to approve it.

In particular, I strongly recommend Subcommittee endorsement of the four BEA budget initiatives, totaling \$13.2 million. Collectively, they will allow BEA to address key blind spots in understanding of the nation’s current economic condition and activities and improve the reliability of traditional estimates. New and better data will make possible more intelligent, effective economic and fiscal policies and business decisions more likely to lead to jobs and profits. Further, the data will deter financial market surges based on misinformation about household or industry conditions, which, as recently witnessed, can have ruinous effects on the nation’s economic wealth.

Specifically, the four BEA initiatives are:

- A New Economic Dashboard, providing a more timely, detailed understanding of the condition of nation's major industries (e.g., finance), industry productivity trends, the drivers of sustained economic growth (e.g., net new investment), and the economic role of small businesses (\$5.2 million)
- Everyday Economics, producing a clearer picture of the economic position of American households in terms of savings, assets, liabilities, and spending, with a particular focus on home ownership (\$3.9 million)
- Modernization of Statistical Production, allowing more timely, reliable data with less economist staff hours (\$2.9 million)
- Energy's Economic Impact, yielding more detailed information on energy's role in economic growth, productivity, inflation, trade, and income distribution and on changes in energy supply, consumption, and cost (\$1.2 million).

Collectively, these initiatives will serve to enhance the safety of \$105 trillion in household and corporate assets and the soundness of nation's economy in five ways.

First, they will remove statistical blind spots in macroeconomic policymakers' abilities to see emerging economic risks and vulnerabilities. To quote BEA's request: "The federal economic statistical system – charged with providing key actionable intelligence on the status, trends, and dynamics of the American economy – fell short in providing the advanced warning signs of a building economic crisis. In no small part, this failing was due to an inability to see, both at the detailed and aggregate levels, warning signs of systematic risk. This failing was not a result of a lack of attention, competence, or focus, but rather the exceptional tempo of change and evolution occurring in the economy and the existing statistical system's inability to keep pace."

Specifically, the initiatives will produce the following new data series that will enhance economic monitoring: quarterly GDP-by-industry (allowing faster identification of sectoral issues, e.g., in financial institutions, than existing annual data allow); net domestic product and net investment (allowing observation of new additions to wealth and productivity capacity beyond replacement); productivity indicators across all major sectors; quarterly indicators of household liabilities compared to assets (giving early warning to overinvestment in housing); quarterly indicators of household income after taxes and essentials (enabling better monitoring of spending power and patterns); and the detailed role of energy in the national economy, by energy type (helping understand economic vulnerabilities to volatility in specific energy markets, e.g., oil). Statistical modernization will let policymakers act on the data more quickly.

Second, the BEA initiatives will result in more reliable forecasts of federal deficits under various scenarios. Current GDP estimates provide the foundation for economic and fiscal forecasting. Quarterly GDP-by-industry data availability and statistical modernization, with its improved checking procedures, will result in more accurate, reliable estimates of total GDP.

Third, the initiatives will provide financial markets with new data by which to better assess investment risk and opportunity. Financial market blind spots, and the resulting economic turmoil, resulted in the loss of \$10 trillion in U.S. household assets between 2007 and 2010, a 12 percent decline. New BEA measures of household economics, including the size and nature of assets and liabilities, would help prevent such catastrophes in the future.

Fourth, data produced by the initiatives will enhance the ability of the nation's corporations to make decisions more likely to lead to greater competitiveness, higher profits, and more jobs. Firms will be able to better understand economic conditions and competitive dynamics within their industries, household capacity to participate economically, the relative cost of doing business in various locations, and firm vulnerability to energy market activity. In particular, small businesses will benefit from direct electronic access to these measures.

Finally, detailed new data on small business activity will allow members of Congress and administration policymakers to take more informed, effective actions to catalyze the vitality of this key component of the U.S. economic base. In particular, the initiatives would produce new financial data by type of small business (S-type, limited liability, noncorporate partnerships, sole proprietorships) and identify energy market issues and opportunities for small firms.

I believe that the nation's return on investment in these initiatives will be so high that I invite the Subcommittee to ask the Government Accountability Office to ascertain this return to the extent possible.

National Center for Science and Engineering Statistics

To emphasize the importance of data to innovation, the America COMPETES Reauthorization Act of 2010 (P.L. 111-358) designated the National Science Foundation's Division of Science Resources Statistics as the National Center for Science and Engineering Statistics (NCSES) with the legislative mission to "...serve as a central Federal clearinghouse for the collection, interpretation, analysis, and dissemination of objective data on science, engineering, technology, and research and development."

NCSES produced detailed statistics on industry, academic, and federal research and development efforts; innovation outputs and outcomes; the science and engineering (S&E) workforce, and S&E education. These data are essential for guiding government, university, and corporate decisions regarding R&D, innovation, and education that will determine the nation's economic competitiveness in the years ahead. Consequently, I strongly encourage this Subcommittee to fully fund the president's request of \$38.01 million for NCSES.

The agency has proposed four initiatives worthy of the Subcommittee's support.

- More accurate estimates of the size and characteristics of the nation's S&E workforce—through a sample redesign of the National Survey of College Graduates that relies on new Field of Degree data from Census Bureau's American Community Survey (\$1.19 million)
- Improved methods for data collection, analysis, and dissemination (\$0.4 million)
- Feasibility test using administrative records from other federal agencies to measure R&D activity and improve data quality and timelines (\$0.3 million)
- Cyberinfrastructure investment to enable linking traditional NCSES R&D data with innovation outcomes data (\$1.5 million)

I very much appreciate the opportunity to present my views before the Subcommittee on the importance of fully funding the economic statistics efforts of the Commerce Department and the National Science Foundation.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. I think the per capita illustrations are important for us to understand the issues at hand, and thank you for your testimony.

Mr. WOLF. Thank you. The next witness will be former Congressman Jim Ramstad representing National Association of Drug Court Professionals. Jim, welcome to the committee.

FRIDAY, MARCH 11, 2011.

**NATIONAL ASSOCIATION OF DRUG COURT
PROFESSIONALS**

WITNESS

HON. JIM RAMSTAD, NATIONAL ASSOCIATION OF DRUG PROFESSIONALS

Mr. RAMSTAD. Thank you, Mr. Chairman, it is nice to be back, Ranking Member Fattah, it is good to be back among friends and former colleagues.

My name is Jim Ramstad and I am a senior policy advisor to the National Association of Drug Court Professionals, and I am here today to talk about drug courts, the most effective and cost beneficial criminal justice strategy for non-violent drug addicted offenders, or as one judge put it, the most successful justice reform in our lifetime, the most successful justice reform in our lifetime.

Mr. Chairman, as you and many of my other former colleagues know, on July 31st, 1981 I woke up from my last alcoholic blackout in a jail cell in Sioux Falls, South Dakota, under arrest for disorderly conduct, resisting arrest, failure to vacate the premise.

I am alive and sober today almost 30 years later only because of the access I had to treatment for my alcoholism, only because of the access I had for treatment, the same access drug courts provide each and every day across America.

Last year alone drug courts served over 120,000 people, people given the same opportunity of recovery that I have had. The opportunity to live a sober, a productive, and a healthy life.

Drug courts are not only changing lives, they are saving lives and they are saving taxpayer dollars, and that point in this time of budget deficits and horrendous monumental debt is one that I can not overemphasize, the savings that are a result of the taxpayer from drug courts.

The most conservative studies, in fact, Mr. Chairman, show for every dollar invested in drug courts \$15.36 is saved on reduced emergency room visits, other health care, foster care, and welfare costs, property losses, and criminal justice and incarceration cost.

As a conference of chief justices declared recently, and I am quoting now, Mr. Chairman, drug courts are the most effective strategy for reducing drug use and reducing criminal recidivism. Remarkably 75 percent of drug court graduates remain arrest free. Seventy-five percent of drug court graduates stay arrest free compared to 30 percent of offenders released from prison. That is on a national level.

One such successful graduate named John is sitting to my left, Mr. Chairman. John in fact is from Loudon County from your district. John got hooked on painkillers following a very complicated wisdom tooth extraction when he was 17 years old. Subsequently he experienced an overdose and faced criminal charges.

John said it all, Mr. Chairman, when he said, and I am quoting this young man, the drug court program changed my life forever. It enabled me to be drug free and it taught me how to live again. It taught me how to live again. John is currently pursuing a Ph.D. degree in psychology and behavioral neuroscience, and John has been in recovery now for three years and 38 days.

In addition to being a proven cost effective budget solution drug courts also promote public safety and address the alarming number—and it really is alarming—the alarming number of addicted and justice involved veterans among the 2,400,000 veterans who have returned from Iraq and Afghanistan.

As law enforcement and prosecutors agree substance abuse is a national concern with shared responsibilities among federal, state, and local governments.

Last week's budget hearing of your subcommittee with Attorney General Holder demonstrated why drug abuse is a national issue requiring a national response on the supply side and the demand side.

On the supply side increased border security and interdiction, but not forgetting the demand side, reduction provided by drug courts and other efforts.

Mr. Chairman, I was moved by your concern after hearing about that hearing, I was moved by your concern and that of Chairman Rogers as to the enforcement and treatment of prescription drug abusers. An epidemic as you know Mr. Chairman and Ranking Member Fattah, an epidemic that is devastating many communities and thousands of veterans. There is no question it would be counter productive to eliminate funding for the prescription drug monitoring program that was sponsored by Chairman Rogers.

Mr. Chairman, today over 2,500 communities have found drug courts to be a proven public safety solution that work better than jail, probation, or treatment alone and reduce drug abuse and crime more effectively and less costly than another other drug strategy.

Drug courts need to be available, Mr. Chairman, for our brave veterans ravished by PTSD and chemical addiction. In fact the most recent study on that point, the most recent study showed one in five returning veterans has a mental health disorder. Think of that, 20 percent of the returning veterans from the wars in Iraq and Afghanistan has some mental health disorder, and one in four a substance abuse disorder. One in four, 25 percent of our GIs coming back from war have a substance abuse problem. And of course as you know and as we have discussed abuse of prescription drugs is exploding among veterans as they seek to counter the pain of combat.

Drug courts are working closely with the Department of Veterans Affairs to connect veterans with the benefits and services that they have earned. Adequate federal funding, Mr. Chairman, for drug courts will accommodate more eligible veterans without limiting el-

igible non-veterans. So from health care to housing and employment, caring for our veterans needs to continue to be a shared responsibility by states and the federal government.

Mr. Chairman, no other justice intervention can match the proven results of drug courts. I have attended numerous drug court graduations during my 28 years in public office and I am constantly in awe at the lives being restored, families reunited, little children returned to their parents, people's careers resurrected, people's lives saved and changed dramatically for the better, but the hard reality is there simply are not enough drug courts to reach all who are eligible.

In fact the Department of Justice has identified 1,200,000 substance abusing offenders who are currently eligible for drug court, but are unable to access drug court, many of whom are veterans.

In closing, Mr. Chairman, let me say I fully realize, I truly do the monumental task before you facing the huge deficit and the mind boggling debt, that is why I ask the fundamental question, how much longer can we continue to spend \$60 billion a year building new prisons and jails with minimal return on investment as compared to drug courts? How much longer can we continue to spend \$60 billion a year as a nation on more cells when drug courts work so much more effectively?

That is why I urge the subcommittee to approve fiscal year 2011 funding for drug courts at least at the same level approved by the subcommittee last year. An investment that is \$50 million as you know, Mr. Chairman, and that investment of \$50 million will save upwards of \$168 million in criminal justice and victimization costs alone and will result in \$1.3 billion in additional benefits to the economy. And if you want the studies to prove those numbers and those savings I refer you no further than the group that has been recently formed by former Speaker Gingrich, former Attorney General Ed Meese, three other exemplary public servants whose names escape me right now, but none has been accused of being a liberal, I can assure you of that, and as they say, the most responsible thing to do in terms of dealing with the drug and alcohol addiction problem is drug courts. They hardly endorse drug courts, and I will be glad to get that material to you for the record, Mr. Chairman.

Thank you very much, Mr. Chairperson, Ranking Member Fattah, for your support of a justice system that truly works.

[The information follows:]

**U.S. House of Representatives, Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
"FY 2012 Members and Outside Witness Hearing"
March 11, 2011**

**Testimony of Former Congressman Jim Ramstad, Senior Policy Advisor,
National Association of Drug Court Professionals**

To my old friends, Chairman Wolf, Ranking Member Fattah, distinguished Members of the Subcommittee, I am honored to be back here today on the other side of the table to testify on behalf of Drug Courts, a proven budget solution, a public safety solution, and a solution for the growing number of justice-involved veterans who are struggling as a result of their service to this nation.

I would like to see Federal funding for Drug Courts well over \$100 million at the Department of Justice (DOJ) however, like all of you I am deeply concerned about the fiscal challenges facing our nation and recognize that the court system will not be exempt from sacrifice. Thus, I strongly urge that the Subcommittee approves funding for Drug Courts at a minimum \$50 million. This is the same level that was approved by the subcommittee last year. An investment of \$50 million for the Drug Court Discretionary Grant Program at DOJ will save upwards of \$168 million from avoided criminal justice and victimization costs alone and result in over \$1.3 billion in additional benefits to the economy.

As you have now seen, the President's budget combines funding for Drug Courts with an unauthorized "Problem Solving Courts Initiative." While Problem Solving Courts certainly have merit, I do not believe that we can afford to dilute Drug Court funding. I sincerely hope that the Congress will again see fit to directly fund Drug Courts.

It is no secret that this issue is close to my heart. For over two decades in Congress I fought hard to end discrimination against those suffering from mental health and substance abuse issues. During that time, I had the privilege of working closely with many of you. I was honored to serve on the Judiciary Committee and to have co-founded the Addiction, Treatment and Recovery Caucus with Patrick Kennedy, a former member of this Subcommittee. Working together, and alongside many of you, we were able to pass the Mental Health Parity Bill in 2008. Carrying on the legacy of the late Paul Wellstone, the Parity Bill ensures that both mental health and addiction are fairly treated. This was a significant step forward in our effort to reduce demand. I am here today to talk about another important step we must take.

The Federal Role

Over the last few years, I have heard a consistently asked question among my colleagues. Why is a Federal investment needed for a state and local problem? I believe this question is flawed. This is not just a state and local issue. From the economy to our national security and the

safety of our neighborhoods; drugs and related crime place an unjust burden on all law abiding citizens.

The budget hearing this Subcommittee had last week with the Attorney General clearly demonstrated why prescription drug abuse, and all drug abuse for that matter, is a national issue requiring a national response. Mr. Chairman, I was moved by your concern, and that of Chairman Rogers, as it related to both the enforcement and treatment of prescription drug abusers. I could not agree more that prescription drug abuse is having a devastating impact on many communities. Drug Courts are on the front lines of this issue. It is where many of these individuals end up when their addiction eventually leads them to the criminal justice system. We further know that prescription drug abuse is having a disastrous effect on our veteran population, and leading directly to increases in veteran involvement in Drug Courts and Veterans Treatment Courts.

Until the demand for drugs is eliminated, drugs will remain a national concern necessitating a shared responsibility between federal, state and local governments. This shared responsibility is evidenced by our national strategies to protect our borders, stop prescription drug abuse and trafficking, reduce victimization, and execute evidence-based demand reduction strategies such as Drug Courts.

As the Committee is keenly aware, Federal drug control spending annually exceeds \$15 billion, spread across a dozen federal agencies. A Federal investment in Drug Courts will produce savings felt throughout the federal government; from the Drug Enforcement Administration, Homeland Security and State Department, to the Center for Disease Control, Department of Veterans Affairs and Department of the Interior. What other investment has such a wide-ranging impact on national spending?

But there is a human side to this story. Mr. Chairman, with me today is a remarkable young man from your district. Jonathan grew up in Loudoun County, Virginia. He was an athlete and involved in numerous clubs in high school, graduating in 2003 with an advanced degree. Jonathan took his first prescription painkiller after having his wisdom teeth out when he was 17. By the time he got to college he was hooked. The downward spiral was fast and destructive. He dropped out, got a job, lost it, and was soon in the hospital with an overdose and facing criminal charges. Jonathan is one of the lucky ones. He was admitted into the Loudoun County Drug Court. I'd like to read to you from a statement he provided.

"The Drug Court program changed my life forever. Not only did this program help keep me away from using drugs, but through the judges and their staff, they taught me how to live again. After enrolling in Drug Court, I was able to go back to school and still work a job 30-36 hours a week. I obtained my two year AS degree in Psychology from Northern Virginia Community College in 2010 and have since then transferred to the College of Charleston in South Carolina to finish my undergraduate work and pursue a doctorate in Psychology and Behavioral Neuroscience. Not only did Drug Court get me back into school, they helped me develop essential coping skills for going through life and I am forever grateful for this program.

It is a difficult program, but it is extremely rewarding for those who complete it and continue to live a life in recovery.”

It is important to remember that behind all of the statistics, all of the debate, there are people like Jonathan who have transformed their lives in Drug Court. Today he is celebrating 3 years and 38 days in recovery. Mr. Chairman, this man and thousands more like him are the returns on your investment. Real lives transformed in Drug Court into hardworking, taxpaying members of their community.

A Proven Budget Solution

In fact recently colleagues like our distinguished former Speaker Newt Gingrich, former Member and former Administrator of the Drug Enforcement Administration Asa Hutchinson, former U.S. Attorney General Edwin Meese, III, and former U.S. Secretary of Education and Federal “Drug Czar” William J. Bennett, the President of Americans for Tax Reform, and over 30 of additional conservative leaders representing over 20 states have come together through the Right on Crime movement to offer a new plan to address crime. To quote their priorities, “In Drug Courts, America has found not only a solution to an important public policy problem, it has hit yet again upon an essential conservative truth – the power of personal responsibility and accountability. Drugs courts are not suitable for every convicted defendant, but neither is imprisonment.” This says it all.

Drug Courts are a budget solution because they lower criminal justice costs by reducing jail/prison use and reducing crime. The latest research shows Drug Courts save as much as \$27 for every \$1 invested when considering only direct and measurable offsets such as reduced arrests, law enforcement contact, court hearings, and the use of jail or prison beds.¹ Drug Courts provide additional benefits such as reduced foster care placement and healthcare utilization. As a result, Drug Courts save up to \$13,000 for every individual they serve.²

Given the abysmal outcomes of incarceration on addictive behavior, there's absolutely no justification for state governments to continue to waste our tax dollars feeding a situation where generational recidivism is becoming the norm and parents, children and grandparents may find themselves locked up together. This is simply an appalling fiscal policy, a fact made glaringly obvious because we have a solution at our disposal: Drug Courts.

¹ Carey, S. M., Finigan, M., Crumpton, D., & Waller, M. (2006). California drug courts: Outcomes, costs and promising practices: An overview of phase II in a statewide study. *Journal of Psychoactive Drugs, SARC Supplement 3*, 345-356; Loman, L. A. (2004). *A cost-benefit analysis of the St. Louis City Adult Felony Drug Court*. St. Louis, MO: Institute of Applied Research; Finigan, M., Carey, S. M., & Cox, A. (2007). *The impact of a mature drug court over 10 years of operation: Recidivism and costs*. Portland, OR: NPC Research. Available at www.npcresearch.com; Barnoski, R., & Aos, S. (2003). *Washington State's drug courts for adult defendants: Outcome evaluation and cost-benefit analysis*. Olympia, WA: Washington State Institute for Public Policy.

² Pew Public Safety Performance Project. (2007). *Public Safety, Public Spending: Forecasting America's Prison Population 2007 – 2011*.

Many states have recognized Drug Courts as a budget solution:

- As you heard last year, Alabama Chief Justice Sue Bell Cobb directed the lower courts to ensure Drug Courts are operating in every county or judicial district.
- A September 2010 report released by the Georgia Department of Audits and Accounts which concluded that Georgia Drug Courts reduce crime costs nearly 80% *less* than most other sentencing options, and produce net economic savings of approximately \$18 million statewide helped convince Governor Deal to expand them state wide.
- The most recent Mississippi State Auditor Report concluded that Drug Courts are “reducing the need for construction of new prisons.” The report estimated savings of \$5.4 million dollars annually based on 500 participants going into a statewide Drug Court system instead of being housed in the state Department of Corrections.
- New York has implemented a Drug Court in every county in the state, saving \$254 million in incarceration costs. According to a recent Northwestern University Report, “alternatives to incarceration like Drug Courts, could lead to the closing of four half-empty prisons in New York.”

A Proven Public Safety Solution

Today, over 2,500 communities have found a solution in Drug Court. One reason behind this unprecedented growth: Drug Courts work better than jail or prison, better than probation and better than treatment alone. Drug Courts reduce substance abuse and crime more effectively and at less expense than any other justice strategy.

The longest study on Drug Court to date shows these outcomes last as much as 14 years.³ Now consider that the more serious the offender’s drug addiction and length of criminal record, the better Drug Courts work. Drug Courts are not for the first time or the non-addicted offender. Those individuals do just as well when diverted to a disposition that leads to record expungement upon successful completion of court conditions. Drug Courts focus on high-value offenders; those who have the highest need for treatment and other wrap-around services, and who have the highest risk of failing out of those services without support and structure. Remarkably, 75% of Drug Court graduates remain arrest free compared with 30% of individuals released from prison.⁴

The Department of Justice recently concluded that there are 1.2 million offenders currently before the courts that meet this criterion.⁵ Without access to Drug Court they will continue to drain the criminal justice system of valuable resources.

³ Finigan et al. (2007). *The impact of a mature drug court over 10 years of operation: Recidivism and costs*. Portland, OR: NPC Research, Inc.

⁴ Roman et al. (2003). *Recidivism rates for drug court graduates: Nationally based estimate - Final report*. Washington DC: The Urban Institute and Caliber.

⁵ The Urban Institute. (2008). *To Treat or Not to Treat: Evidence on the Prospects of Expanding Treatment for Drug-Involved Offenders*.

A Solution for Veterans in Need

I would like to take a moment to talk about our veterans. I know that every Member on this Subcommittee would agree that we are responsible for ensuring that whatever effects veterans suffer in the task of defending this great nation will be treated. For those that enter the criminal justice system, Drug Courts are answering this call of duty by ensuring they receive appropriate treatment and resources.

There are now over 2.4 million veterans from our conflicts in Afghanistan and Iraq. Most veterans return home strengthened by their military service. But a growing number of veterans are experiencing Post Traumatic Stress Disorder and Traumatic Brain Injury as a result of combat. 1 in 5 veterans show symptoms of a mental health disorder⁶ and 1 in 4 veterans under 25 has a substance abuse disorder.⁷ As I previously mentioned, abuse of prescription drugs is exploding among veterans as they seek to manage pain from injuries suffered during their service.

When left untreated these conditions often lead to criminal activity and increasing numbers of veterans are being arrested and entering the criminal justice system. Drug Courts and Veterans Treatment Courts are collaborating with the Department of Veterans Affairs to connect veterans with the benefits and services they have earned. Federal funding for Drug Courts will expand capacity and increase veteran involvement without limiting eligibility of non-veterans.

From health care to housing and employment, caring for our veterans has always been shared by states and the federal government.

Conclusion

Finally, I would be remiss if I did not mention the FY'11 budget. It is my sincere hope that the committee sees fit to keep Drug Court funding at an appropriate \$50 million level, an amount previously approved.

These are extraordinary times and your responsibility is as great as it has ever been. But I cannot think of a committee more suitable to lead us through the difficult road ahead. Your leadership and integrity will stand this nation in good stead and it is an honor and a privilege to sit before you today. On behalf of 27,000 Drug Court professionals working in over 2,500 Drug Courts, and the 120,000 individuals like Jonathan whose lives were saved in Drug Courts last year, I thank you for your service to this nation.

⁶ RAND Ctr. For Military Health Policy and Research, *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery* (Terri Tanielian & Lisa H. Jaycox eds., 2008).

⁷ Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (November 1, 2007). *The NSDUH Report: Serious Psychological Distress and Substance Use Disorder among Veterans*. Rockville, MD.

Mr. WOLF. I thank you Jim. And John, we welcome you. Well, Jim, thank you.

Mr. RAMSTAD. Thank you very much, Mr. Chairman, Ranking Member Fattah.

Mr. WOLF. Mr. Fattah.

Mr. FATTAH. Well, thank you, Jim. First of all, I have no problem with being accused of being a liberal, so I just want the record to reflect that I resemble that remark.

But I want to congratulate John for his pursuit of his doctoral degree and for dealing with the challenges that he has had to deal with. I was the proud sponsor of the drug court legislation in Pennsylvania when I was—this is a couple of decades ago—when I was in the state senate. I think that everything you said is correct in terms of the empirical evidence, so I thank you for your testimony.

Mr. RAMSTAD. Thank you.

Mr. WOLF. Thank you. Thank you, John.

The next witness will be American Society of Agronomy and Crop Science Society, Catherine Swoboda. Welcome.

FRIDAY, MARCH 11, 2011.

**AMERICAN SOCIETY OF AGRONOMY AND CROP
SCIENCE SOCIETY OF AMERICA**

WITNESS

**CATHERINE SWOBODA, SCIENCE POLICY INTERN, AMERICAN SOCIETY
OF AGRONOMY AND CROP SCIENCE SOCIETY OF AMERICA**

Ms. SWOBODA. Thank you for offering the American Society of Agronomy and the Crop Science Society of America the opportunity to comment today. Many of our member scientists' fundamental research depends on grants from the National Science Foundation's BIO, GEO, and EHR directorates.

The American Society of Agronomy and the Crop Science Society of America testify today in support of the funding level put forth for the National Science Foundation and the President's budget request of \$7.8 billion as this budget level is consistent with the amount authorized in the recent America COMPETES Act.

Throughout history farmers have adapted agricultural systems to changes in the environment; however, recent extreme and unpredictable weather events linked to unprecedented climate change have outpaced land managers' ability to adapt. Increases in frequency and intensity of precipitation, elevated temperatures, drought, and other extreme weather events are negatively impacting crop yield and quality. These negative weather impacts can be seen here in America.

Just last January in Florida one-third of the winter fruit and vegetable harvest was lost when the state suffered 13 consecutive nights of below freezing temperatures, significantly driving up produce costs to consumers.

Such extreme weather events can act as a threat multiplier for instability, leaving already most volatile regions of the world even more vulnerable to instability due to greater hunger, violence, and crime.

There are several factors associated with climate change that impact cropping systems. Drought will limit the productivity of over half of the earth's arable land in the next 50 years and adversely impact crop yields. Elevated temperatures can shorten the period of grain filling which in turn will limit weight gain in the grain and reduce pollen viability. Carbon dioxide concentrations in the atmosphere will also increase. Carbon dioxide is a fundamental requirement for plant carbohydrate production in overall plant metabolism. Some plants will be more productive with the continued climb of carbon dioxide; however, tropical grasses like maize, sugar cane, sorghum, and cellulosic biofuel crops may not respond positively.

Furthermore the benefits seen by other plants may be counter balanced by other pressures both biotic and abiotic which accompany climate change and continued release of carbon dioxide.

Crops will be vulnerable to increasingly active biotic stresses such as viruses, bacteria, and fungi which are highly responsive to humidity and rainfall as well as temperature.

And finally as the seasons lengthen and winters moderate due to climate change, adaptation zones of invasive animal, plant, pathogen, and insect species are likely to increase as overwintering and movement of pests and pathogens occurs more rapidly.

Adapting crops and cropping systems to new seasons, temperatures, gases, and biotic stresses will require crop and region specific crop adaptation technologies and strategies. Basic science approaches for adapting crops to climate change include improvement of crop cultivars and development of new methods of managing the crops in the field.

We need to capitalize on these known approaches and seek out additional advances to overcoming the challenges to agricultural production.

We hope that you will continue to strongly support funding for NSF and especially the BIO, GEO, and EHR directorates as the work performed in these directorates will be essential for developing technologies and strategies for crop adaptation.

Thank you again for providing us with the opportunity to testify today.

[The information follows:]

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Oral testimony of Catherine Swoboda on behalf of the
 American Society of Agronomy
 Crop Science Society of America
 regarding the National Science Foundation budget for Fiscal Year 2012.
 Prepared for the U.S. House of Representatives, Committee on Appropriations,
 Subcommittee on Commerce, Justice, and Related Agencies

Thank you for offering the American Society of Agronomy and the Crop Science Society of America the opportunity to comment today. Many of our member scientists' fundamental research depends on grants from National Science Foundation's Biology (BIO), Geosciences (GEO), and Education and Human Resources (EHR) Directorates.

The American Society of Agronomy and the Crop Science Society of America testify today in support of the funding level put forth for the National Science Foundation (NSF) in the President's Budget request of \$7.767 billion as this budget level is consistent with the amount, \$7.8 billion, authorized in the recent America COMPETES law (P.L. 111-358).

Basic Science Research in BIO and GEO Supports Solutions to Grand Challenges

Adaptation to variable weather and climate patterns

Throughout history, farmers have adapted agricultural systems to changes in the environment. However, recent extreme and unpredictable weather events linked to unprecedented climate change have outpaced land managers' ability to adapt. Increases in frequency and intensity of precipitation, elevated temperatures, drought and other extreme weather events are negatively impacting crop yield and quality.

These negative weather impacts can be seen in here in America. Just last January, in Florida, one-third of the winter fruit and vegetable harvest was lost when the state suffered 13 consecutive nights of below-freezing temperatures, significantly driving up produce costs to consumers. Such extreme weather-events can act as "*a threat multiplier for instability*", leaving the already most volatile regions of the world even more vulnerable to instability due to greater hunger, violence, and crime¹.

Some of the overall impacts to cropping systems include:

- ***Drought*** will limit the productivity of over half of the earth's arable land in the next 50 years, adversely impacting crop yield².

- **Elevated temperatures** can shorten the period of grain-filling (limiting weight gain in the grain) and reduce pollen viability^{3,4}.
- **Carbon dioxide (CO₂)** is a fundamental requirement for plant carbohydrate production and overall plant metabolism. Because of the continued climb in CO₂, many plants will be more productive with the exception of tropical grasses like maize, sugarcane, sorghum, and cellulosic biofuel crops, which do not respond as much to CO₂ increases may not see positive responses to increased CO₂. Benefits, however, may be counterbalanced by other pressures—biotic and abiotic, which accompany climate change and continued release of CO₂.
- **Biotic stresses** such as plant pathogens- viruses, bacteria, and fungi are highly responsive to humidity and rainfall, as well as temperature. As the seasons lengthen and winters moderate due to climate change, adaptation zones of invasive animal, plant, pathogen, and insect species are likely to increase as over-wintering and movement of pests and pathogens occurs more rapidly.

Adapting crops and cropping systems to new seasons, temperatures, gases, and biotic stresses will require crop- and region-specific ***crop adaptation technologies and strategies***. Basic science ***approaches for adapting crops to climate change exist including:***

1. Improvement of crop cultivars; and
2. Development of new methods of managing the crops in the field.

We need to capitalize on these known approaches and seek out additional advances to overcome the challenges to agricultural production. We hope that you will continue to strongly support funding for NSF and especially the BIO, GEO, and EHR Directorates as the work performed in these directorates will be essential for developing technologies and strategies for crop adaptation.

Thank you again for providing us with the opportunity to testify before the House Appropriations Subcommittee on Commerce, Justice, and Science Today.

Mr. WOLF. Thank you for your testimony.

Mr. Fattah.

Mr. FATTAH. I want to thank you for your testimony.

Ms. SWOBODA. Thank you.

Mr. WOLF. Thank you very much.

American Astronomical Society, Dr. Debbie Elmegreen.

FRIDAY, MARCH 11, 2011.

AMERICAN ASTRONOMICAL SOCIETY

WITNESS

DR. DEBBIE ELMEGREEN, PRESIDENT, AMERICAN ASTRONOMICAL SOCIETY

Ms. ELMEGREEN. Thank you, I am Debbie Elmegreen from Vas-sar College where we have no football team.

Thank you Chairman Wolf, Ranking Member Fattah, for the opportunity to comment on astronomy in the fiscal year 2012 budget from my perspective as president of the American Astronomical Society, the organization for professional astronomers in North America.

The AAS supports the NASA, NSF, and DOE budget request as they pertain to astronomy and the office of nuclear energy plutonium 238 production restart.

We are in a golden age of discovery for astronomy from planets around nearby stars to dark matter, dark energy, and the early universe. We stand poised to answer big questions, are we alone? How did universe begin? What is it made of?

Astronomy inspires generations of scientists and engineers through discoveries about the universe rebuilt by NSF's supported telescopes on the ground like the new ALMA radio telescope, and NASA missions in space like Hubble Space Telescope and Kepler which finds earth-like planets.

Each year a quarter of a million college students enroll in astronomy courses, including 15 percent of all future K-12 teachers.

The U.S. Astronomical community just completed its sixth decadal survey to determine the most compelling research and to prioritize the projects to accomplish those goals. This well respected survey process has helped make the U.S. a world astronomy leader.

The report, New Worlds, New Horizons, produced by the National Academies and funded by NASA, NSF, and DOE, provides policy makers with a prioritized set of initiatives for federal support. It is based on input from over 1,000 astronomers and independent assessment of costs and risks and budgetary constraints. The recommended program is a balance of small, medium, and large projects and builds on international, private, and interagency partnerships.

The top large ground project is the revolutionary large synoptic survey telescope enabling time discoveries by rapid repeated sky scans. It will find small near earth asteroids as congressionally mandated, and distant supernova which map out the universes acceleration. Nightly acquisitions of over 10,000 gigabytes of data will drive new methods for data achieving, LLST will be unique world-

wide highlighting U.S. leadership. A recommended mid scale innovations program will allow a competed program in NSF for medium cost projects.

Our top ranked medium project is CCAT, a large sub-millimeter telescope that will compliment ALMA by surveying regions forming planets or forming galaxies.

The James Webb Space Telescope is the successor to the Hubble Space Telescope and was the top ranked program in the 2000 decadal survey. It underlies many of the 2010 decadal recommended activities.

JWST will transform astronomy through observations of the very first stars and galaxies, black holes, and planets information. We support JWST. A timely launch of JWST also enables this decadal survey's top ranked launch space program, the wide-field infrared space telescope. Its goals encompass two high priority astronomy areas, earth like planets and dark energy. Our leadership in dark energy studies is at risk in a WFIRST launch this decade or a suitable partnership with the European space agency is not achieved.

The mid scale explorer missions in NASA's astrophysics division address other important issues. They provide rapid launches for timely research as with the cosmic background explorer that led to a Nobel prize and they enable instrument training for young scientists.

An issue critical planetary science is the production of plutonium 238 used to power missions to the outer solar system such as the Cassini mission to Saturn. There is no viable energy alternative for deep space missions. Our production restart is vital to avoid delayed missions and escalating cost. We urge funding the plutonium restart.

In closing I thank Representative Wolf for your bipartisan leadership in supporting science and advanced research. Your efforts, along with this whole committee have benefited science broadly and astronomy in particular. I can think of no more important way to rebuild America than to support advanced research and maintain U.S. leadership in science, engineering, and technology.

Thank you.

[The information follows:]

Testimony of
Dr. Debra M. Elmegreen
President of the American Astronomical Society
Before the House Appropriations Subcommittee on Commerce, Justice, and
Related Agencies On
Astronomy and Astrophysics in the FY 2012 Budget
March 11, 2011

Thank you for the opportunity to comment on astronomy and astrophysics in the fiscal year 2012 budget from my perspective as President of the American Astronomical Society (AAS). **The AAS supports the NASA budget request of \$18,724 million. Within the NASA Science Mission Directorate, the AAS support the Division of Astrophysics request of \$683 million, the James Webb Space Telescope request of \$374 million, the Division of Heliophysics request of \$622 million, the Division of Planetary Science request of \$1,541 million, and the Division of Planetary Science Technology Program request of \$133.9 million that includes support for the critical restart of production of plutonium-238, necessary for missions that explore the remote parts of our solar system. The AAS also supports the Astrophysics Explorer Program request of \$118.3 million, a highly ranked priority in the Astronomy and Astrophysics Decadal Survey. The AAS supports the NSF request of \$7,767 million and the Division of Astronomy requested funding level of \$249 million. The AAS supports the Department of Energy Office of Science request for \$5,416 million and the Office of Nuclear Energy plutonium-238 production restart for \$10 million.**

Representative Wolf, let me begin my testimony by thanking you for your bipartisan leadership in supporting science and advanced research during your time in Congress. Your efforts, along with your colleague Representative Mollohan over the past several years, have significantly benefited science broadly and astronomy in particular. I can think of no more important way to ensure the long-term success of our Nation than to support advanced research in science, engineering and technology, as you have done and I know you will continue to do.

The excitement of scientific discovery is a powerful force among our Nation's youth, and leads directly to an improved standard of living in our Nation by attracting talented young people to pursue STEM careers. Astronomy has a role to play in this regard, not just in uncovering the mysteries of the Universe, but by drawing young people to the worlds of science, technology and engineering. Nearly everyone I have met involved in the pursuit of science, from student to professor, is amazed by discoveries about the Universe revealed by NSF-supported telescopes like the VLA and NASA missions like the Hubble Space Telescope and the Kepler mission. The "Rising Above the Gathering Storm" report warns that our younger generation is less educated than its parents, and that the nation is not adequately training the next generation of engineers and scientists; this failure directly impacts our economy. The public science literacy rate is less than 30%, and the US must improve to remain competitive. Astronomy offers one way to help because it is a mind-opening field that engages the public and schoolchildren in science; 60 million people go to museums and planetariums every year, 15% of all future K-12 teachers take astronomy as their only college science course, and 250,000 college students are enrolled in astronomy courses annually.

The American Astronomical Society is the pre-eminent membership organization for research astronomers in North America. With nearly 7,500 members overall, and more than 6,500 in the United States, the AAS serves its community by publishing the most important research journals in our field, organizing the largest astronomy meetings in the world, and providing career development, education and outreach activities. I am honored to serve the Society as its President and grateful to be able to provide testimony to the Commerce, Justice and Science Appropriations Subcommittee on behalf of the American Astronomical Society and the community it represents.

The astronomy and astrophysics community in the United States undertakes a survey every decade of the current state of our understanding of the Universe to determine the areas most ripe for discovery in the coming decade and to prioritize the projects, programs, and missions that are necessary to make progress in these important research areas. As a community, we have been executing these decadal surveys since the 1950s. The report is produced by the National Academy of Sciences, with the support and encouragement of the American Astronomical Society and the entire astrophysics community, and is funded by the primary research agencies that support our area of research: NASA, NSF and the Department of Energy. Practically, these reports provide policy makers with a community-prioritized set of initiatives for federal support chosen from a very much larger group of exciting proposals.

The AAS fully endorses the recommendations of the most recent decadal survey, completed in August 2010: the “New Worlds, New Horizons” (NWNH) report. The recommendations of NWNH represent the consensus of the astronomical community on our priorities for research and activities in astronomy and astrophysics in the decade between 2012 and 2021.

The recommendations are based on a 2-year effort, starting with several hundred white paper submissions and dozens of Town Halls from all over the nation, filtered through nine panels and six study groups to the main Astro2010 committee to come up with a plan that fits the budget guidelines we were originally given by the federal agencies. The process involved a careful assessment of cost evaluation and technical readiness by an independent contractor so that the projects and activities should not suffer cost overruns. The NWNH report acknowledges the challenges of maintaining and developing a national astronomy and astrophysics program during a time of budget constraints. The report states, “The committee’s proposed program is recommended on the basis of four general criteria—maximizing scientific contribution, building on the current astronomy and astrophysics enterprise, balancing this decade’s programs against investing in the next decade’s, and optimizing the science return given the highly constrained budget.”

The astronomy and astrophysics divisions of NASA and NSF have designed FY2012 budgets to align with the recommendations of NWNH. The NWNH report is a balanced set of recommendations, with small, medium, and large projects and missions, for ground and for space, and also includes core research activities such as technology development, laboratory astrophysics, theory and computation, and data analysis and archiving. The top two large-scale ground-based initiatives are the Large Synoptic Survey Telescope (LSST) and the Mid-Scale Innovations Program. The top two large-scale space-based initiatives are the Wide-Field Infrared Survey Telescope (WFIRST) and the Explorer Program.

The LSST is a large field-of-view 8-meter class telescope. It will revolutionize our exploration of the sky by opening the time domain window, with a survey of half the sky every few days. The rapid response system will alert astronomers to transient events within 1 minute for quick follow-up observations, and the tens of terabytes of data acquired each night will require development of a very accessible database. LSST will be applied to everything from Near-Earth asteroids (a Congressionally mandated study) to observations of billions of galaxies and a mapping of our Galaxy's stars, to supernovae and mapping of large-scale matter distributions that will help our understanding of cosmic acceleration and put constraints on dark energy and dark matter. It will be a facility that is unique in the world, and the US leadership in this endeavor will emphasize some of the US optical astronomy technical strengths.

LSST is technically ready to go and under development, with many private and international investors, and NSF and DOE would share the federal cost (NSF through the Major Research Equipment and Facilities Construction [MREFC] line and later AST for the federal share of operations costs, and DOE for the camera). The data system development fits in well with Presidential cross-cutting areas of data archiving capabilities (also tying in to NSF's CIF21 line in the FY2012 budget for cyber infrastructure).

The Mid-Scale Innovations Program was the second-ranked large-scale project, allowing a competed program for projects between the \$4M Major Research Instrumentation (MRI) line and the \$135M MREFC line. There were more than two dozen worthy projects in this category proposed to the decadal survey. Among them are CCAT, a 25-meter sub-millimeter and millimeter telescope that will complement ALMA (Atacama Large Millimeter Array) by providing large-scale surveys, as well as a solar radio telescope with high resolution, a gravity-wave detector, a Cerenkov detector to study high energy events, advanced adaptive optics, and a radio array to probe the epoch of recombination when the first stars formed. NSF is now considering a Foundation-wide mid-scale line, because other disciplines also have a need for this level of funding, and it makes sense to provide funding through competed programs.

WFIRST is a wide-field infrared telescope with three goals: it will accomplish exoplanet space studies through microlensing, to complement the discoveries of Kepler by doing a census of planets in the outer parts of solar systems, it will provide insight on dark energy through three techniques (baryon acoustic oscillations, supernovae, and weak lensing), which will complement the ground-based LSST optical results, and it will have a survey mode for galactic and general guest investigator studies. NASA may pursue a possible collaboration with ESA on a joint WFIRST/Euclid mission if it could do all the science NWNH proposed for WFIRST; such a joint project would build on the strengths of international collaborations for large projects. Meanwhile, NASA has selected the Science Definition Team for WFIRST, which is necessary for helping to specify the mission details.

For the FY2012 budget, NASA has included a separate line in the Astrophysics Division for an Explorer program as a response to the second-ranked large-scale recommendation in NWNH. Each Explorer is medium-scale; the funding NWNH recommended was for several Explorers per decade (2 SMEX, 2 MIDEX, and several Missions of Opportunity) to restore the program to its previous level of activity. These missions provide rapid turnaround, have led to Nobel prize-

winning results such as with COBE (Cosmic Background Explorer), and enable crucial training for young astronomers to learn how to build instruments for later larger missions.

The James Webb Space Telescope (JWST) is the successor to the Hubble Space Telescope, which has brought astronomy and astrophysics to the next level and inspired many Americans to study astronomy. The potential of JWST to transform astronomy underlies many of the activities recommended in the NWNH decadal report. It is designed to observe beyond Hubble's capabilities to the earliest observable epoch of the universe. It is expected to serve thousands of astronomers over the next decade.

JWST's primary scientific mission has four main components: to search for light from the first stars and galaxies which formed in the Universe after the Big Bang, to study the formation and evolution of galaxies, to understand the formation of stars and planetary systems, and to study planetary systems and the origins of life. JWST will have a 6.5-meter (21.3 ft) primary mirror, about three times the size of Hubble's 2.4-meter mirror. The sunshield is the size of a tennis court. In order for it to fit in a rocket for launch, the sunshield will be folded up like origami. JWST will orbit 1 million miles away from Earth, four times any distance humankind has traveled. (For comparison, Hubble orbits 300 miles above Earth, and the International Space Station orbits at about 220 miles. The Moon is 250,000 miles away from Earth.) JWST will be at the L2 Lagrange point, where it is not serviceable but can maintain the same orientation with respect to the Sun and Earth, making shielding and calibration much simpler.

On November 10, 2010, NASA Administrator Charles Bolden released the findings of the Independent Comprehensive Review Panel on the James Webb Space Telescope (JWST). Senator Barbra Mikulski called for the independent review, which was led by John Casani from NASA's Jet Propulsion Laboratory. The report stated that the mission is technologically sound and the cost growth is a result of mismanagement. The management of JWST has moved to NASA Headquarters. Richard Howard, NASA's deputy chief technologist, will head the new division for JWST. Howard's first order of business will be to make a new budget for JWST. We support the \$374 million requested for JWST; however, it is currently going through a bottom-up cost estimate process, and the full cost to launch JWST at the earliest possible date will be known by mid-summer. NASA must be ready to adjust its funding profile at that time in order to optimize the use of federal money.

Let me speak briefly about another important issue, which involves two government agencies, is of low cost, and which has been a shining example of American prowess in scientific and technological achievement: the production of plutonium-238 (Pu-238) and its integration into power modules that generate electrical power by converting heat into electricity. Pu-238 was produced in parallel with the production of fissile plutonium. With the end of the cold war and reductions in the need for fissile plutonium, the production of Pu-238 was also halted. Through radioactive decay, the stockpile of Pu-238 has dwindled, while also being tapped to power solar system exploration missions like the Cassini mission, which has generated so much new knowledge about Saturn and its rings and moons. For several years, the administration has sought to restart the production by proposing funding of roughly \$30M total, while involving both the producer of plutonium (the Department of Energy) and the user (NASA). Only two

nations, the US and Russia, are capable of producing or have stockpiles of this material. It is time again to produce our own.

Restart of Pu-238 production is of critical importance to the development of planetary science missions. There is no viable alternative way to power deep space missions, as solar panels cannot produce enough electricity far from the Sun. If Pu-238 production starts immediately, there will still be a 5-year delay to have enough Pu-238 for a spacecraft. Full scale Pu-238 production is unlikely until 2018, which is too late to meet all of NASA's needs. The delay will push back the 12 proposed planetary space missions that require Pu-238. The delay could cause missions to reach prohibitively high costs, which in turn could bring about job losses, diminish the United States leadership role in planetary science, and prevent us from expanding human knowledge of the universe. Given the magnitude of the funds necessary to regain our production capability, I strongly urge you to fund this request fully at the President's requested level.

As noted in NWNH, for centuries astronomy has contributed to society not only through discoveries about the Universe but also through the advancement of science and technology in general. Technological developments for NASA X-ray astronomy programs have led to today's X-ray inspection systems used by airports, the military, and border patrols. Astronomical image processing techniques are widely used in medical fields, in industry, and even in tracking endangered species. Software developed to schedule observations by the Hubble Space Telescope has now been adapted to optimize semiconductor manufacture, to manage patient flow in hospitals, and to assist in WiFi communications.

We understand the need for fiscal restraint, and we agree that government needs to live within its means. Spending cuts, however, need to be smart and strategic. Cuts to government-sponsored scientific research and critical research facilities are counterproductive at a time when we are seeking to facilitate and spark economic growth. Such cuts would only hurt our long-term competitiveness, especially at a time when emerging economies such as China and India are ramping up their investments in scientific research and education. Europe seems poised to take over the US lead in ground-based optical and space-based astronomy. Cuts to research and facilities would also have a severe impact on cutting-edge research that is critical to our future. At DOE, the cuts would affect high energy and nuclear physics, magnetic fusion, heavy-element chemistry, nanotechnology, high-performance computing, advanced materials, and structural biology. Proposed cuts to NSF would have even broader and more far-reaching impacts in many other important scientific disciplines.

It is time for America to tackle the largest drivers of our debt and deficit, rather than shortchange our future by cutting funding on our most talented students, essential research, and entrepreneurial potential. The Congress instead should look to the bipartisan Senate process that is considering the recommendations of the fiscal responsibility commission. Only reforms of this magnitude can reverse our budget outlook and enable smarter, more strategic decisions about the non-defense discretionary portion of the budget. We know all of our elected representatives seek the long-term success of our nation and the maintenance of leadership in science and technology. The quality of life our children and grandchildren will inherit depends upon the choices you make.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. Let me thank you, and I also think that the plutonium 238 restart is critically important and I want to also note for the record your comments in your written testimony on the budget deficit and how we ought to proceed.

Thank you.

Ms. ELMEGREEN. Thank you.

Mr. WOLF. Thank you very much.

The American Physical Society, Dr. Michael Lubell.

FRIDAY, MARCH 11, 2011.

AMERICAN PHYSICAL SOCIETY

WITNESS

DR. MICHAEL LUBELL, DIRECTOR OF PUBLIC AFFAIRS, AMERICAN PHYSICAL SOCIETY

Mr. LUBELL. Chairman Wolf, Ranking Member Fattah, thank you for the opportunity to testify today.

I am appearing on behalf of the American Physical Society which represents 48,000 physicists in universities, industry, and national laboratories.

I want to begin by thanking the committee for its past support for NSF, NASA, and NIST, and in particular, Chairman Wolf, when I was in your office which almost seems like yesterday, but your role in promoting what became the Rising Above the Gathering Storm report.

I also want to note that APS along with a number of other organizations that are a part of the task force on American innovation sent a letter to the Bowles Simpson Commission last fall urging entitlement reform, so we are on the record on that. I just want to make that clear, and Mr. Culberson had raised that, and I think we feel very strongly about it.

I am a professor at CCNY in addition to the work that I do for the American Physical Society, and as a university professor and research physicist I can personally attest to the critical role NSF, NASA, and NIST have played in advancing the frontiers of American science and in training America's next generation of scientists.

You have already heard other witnesses testify to the facts so I will not repeat them, instead I want to return to an issue that APS raised in prior testimony before this committee, one that was not dealt with during the last three years and now looms large in fiscal year 2012 for NSF.

In November of 2008 then-President Elect Obama requested APS to provide the new administration with advice on sciences research and needs that could be addressed in an economic stimulus bill and we were pleased to do so. We compiled a list of shovel ready projects and instrumentation requests pending at a number of federal agencies, among them NSF.

Most of the agencies largely followed our guidance. NSF elected however to use a majority of the funds it received in the American Recovery Reinvestment Act to address another critical need, increasing the acceptance rates of very highly ranked research pro-

posals that budgetary strictors had prevented the foundation from supporting previously. The acceptance rate had declined precipitously and then-Director Arden Bement believed he was reaching price in proportion.

The need was compelling but NSF's decision to address it with funds that would last only three years created the specter of a significant short fall in fiscal year 2012.

Indeed President Obama's fiscal year 2009 budget recognized the problem, it projected an increase of 17 percent for the NSF and the out year budget fiscal year 2012.

In prior testimony we called this committee's attention to the administration's plan which we deemed difficult, if not impossible to realize, and to address the shortfall we urged the committee to allocate much of the increases in NSF's 2009, '10, and '11 budgets to one shot such as laboratory start ups or new faculty grants of limited duration.

Unfortunately our recommendations were not enacted into law and today the NSF faces a problem of either allowing students supported with ARRA funds to be stranded in the middle of their graduate education and severely restricting the award of new grants.

Neither course is desirable, both are damaging to America's global scientific leadership and public polling has shown the public values deeply.

The clock cannot be turned back, but if this committee elects not to grant the NSF the appropriation increase requested by the President the problem the foundation faces will be made considerably worse.

Therefore although we fully recognize the need to shrink the federal deficit, we urge this committee to be wise in how it reduces expenditures and where it applies its cuts.

Building a better America requires a strong science research enterprise in a highly skilled work force. To sustain our nation's economic growth and to keep the highly skilled jobs within our borders we must commit ourselves to educating the scientific workforce of the future and providing the young scientists today with the resources they need to keep our Nation at the innovation frontier.

Over the years NSF has played a central and extraordinary effective role in both endeavors and we believe it deserves the funding the President has requested. We hope the committee will find a way to provide the necessary appropriation.

Again, thank you for your past support and for allowing me to testify today.

[The information follows:]

TESTIMONY

of

Dr. Michael Lubell

for

The House Appropriations Subcommittee
on Commerce, Justice and Science

March 11, 2011

Mr. Chairman and members of the committee, thank you for the opportunity to testify today. I am appearing on behalf of the American Physical Society (APS), which represents 48,000 physicists in universities, industry and national laboratories. I want to begin by thanking the committee for its past support for the National Science Foundation (NSF), NASA and the National Institute of Standards and Technology (NIST).

As a university professor and a research physicist, I can personally attest to the critical role these agencies have played in advancing the frontiers of American science and in training America's next generation of scientists. As members of this committee you are probably familiar with the facts, so I will not repeat them in the limited time I have.

Instead, I want to return to an issue the APS raised in prior testimony before this committee, one that was not addressed during the last three years and now looms large in FY 2012 for NSF. Let me review the history in brief.

In November 2008, then President-Elect Obama requested the APS to provide the new administration with advice on science infrastructure needs that could be address in an economic stimulus bill. The APS was pleased to do so and within six weeks complied a list of shovel-ready projects and instrumentation requests pending at a number of federal agencies, among them NSF.

Most of the agencies largely followed our guidance. However, NSF elected to use the majority of funds it received in the American Recovery and Reinvestment Act to address another critical need: increasing the acceptance rate of very highly rated research proposals that budgetary strictures had prevented the Foundation from supporting previously. The acceptance rate had declined precipitously and then director Arden Bement believed it was reaching crisis proportions.

The need was certainly compelling, but NSF's decision to address it with funds that would last only three years created the specter of a significant funding shortfall in FY 2012. Indeed, President Obama's FY 2009 budget recognized the problem, reflected by the administration's anticipated increase of 17 percent for the NSF in the out-year budget for FY 2012.

In prior testimony we called this committee's attention to the administration's plan, which we deemed difficult if not impossible to realize. And to

address the looming shortfall, we urged the committee to allocate much of the increases in the NSF's FY 2009, 2010 and 2011 budgets to "one shots," such as laboratory start-ups or new faculty grants of very limited duration. Unfortunately, our recommendations were not enacted into law, and today the NSF faces the problem of either allowing students supported with the ARRA funds (that run out at the end of FY 2011) to be stranded in the middle of their graduate education or severely restricting the award of new grants.

Neither course is desirable: both are damaging to America's global scientific leadership that polling has shown the public values deeply. The clock cannot be turned back to prior fiscal years. That much we all know. But if this committee elects not to grant NSF the appropriation increase requested in the FY 2012 presidential budget, the problem the Foundation faces will be made considerably worse. Therefore, although we recognize the need to address the federal deficit, we urge this committee to be wise in how and it reduces expenditures and where it applies the cuts.

Building a better America requires a strong science research enterprise and a highly skilled workforce. To sustain our nation's economic growth and to keep the highly-skilled jobs within our borders, we must commit ourselves to educating the scientific workforce of the future and providing the young scientists of today with the resources they need to keep our nation at the innovative frontier. Over the years, NSF has played a central and extraordinarily effective role in both endeavors. We believe it deserves the funding the president has requested and we hope the committee will find a way to provide the necessary appropriation.

In closing, let me again express my appreciation for the committee's past strong support for American science and through its appropriations not only for the NSF but for NASA and the National Institute of Standards and Technology, as well. Thank you for affording me the opportunity to testify.

Mr. WOLF. Well, thank you very much. We will do everything we can for education. So you understand this subcommittee will be given an allocation——

Mr. LUBELL. Right.

Mr. WOLF. And in the CR, if you look at the CR, we are heavy in protecting NSF and NASA. Others took quite a big hit.

Our hands, Mr. Fattah's hands are now tied because when I was in the minority I could differ, but generally we are going to have to reach the budget numbers. This is a pretty impressive year. I think if we could have video conferenced this and allowed the President, his Chief of Staff Daley and Mr. Lew to look at this, I think it could have made a difference.

Mr. LUBELL. I agree.

Mr. WOLF. Niall Ferguson, the historian who I have great respect for said the great nations decline rapidly. Once decline comes, the flapping of the wings of a butterfly and all of a sudden it goes. I think we are really approaching that. We are going to have to hopefully resolve this by the end of the year. I would appreciate very much your sending that letter. I would hope that all of the groups here would ask to meet with the administration—obviously the President cannot meet with everybody. Put together a team prepared to deal with the Simpson Bowles Commission because we want to protect, or not only protect, I think the word is is to enhance, the funding on the sciences to make sure that we do whatever so we can create the jobs here. That is going to be where this thing comes out. I know there were some amendments on the floor in the CR where they took money out of NASA and put it into COPS.

Mr. LUBELL. Yes.

Mr. WOLF. I am sure the members heard from the local law enforcement, and I understand, but until we get that deficit issue resolved it will be very tough, so thank you for doing that.

Mr. LUBELL. We are doing whatever we can to help. Thank you.

Mr. WOLF. Mr. Fattah.

Mr. FATTAH. I was out at the Sandia National Lab. It is an amazing thing that we as a nation should be proud of in terms of the investments that have been made.

I agree with the chairman. I want to say a couple of things. One is, I do not assume because I am in the minority that that gives me some notion of being irresponsible. I am committed that we are going to come to a bipartisan process in the subcommittee and have something that we can support. I am going to work with my chairman, and he has got to work with an allocation.

I do want to note that I am going to also introduce a bill next week that would focus on the other side of this equation.

David Walker, who I think has done remarkable work getting the nation focused on the debt, yesterday said this problem is not going to be solved by cuts alone, that it is impossible. It was Roll Call's editorial last year that said that the proposed cuts in the scientific and innovation areas are eating our country's seed corn.

So we have to work within an allocation, but we also need to point the direction. Partly it is about entitlement reform, but it is also understanding that we are going to have to raise the stakes

in terms of having the revenue we need focused on the priorities to insure our position as the number one nation in the world.

So thank you.

Mr. WOLF. Thank you.

Mr. LUBELL. Thank you.

Mr. WOLF. Thank you very much.

The next is Congressman Sam Farr from California. How are you, Sam?

FRIDAY, MARCH 11, 2011.

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

WITNESS

HON. SAM FARR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. FARR. Well, our coastline is a little threatened, but it seems to be okay from the tsunami, and I would just like to——

Mr. WOLF. What have you heard? We have been in here all morning.

Mr. FARR. Well, there was a huge earthquake in Japan.

Mr. WOLF. No, I know that, but with regard to California.

Mr. FARR. We have not been here since that early in the morning.

Mr. WOLF. No, we followed it all morning, but——

Mr. FARR. Well, California put out a coastal all along the west coast was a tsunami warning.

Mr. WOLF. Right, but I mean has anything happened?

Mr. FARR. No.

Mr. WOLF. No.

Mr. FARR. It is a great advertisement for everybody to rush to the very spot they should not be in is to go to the beach and watch it. Because every time they have done one of these tsunami warnings nothing has happened so people want to see what is going to happen. Some day we are going to have a crisis.

Mr. WOLF. Now I will tell you for the record this committee several years ago when the tsunami took place we sent a letter to every governor and I believe almost every mayor. We sent a letter to everybody urging them on the tsunami warning system and hopefully some of that came in effect.

Mr. FARR. Well, I would like to invite you out as a committee to come see what we have done on the west coast. I mean it is phenomenal the amount of technology we have put into it along the Hawaii——

Mr. WOLF. Yes.

Mr. FARR [continuing]. To do this early detection system so that the warnings— we have never had these warnings in the past.

Mr. WOLF. I know.

Mr. FARR. I think until you have a chance to just see how much of this globe is ocean and how the majority of all that flying was over ocean and how big that Pacific ocean is, and we flew from Andrews's Air Force Base to refuel in Shannon and then spent the night in Kuwait, and talking to the pilots just over the north Atlantic 20,000 aircraft a day. They are lined up every 25 miles apart

going in each direction, and the interest is all of that depends on the weather forecast of whether that line up is going to be going this way or this way or this way. It is all based on weather, but that amount of cargo and people is just phenomenal. Versus the southern hemisphere we flew across the entire Indian ocean and one commercial aircraft passed us. So the northern hemisphere and the amount of instrumentation you put in there through NOAA.

But I am here to not so much talk about the weather stuff, because you know frankly in the commerce budget there is a lot of sort of contract, big contractors in that. Think of all the satellite stuff and all of the material they need. The ocean on the other side is where our manpower, scientists are, and NOAA has always put more money in the atmosphere side than they do in the ocean side, so I am going to kind of make a pitch today for the oceans because we woke up this morning hearing about what the impact of an earthquake was on one country's ocean and could have a consequence on us.

I mean I do this every year, it is kind of a focus, but I want to just point out to you, Mr. Chairman, and I think you understand this because you would not be in politics as long as you are, but in Virginia and Maryland the commercial seafood industry contributes \$2 billion in sales and supports 41,000 jobs, but why NOAA is so important is because the environmental conditions which allow that industry to be healthy when they are not right have huge economic costs.

The pollution and poor water quality has degraded oyster reefs in Chesapeake Bay, the losses in Virginia and Maryland's oyster industry have been more than \$4 billion in losses, and our national economy depends on NOAA being able to do its job so that the commerce from the ocean can move, and yet in this budget we have a \$54 million decrease in NOAA and it has trickled down consequences that I think we need to be aware of.

First of all if the Appropriations Committee is going to count on the sort of baseline data that it was in H.R. 1, I would hope that you would really drill down on doing oversight on what that trickle down effect is going to have, because we just passed that without any discussion, no hearings and all that. But the examples of cuts, there is a \$10 million cut to the Marine Sanctuary Program, and marine sanctuaries are not everywhere, but where they are they are a big economic asset, plus a huge scientific asset. There is a \$10 million cut to the Cooperative Research Program. That thing benefits as it points out it was cooperative between fishermen and scientists.

We are going to catch shares which we really support on the west coast, it has been controversial on the east coast, west coast love it, fishermen are in it, this is going to be a managed system, it is going to be a lot safer for fishermen, it can be smarter. And essentially what fish shares does is it allows you to catch shares, is that you are allocated a tonnage of fish that you can catch within these seasonal conditions. And something those seasons are short, but then that means you got to go out then, right then and catch it all or try to catch it all and you put yourself and your boat and your crew at risk. Now you know what you are allotted, you can go out any days you want, you wait for a day that there are better

conditions for fishing, it is a lot safer, and frankly not all of the fish get hit the same day by all the boats. So it is just less bombardment on the fish stocks.

So it has really improved the stock assessment and it is a win-win and you are going hear a lot of controversy from the northeast here, you know, around the New England states, but if you do take a hatchet at that please exempt the west coast and Alaska because they are very, very satisfied with the catch share program.

I am here to put the ocean back into NOAA, to put the O back in. I think a few years ago I complained that they were cutting so much out of the ocean we ought to change the agency's name to NAA.

And again, you know what was also amazing, we were at East Timor, this was the house democracy partnership committee in Indonesia. Indonesia looks a little small on that map, but it is the fourth largest populated country in the world. It was longer than the United States is wide. It is made up of 17,000 islands. It is the largest Muslim democracy in the world. And it is very pro-U.S. But you cannot get there unless you fly over oceans.

And when we got out and went into these small islands, I just could not believe the amount of trash that was on the beaches. In East Timor, one of the poorest countries in the world, they could not generate that trash because they do not have a capital to buy that stuff. There is lots of plastics and tires and all kinds of stuff that you just do not see on the island, it is not in the economy, it got there from the oceans, and you realize my God, if this stuff is on the beaches from the oceans then it has got to be all over the waters. And you know, if the ocean does not stay healthy we are dead, because life on the planet depends on healthy oceans. And you are the only committee that has all this jurisdiction and I just really appreciate it.

And lastly I want to put in a pitch for two programs that are in your justice category because they really work. One is the COPS Program that our communities have been able to take advantage. And you know they have to put up their own capital to continue hiring the cops, there is no free lunch there. And California's cost is much higher than the nation because that program is the same salary for every cop in the nation regardless of what the local conditions are, but even with that we get the smaller return than a less costly state or salaries are lower in other states, those strapped communities are excited about getting into the program because it is the one hand out there that allows them to get cops right in the areas where we are facing trouble.

And the second issue in your jurisdiction there is the drug courts. I know your predecessor was really keen on it, I think that diverting people out of the regular criminal process and getting them in through courts where they are going to get treatment, because without treatment—you can convict people for drug crimes, but if they go into prison they are going to go stay addicts, they are going to do strange things while they are locked up and they are going to go right back to doing strange things when they get out, and drug courts have been very effective at getting diversion and treatment and I am really appreciative of that.

[The information follows:]

March 11, 2011

TESTIMONY OF THE HONORABLE SAM FARR
BEFORE THE HOUSE APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE,
AND RELATED AGENCIES

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee: Thank you for this opportunity to submit testimony to you. I come here today in an effort to support an increase in total programmatic funding to \$6 billion for the National Oceanic Atmospheric Administration (NOAA).

Our oceans and coasts are among our greatest natural resources. Over half of the United States population lives in the 673 coastal counties, with a 5% projected increase in this coastal population by 2015. Coastal and marine waters support over 2.8 million jobs, and the coastal economy generates half of the nation's GDP. The culture, economy, and security of our Nation depend on the health and sustainability of these coastal and ocean assets, yet we are not sufficiently managing and protecting them. We all know that the budget this year is more constrained than ever, however I respectfully urge you to make oceans a funding priority. An increased and sustained investment now will only work to enhance the benefits these resources will provide in the future.

There are several challenges facing NOAA in the near term that justify the need for increasing the Fiscal Year 2012 appropriation to \$6 billion. NOAA has a mandate to maintain its satellite capabilities, which are essential for weather forecasting and other earth observing needs. However, the costs for such satellites and sensors continue to increase with each fiscal cycle. In the President's Fiscal Year 2012 request, 37% of NOAA's entire budget is directed to the National Environmental Satellite Service (NESS). This request for the NESS includes an increase of \$687.8 million for the Joint Polar Satellite System (JPSS). While these increases to the satellite budget are necessary to avoid gaps in critical climate data and weather forecasting, this increase should not come at the cost of shifting funds from non-satellite programs across the agency. This is why an increase in NOAA's overall funding over the President's Fiscal Year 2012 budget is desperately needed.

Additionally, recognizing the need for a comprehensive approach to ocean and coastal conservation management, in 2010, the President signed an Executive Order establishing a National Policy for the Stewardship of the Ocean, Coasts, and Great Lakes. This Executive Order adopts the Final Recommendations of the Interagency Ocean Policy Task Force and is a great step forward in strengthening ocean governance and coordination. Additionally it establishes guiding principles for ocean management that will ensure protection, maintenance, and restoration of marine and coastal ecosystems. The President's Fiscal Year 2012 request also includes a reorganization of NOAA that would consolidate the agency's climate capabilities into a single line office called the NOAA Climate Service. This reorganization will improve NOAA's ability to provide data, information, and services to decision makers and the public in a more streamlined and coordinated manner. Our funding request would permit NOAA to meet

current mandates, as well as allow for the increasing responsibilities bestowed upon the agency to manage our ocean, coasts, and Great Lakes in a changing world.

To that end, I want to emphasize the invaluable services and programs of NOAA. Among these are the National Marine Sanctuary Program, the Integrated Ocean Observing Program, the National Sea Grant College Program, the National Estuarine Research Reserve System, and the Coastal and Estuarine Land Conservation Program, not to mention the National Weather Service, which provides the weather data on which virtually all Americans rely. Combined, the many NOAA activities support necessary ocean protection, research, exploration, and education, facilitating America's trade and commerce, leisure and recreation, and putting seafood on our tables. Therefore, it is important that we make significant progress toward increasing NOAA's funding to \$6 billion in the very near term. Even though the President's Fiscal Year 2012 budget proposal has made progress toward the necessary funding by requesting \$5.49 billion in NOAA funding, \$2.02 billion of this goes to NOAA's satellite programs and does not explicitly stipulate necessary budget increases for NOAA's many other vital programs. However, the budget does indicate the President's commitment to some programs, identifying the need to support research to further our understanding of ocean acidification and allocating money to implement a coastal and marine spatial planning program. The request also supports funding for expanding stock assessments, assisting working waterfronts, developing regional ocean partnerships, and easing the transition to the new groundfish catch share program along the West Coast by covering observer and other related costs. It is critical that NOAA's many other important programs and responsibilities be funded at a level commensurate with their value added to environmental and human health.

As a Member of California's coastal delegation, I am an intimately connected advocate for coastal and ocean resources. Several of the programs under NOAA's jurisdiction and other private and state entities are represented in my district, making it one of the most dynamic coastal destinations in the country. California's 17th District includes the Monterey Bay National Marine Sanctuary, the Nation's second largest marine sanctuary supporting one of the world's most diverse marine ecosystems, as well as the National Marine Protected Area Center and Science Institute.

I cannot emphasize enough that the health and sustainability of our ocean and coastal resources is imperative for the future of our nation. Therefore, I would appreciate your support in funding the NOAA and its programs that are of critical importance to my district and to our nation. Please consider this written testimony for the record. I do understand the requested investment is sizable; however, it must be done to protect our nation's largest public trust. We must show our ocean stewardship now. Let's make the necessary strides in the 2012 cycle to give this agency the resources in needs to fully realize its mission, to effectively provide its many products and services to the American people, and to understand and manage the ocean upon which we all increasingly rely.

Mr. WOLF. Thank you. Jim Ramstad was just here to testify too.
 Mr. FARR. Thank you.
 Mr. WOLF. Thank you, Sam, I appreciate it.
 Mr. FARR. Thank you very much, thank you for your leadership.
 Mr. WOLF. Mr. Fattah.
 Mr. FATTAH. Thank you, Mr. Chairman.
 Mr. FARR. And I will get you all a fax about the New Jersey shores, okay.
 Mr. WOLF. Avalon.
 Mr. FARR. At least you have got a television program out of it. Thank you.
 Mr. WOLF. Thanks, Sam.
 Next American Society of Civil Engineers, Tom Smith.

FRIDAY, MARCH 11, 2011.

AMERICAN SOCIETY OF CIVIL ENGINEERS

WITNESS

TOM SMITH, EXECUTIVE DIRECTOR/GENERAL COUNSEL, AMERICAN SOCIETY OF CIVIL ENGINEERS

Mr. SMITH. Thank you, Mr. Chairman.
 Mr. Chairman and Mr. Fattah and members of the committee and staff I want to thank you for the opportunity to be here today. It is a great pleasure to be here. I thank you for your service to this committee. I agree with the chairman that this is a very impressive committee and much of what I want to do is reinforce some of the comments that you have made from the distinguished colleagues that have already spoken, and I thank you also, Mr. Chairman, for your leadership in Virginia, I am a lifetime resident of Fairfax County and appreciate your leadership here today and everything you have done to us.

We are pleased to offer this testimony in support of the \$7.767 billion budget for the National Science Foundation and also the \$1.001 billion budget for the National Institute for Standards and Technology for fiscal year 2012.

We recognize that you must make difficult decisions as have been eluded to earlier. We believe however that the plan put forth by the co-chairs of the national commission on fiscal responsibility and the President's fiscal year 2012 budget recognized the importance of investment in science and research which are critical to the competitiveness and future of this country.

ASC publishes a report card that we update every four years and you may have heard President Obama reference it in the State of the Union speech where he referenced the grade of D for our country's infrastructure which is you know another issue, and the funding recommendation that we have over the next five years is \$2.2 trillion to meet national infrastructure needs.

Now recognizing that the spending at this rate is unlikely, research is needed to increase productivity and reduce costs through the development of innovative design materials, construction methodologies, and rehabilitation technologies, maintenance procedures, and operation techniques. We think it is particularly important for the federal government to be involved in this area.

You know, in our industry, you know, you see a certain amount of fragmentation with, you know, subcontractors and different disciplines involved in design and construction, there is also low profit margins, and you also see the constant threat of litigation which has a tendency to stifle innovation, so this topic of tort reform is probably another topic which we would love to see advanced in another forum, but recognizing the difficulties in the private sector and innovation in this area is particularly important we believe to have organizations like NSF and NIST and other federal agencies that can help us realize the goals that are necessary in science and technology.

According to the National Academy of Sciences, more than half the increase in the U.S. gross domestic product in the last 50 years can be attributed to advances in science technology, innovation, and engineering, it effectively touches everything we do, and we do believe that by making an investment like this we are going to be able to focus on the revenue side for this country as well.

This solution to many nations' and the world's greatest challenges are energy, environment, food and water, health care, economic growth, and others depend on advancement in science, technology, innovation, and engineering.

The support that the federal government has provided for basic research and development, the primary function of the National Science Foundation has helped this country retain its world leadership position in research and education and science and engineering, but we believe that that position is as precarious as has been eluded to earlier with the National Academy of Engineering's report that came out last year on the Rising Above the Gathering Storm revisited.

Without qualified scientists and engineers there can be for innovation, our education system is not meeting the needs of our society and many elementary, middle, and high school students do not receive adequate instruction in math and science such that the possibility of studying engineering at the college level is inhibited, and I agree with a lot of the comments from the mathematical society that you heard earlier and the concerns about the statistics regarding diversity and attracting the best and brightest to our profession which is so critical to the future of this country.

ASE supports the President's request of \$231 million for the K through 12 science technology, education, and mathematic programs at NSF.

We also urge Congress to carefully consider K through 12 STEM funding throughout the federal government. Our nation's future competitiveness and the global marketplace is directly tied to the ability of your schools to prepare children in the STEM fields.

The mission of the National Institute of Standards and Technology is to promote U.S. innovation and industrial competitiveness by advancing measurement science standards in technology in ways that enhance economic security and improve the quality of life. The well being of the nation is effected every day by mismeasurement and standards work including the quality of your water, air, food, et cetera. We fully support the request for \$678 million to fund these vital activities.

The national laboratory at NIST is also a relatively small program that addresses a large need including fire science, fire safety engineering, building materials, computer integrated construction practices, structural, mechanical, and environmental engineering and building economics.

We also applaud NIST for its strong leadership in this area and urge Congress to continue to support these activities including the engineering laboratory's \$91 million request which includes the disaster resilient buildings infrastructure and communities initiative at \$10.6 million.

Finally we also urge Congress to support the national construction safety team with an appropriation of at least \$1 million.

Once again, we thank you for your service for this country and the opportunity to be here today for speak in favor of these important programs.

[The information follows:]



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Mr. Chairman and Members of the Committee: I am Tom Smith, Deputy Executive Director and General Counsel of the American Society of Civil Engineers (ASCE). ASCE is pleased to offer this testimony in support of the proposed budgets of \$7.767 billion for the National Science Foundation (NSF) and \$1.001 billion for the National Institutes of Standards and Technology (NIST) for Fiscal Year 2012.

ASCE recognizes that Congress must make difficult funding decisions this year and that real cuts must be made. Both the plan put forth by the Co-Chairs of the National Commission on Fiscal Responsibility and the President's FY 2012 budget request recognizes the importance of investment in science and research.

ASCE believes that technological innovation has been the engine driving the nation's economic expansion for the last fifty years. ASCE firmly believes that by maintaining strong continuing and steadily increasing support for research and education, we will continue to enjoy the rewards of economic expansion. If we do not continue to invest in research and technology, we will lose our position in an ever more integrated and competitive world. Global competition increasingly requires the United States to make the necessary investments in science and engineering research and education.

If history is any guide, we already know the benefits of investment in science and technology. According to economic experts, science-driven technology is responsible for over 50 percent of the growth of the U.S. economy during the last half century. Robust, sustained investment in research and development is required for stimulating growth in high-wage industries, for generating new technologies in critical areas of need, including energy, transportation and manufacturing, and for preparing the workforce of tomorrow. The basic research funded by NSF, in engineering and all other areas of science, is the foundation of that investment in the future. Additionally, the targeted research and standards activities at NIST laboratories provide industry and the science and engineering community with the measurement capabilities, standards, evaluated reference data, and test methods that provide a common language needed at every stage of technical activity.

ASCE estimated in its *2009 Report Card for the Nation's Infrastructure* that \$2.2 trillion is needed over five years to meet national infrastructure needs. Spending at this rate, even through the use of innovative financing techniques, is unlikely. Research is needed to increase productivity and reduce costs through the development of innovative design, materials, construction methodologies, rehabilitation technologies, maintenance procedures, and operation techniques. Fragmentation of the design and construction

industry limits the support of long-term research efforts that could result in technological gains and innovation. Only the leadership and support of the federal government, through NSF and NIST, can these goals be realized.

I. The American Society of Civil Engineers

ASCE, founded in 1852, is the country's oldest national civil engineering organization representing more than 144,000 civil engineers in private practice, government, industry and academia dedicated to the advancement of the science and profession of civil engineering. ASCE is a 501(c)(3) non-profit educational and professional society. Research in civil engineering, properly conceived, conducted and implemented, should assure significant advances in the quality of life of individuals by providing essential service with minimal adverse effects on the environment by applying the principle of sustainable development and disaster resilience. Research should also provide new developments in civil engineering practice that will keep the profession dynamic.

II. National Science Foundation (NSF)

ASCE supports the Administration's FY 2012 request for NSF of \$7.767 billion, an increase of \$894.49 million (13 percent) over the FY 2010 Enacted level.

In recent years, Congress has increasingly recognized that to remain technologically and economically competitive, our country is dependent on long-term investment in federal research and education programs in science and engineering. The support that the federal government has provided for NSF in a period of budgetary stringency has helped this country retain its world leadership position in research and education in science and engineering. That position is under an unprecedented challenge from foreign nations newly committed to establishing leadership positions in research and technology development.

National investment in NSF research and education programs produces the new knowledge and the trained scientists and engineers indispensable to our future economic vitality and national security. ASCE strongly believes that Congress must maintain and increase that support.

Science, Technology, Engineering, and Mathematics (STEM) Education – ASCE encourages the continued federal commitment to math and science education by maintaining the peer reviewed Math and Science Partnerships (MSP's) at the NSF and supporting robust funding for both the U.S. Department of Education (ED) and the NSF Math and Science Partnership programs.

Our education system is not meeting the needs of our increasingly technological society. Many elementary, middle, and high school students do not receive adequate instruction in math and science, such that the possibility of studying engineering at the college level is effectively precluded. Moreover, many elementary, middle, and high school students receive little or no exposure to engineering. As a result, students who

have the aptitude to be successful engineers never have an opportunity to develop an interest in this career path. Consequently, too few well-qualified students are pursuing careers in civil engineering.

The President's request of \$231.37 million for K-12 STEM programs at NSF is a 15% decrease from FY 2010 enacted. ASCE strongly supports this request and urges Congress to carefully consider K-12 STEM funding throughout the federal government. Our nation's future competitiveness in the global marketplace is directly tied to the ability of our schools to prepare children in the STEM fields. Every well-planned and executed effort to improve the nation's student's performance in STEM fields will pay dividends in the future.

III. National Institute of Standards and Technology

ASCE strongly supports the Administration's FY 2012 proposal for \$1.001 billion for NIST, a 16.9 percent increase above NIST's FY 2010 appropriations.

NIST is a non-regulatory agency of the United States Department of Commerce. The institute's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve quality of life.

The well-being of the nation is affected every day by NIST's measurement and standards work. The quality of the water, air, and the food depends in part on that work. NIST standards ensure that consumers are confident in the quantity and quality of the product purchased, whether it is a gallon of gasoline or the amount of electricity used and stated in the monthly bill. Standards improve the accuracy of medical tests and treatments and help to make sure the nutritional content of what we are eating is appropriately labeled. Standards help to convict criminals and free the innocent through more accurate and faster DNA tests. Standards provide crucial timekeeping that we depend upon for navigation, telecommunications, financial transactions, and basic research. And standards improve the readiness of our first responders and our homeland security.

Scientific & Technical Research & Services (STRS) - These are NIST's core programs that provide the measurements and standards on which the nation's industry stands and grows. NIST laboratories provide industry and the science and engineering community with the measurement capabilities, standards, evaluated reference data, and test methods that provide a common language needed at every stage of technical activity. U.S. scientists rely on NIST's evaluated data services and measurement expertise for a host of basic and applied research activities. **ASCE supports the request of \$678.9 million to fund these vital programs.**

Engineering Laboratory – ASCE believes that the services provided by the Engineering Laboratory are invaluable to the building industry. EL works to improve the productivity of U.S. construction industries and serves as the premier fire research

laboratory in the U.S. It develops technologies to predict, measure, and test the performance of construction materials, components, and practices. EL is the nation's central laboratory for providing the tools (i.e. research and measurements) needed to rebuild the nation's infrastructure.

Laboratory activities include: fire science and fire safety engineering; building materials; computer-integrated construction practices; structural, mechanical and environmental engineering; and building economics. The laboratory conducts investigations at the scene of major fires and structural failures due to earthquakes, hurricanes or other causes. The knowledge gained from these investigations guides research and is applied to recommendations for design and construction practices to reduce future hazards.

Construction is one of the nation's largest industries, comparable in size to the health care and agricultural industries. Like those vital areas of the nation's economy, the construction industry needs research and development to enhance international competitiveness and increase public health and safety. Funding for construction-related research, from all sources, is a fraction of that available to the healthcare and agricultural industries. Due to the fragmented nature of the construction industry, the private sector does not have the resources to conduct the needed research and development on its own.

ASCE is pleased to see, and strongly supports, the Measurements and Standards to Support Advanced Infrastructure Delivery and Resilience with a \$10.6 million request.

Many of the nation's largest buildings and much of its infrastructure are concentrated in disaster-prone regions where hurricanes, earthquakes, floods and other hazards are common. The disaster resilience of our structures today is determined in large measure by the building codes, standards, materials, and practices used during their construction. With few exceptions, these legacy codes, standards, materials, and practices, which have evolved over several decades, are prescriptive i.e. not performance-based, oversimplified, and inconsistent.

To allow greater use of innovative structural systems and sustainable materials, there is a critical need to replace prescriptive codes with ones based instead on performance. There are gaps in the measurement science needed to improve the disaster resilience and sustainability of buildings and infrastructure exposed to natural and man-made hazards. Catastrophic failures in infrastructure cost the U.S. hundreds of billions of dollars in repairs and directly impact our personal and economic health. Additionally, there is a need to address the decline in the nation's construction productivity, which has averaged 0.6 percent per year over the past four decades. Construction industry leaders see the potential for improvements in construction productivity with integrated and automated processes using advanced technology.

National Construction Safety Team Act – Public Law 107-231 - created the National Construction Safety Team at NIST with the mandate to investigate major building failures within the United States. The investigations are conducted to establish the

technical causes of building failures and evaluate the technical aspects of emergency response. The goal is to recommend improvements to the way in which buildings are designed, constructed, maintained and used. ASCE supported this act; however ASCE believes that NIST must be provided with the necessary resources. The National Construction Safety Team (NCST) Advisory Committee, established by the Act, recommended the creation and funding of a NCST office. **ASCE urges Congress to appropriate at least \$1 million for such an office.**

III. Hazard Mitigation

Within the NSF and NIST, and other Federal agencies, there exist a number of small but critical programs designed to mitigate the impact of natural disasters. These critical programs such as the National Earthquake Hazards Reduction Program (NEHRP), the National Windstorm Impact Reduction Program and others hold the potential to save countless lives and billions of dollars. These programs deserve Congress's full attention and funding. NIST estimates that each year, the United States suffers \$52 billion in property damage, disruption of commerce, and lost lives due to natural disasters such as hurricanes, tornadoes, wildfires, earthquakes. A single major event—a big earthquake or hurricane— could cause some \$80 billion to \$200 billion in economic losses in the affected areas. The tragedy caused by Hurricanes Katrina and Rita in August and September 2005 underscores the growing risk to society from natural disasters.

National Earthquake Hazards Reduction Program (NEHRP) has provided the resources and leadership that have led to significant advances in understanding the risk earthquakes pose and the best ways to counter them. Under NEHRP, there has been a constant source of funding for seismic monitoring, mapping, research, testing, code development, mitigation and emergency preparedness. NIST has played a strong role in the leadership of the critical program and we urge Congress to continue to fund this critical office.

National Windstorm Impact Reduction Program - In October 2004, Public Law 108-360 authorized the creation of the National Windstorm Impact Reduction Program. As Katrina and other hurricanes, not to mention tornadoes and other severe storms, have so recently demonstrated, the nation is extremely vulnerable to the impact of severe wind events. NIST recently took steps to create a Wind Storm Office as part of their Disaster-Resilient Buildings, Infrastructure, and Communities Initiative.

ASCE strongly urges Congress to continue to fund these important programs and to support the new Disaster-Resilient Buildings, Infrastructure, and Communities Initiative request at \$10.6 million.

IV. Conclusion

Once again, thank you for the opportunity for ASCE to express its views. If you need more information, contact Martin Hight, ASCE Senior Manager of Government Relations at (202) 326-5125 or by e-mail at mhight@asce.org.

Mr. WOLF. Thank you for your testimony.

Mr. Fattah.

Mr. FATTAH. I thank you for your testimony and we have our work cut out for us. But you know, I am sure that the chairman and I are going to figure it all out.

Mr. SMITH. We have confidence in you.

Mr. WOLF. Thank you very much.

American Society for Quality, Dr. David Spong.

FRIDAY, MARCH 11, 2011.

AMERICAN SOCIETY FOR QUALITY

WITNESS

DR. DAVID SPONG, PRESIDENT, AMERICAN SOCIETY FOR QUALITY

Mr. SPONG. Mr. Chairman, Mr. Fattah, my name is David Spong, I appreciate the opportunity to testify before you today.

I represent the Foundation for the Malcolm Baldrige National Quality Award which serves to raise money to support the Baldrige Performance Excellence Program.

I am also here today as president of the American Society for Quality, a professional association and the leading authority or quality which has administered the Baldrige award since 1991. Additionally an alliance of 33 similar state award programs support my testimony.

Mr. Chairman, I am testifying today to support full funding for the Baldrige Program, a program that may seem small in size in funding, but the very large in the way it positively impacts our country, its citizens, companies, customers, and right now perhaps most importantly jobs, and I should know, I have had the honor of leading two organizations to receive the Baldrige award. I have seen firsthand how the real life application of the Baldrige principals can improve organizational excellence. Believe me it works.

As an example, in 2010 the 83 Baldrige applicants represented almost 300,000 jobs, \$38 billion in revenue, and greater than 80 million customers. And now the very program which has proven its measurable worth over and over is coming under misguided pressure to cut its funding at a time when our economy needs it most.

President Obama's fiscal year 2012 budget recommends reducing funding for the Baldrige Program by \$2.2 million out of about 10 million. He recommends evaluating ways to transition out of federal funding and have the private sector shoulder the cost.

The foundation or any other private organization in my view would not be sustainably capable of achieving the goals and true mission of the effort nor provide the prestige and patriotic almost of the program if it were to be privatized.

In fact if I were president I would ask Congress to increase the funding for the program, not decrease it so that its impact on the U.S. economy would be even greater.

Mr. Chairman, with all respect continued federal funding of the Baldrige Program at current levels is not only critically necessary, but completely economically justifiable to the U.S. government even in these times of significant budget pressure.

The Baldrige Program is a very strong example of an appropriate use of leverage dollars. An independent study calculates a 207 to 1 rate of return to the economy for every dollar the government invests in it.

The Baldrige Program is the only U.S. public private partnership dedicated to improving U.S. organizations so that they can compete globally. It educates business, education, health care, and non-profit organizations on best practices in organizational management.

The federal funding is in fact only a fraction of the total amount of hours funding and value contributed to the program, yet government support is critical as it provides the leadership, prestige, integrity, independence, consistency, and continuity the program needs, and without an efficient and effectively managed program as it is now through NIST the entire stakeholder system would collapse.

The government contributions to the Baldrige Program is supported by those thousands of experts who volunteer as an act of patriotic service to their country. The \$9.6 million appropriation for the program is one of the best investments taxpayers can make to promote economic growth and improve America's competitiveness.

Mr. Chairman, I respectfully urge you to vote to invest fully in the Baldrige Program.

Thank you for this opportunity to insure that you know how important the Baldrige Performance Excellence Program is to our country, and I would be happy to answer any questions.

[The information follows:]

**Testimony of
E. David Spong
Foundation for the Malcolm Baldrige National Quality Award, Inc.
Fiscal Year 2012 Budget Hearing
Pertaining to the National Performance Excellence Program
before the
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
March 11, 2011**

Mr. Chairman and distinguished members of this Subcommittee, my name is David Spong. I am honored by and appreciate the opportunity to testify before you today. I represent the Foundation for the Malcolm Baldrige National Quality Award, Inc., and am a lifetime member as well as past chair of the Board of this Foundation. I am here today as the president of the American Society for Quality (ASQ). I am here to tell you about a program that may seem small in size and funding but is very large in the way it affects our country, its citizens, companies, customers, and right now maybe most importantly, jobs.

The program currently is funded at \$9.6 million annually based on the enacted FY 2010 budget but President Obama's FY 2012 budget recommends reducing funding for the program by \$2.2 million from his FY 2011 proposed level of \$9.9 or \$1.9 million from the FY 2010 enacted level. He further and recommends a study during 2012 to explore outside funding for the program. I am hopeful that the Congress doesn't make the same mistake in your budget. In fact, Congress should increase the funding for this program, not decrease it. I will stress today how well the Baldrige program addresses the urgent need to make U.S. organizations stronger at the lowest possible cost as well as the extent to which taxpayer's dollars are leveraged toward that goal in a way that is truly exemplary. So, my goal is to impress upon you that the Baldrige program should get more funding and continue to be managed by NIST.

The National Performance Excellence Program was established in 1987 as a result of Public Law 100-107 with the purpose of strengthening U.S. competitiveness. To show the importance of strengthening our competitiveness, the Baldrige program was set up within NIST, an agency of the U.S. Department of Commerce, which, for more than a century, has helped lay the foundation for innovation, economic development, and quality of life in America. Although the Baldrige office guides the overall program, the program involves a public-private partnership where principal support for the program comes from the Foundation for the Malcolm Baldrige National Quality Award, not from government funding. **Here we are again in a very challenging time and the Baldrige Program could again help get our economy back on track.**

As our country continues to discuss ways to meet the economic challenges and global competition facing our nation and the necessity to make some concessions to help solve our national debt and deficit problems, **we already have a program that benefits the United States**

by driving economic development through increasing business productivity, workforce efficiency and job creation.

In the early and mid-1980s, many industry and government leaders saw that a renewed emphasis on quality was no longer an option for American companies but rather a necessity for doing business in an ever-expanding and more demanding competitive world market. The Baldrige Program was established to promote the awareness of performance excellence as an important element in competitiveness and was envisioned as a standard of excellence that would help U.S. companies achieve world class quality. From the outset, Congress anticipated how applicable the Baldrige concepts would be for organizations beyond the business sector, and it since has expanded the Award to include the education, health care, and nonprofit sectors so the reach of the Program expands to all sectors of the U.S. economy including government which I emphasize because I know our government could improve and work more efficiently by using the Baldrige criteria. Baldrige is now accepted as a proven methodology to manage all types of organizations.

It's the only U.S. public-private partnership dedicated to improving U.S. organizations so they can compete globally. **It educates business, education, health care, and nonprofit organizations on best practices in performance excellence.** The Federal funding is in fact, only a small measure of the total amount of hours, funding, and value contributing to the Program. Yet the government support is significant as it provides the integrity, consistency and continuity the program needs and without an efficient and effectively managed program, the entire stakeholder system would collapse.

Studies by NIST, universities, business organizations, and the U.S. General Accounting Office have found that the benefits to organizations using performance excellence approaches, such as the Baldrige Criteria, include increased productivity, improved profitability and competitiveness, and satisfied employees and customers. Award recipients have found that by applying the Baldrige Criteria they created a culture for change and excellence within their organizations that ultimately improved customer service, workforce morale, increased growth, profitability and institutionalized a process for continuous learning and improvement.

In order to understand the value of Baldrige you've got to understand the program as more than an award to honor companies. There's a lot more to obtaining a Baldrige Award than balloting. While the CMA, SAG, and MTV all help us celebrate our best – **Baldrige has at its heart a much more fundamental, and essential purpose - our nation's vitality.**

There is a misconception that the Baldrige Performance Excellence Program is primarily an awards program. While the Baldrige Performance Excellence Program is widely known for managing the Malcolm Baldrige National Quality Award, its main mission is to provide education and global leadership in promoting performance excellence. In fact, the awards are only the culmination of the evaluation process that scores of organizations undertake each year, both at the national level through the Baldrige Performance Excellence Program and through many non-funded parallel state and local programs. **These evaluations are supported by the efforts of thousands of volunteer experts who help these organizations improve their performance and competitiveness.** It is estimated that these volunteers, leaders from all sectors

or our economy, contribute over 120 hours each annually, **collectively 149,000 hours, at a conservative estimate of value at \$8.8 million, to improving U.S. organizations, as an act of patriotic service to their country.** So, the Award may be the most visible part of the Program, but the intention was not to simply give out awards, but to establish role model organizations that would share their successful strategies with other U.S. businesses.

An October 2001 study of the economic impact of the Baldrige Program, prepared for NIST by economists Albert N. Link and John T. Scott, conservatively **estimated the net private benefits associated with the Program to the economy as a whole at \$24.65 billion.** When compared to the social costs of the Program of \$119 million, the Baldrige Program's social benefit-to-cost ratio is 207-to-1 (*Economic Evaluation of the Baldrige National Quality Program*). In another 2004 study, *Building on Baldrige: American Quality for the 21st Century*, it states, **"more than any other program, the Baldrige Award is responsible for making quality a national priority and disseminating best practices across the United States."** The Baldrige Foundation has commissioned a reprise of the social benefit-to-cost ratio study this year, and it is expected that the ROI will be even significantly higher since the last time the study was done.

The Baldrige Program is a **very strong example of an appropriate use of taxpayer dollars, and has a long-term track record of excellent return on taxpayer investment** for the greater good of our nation. Without an efficient and effectively managed program, currently partially funded by the government, **the entire stakeholder system would collapse.** The Foundation would not be financially capable of achieving the goals and mission of the effort. Currently, the Foundation leverages the total program funding by providing to the NIST and the federal government funding on average of \$1.2 to \$1.5M annually for the training of examiners, printing of the criteria, the award crystals, and award ceremony. The Foundation cannot financially support the day-to-day staffing required to administer all the educational benefits this program provides and still maintain the integrity and patriotic element of the program if it were privatized.

Beyond this, countless other organizations use the Baldrige Performance Excellence Criteria as a framework for improving their operations. **The program has been emulated by numerous national award programs throughout the world,** which use the Baldrige Criteria for their own national quality programs. Criteria are distributed at the rate of more than 2,000,000 downloads per year on the Baldrige Program Web site. With that in mind, the government is contributing just **\$5 per user of the Criteria.** With the network of state and local programs reaching thousands of organizations at the local level and the Award recipients sharing their best practices all across the country, the small government investment is leveraged into a national network that helps U.S. organizations improve performance, increase innovation, and ensure sustainability.

In addition, **the Baldrige Performance Excellence Program is a government and industry partnership, with over 90% of the support, including in-kind contributions, provided by the private sector.** The federal government's contribution is used by NIST to manage the Program. Application fees are charged to cover expenses associated with distribution and review of applications and development of feedback reports.

The private Foundation for the Malcolm Baldrige National Quality Award has raised an endowment currently valued at approximately \$18.5 million. This endowment funds many other

Program expenses, including the printing of Program materials and the annual Presidential Award ceremony, and it provides a subsidy for the review of applicants with fewer than 500 employees and nonprofit K-12 education organizations.

Baldrige recipients serve as model organizations for everyone else to learn from, and emulate. Through Baldrige, “best practice” becomes something more than I like your idea. It becomes documented, data driven, evidence based examples of performance excellence. These examples reach every sector of the economy – manufacturing, small business, service, healthcare, education, and the nonprofit sector (including public service.)

The Malcolm Baldrige National Quality Award and the Baldrige Award recipients constitute the visible centerpiece of the Baldrige Program. However, the Program’s enabling legislation designates it as an outreach and education program designed to encourage performance excellence not only in applicants for the Award but also in a much broader base of organizations that do not apply for the Award. A report, *Building on Baldrige: American Quality for the 21st Century* by the private Council on Competitiveness, said, **“More than any other program, the Baldrige Award is responsible for making quality a national priority and disseminating best practices across the United States.”**

The Alliance for Performance Excellence, a 501(c)3 nonprofit that represents 33 Baldrige-based state quality award programs nationwide, strongly supports the mission and continuity of the Baldrige Performance Excellence Program (BPEP) program. The number of state and local, regional, and sector-specific award programs has grown tremendously. In 1991, only eight state and local award programs existed. Today there are 37 state and local, regional, and sector-specific quality award programs. These programs have been especially successful in reaching out to locally-based small and medium-size organizations. The state and local programs have become a feeder system to the Baldrige Award. In the last 14 years, 45 out of the 60 Baldrige Award recipients also have won their state’s highest-level quality award. The state and local programs greatly extend the reach and impact of the Baldrige Program. State and local programs have distributed tens of thousands of paper and electronic copies of the Baldrige Criteria, including 20,788 paper copies in 2009 alone. The criteria at the state level are Baldrige-based, with most being word-for-word copies. This has helped the Baldrige Performance Excellence Program reach a widespread audience.

In addition to the state and local network, an international network has evolved and as of January 2010, there were 95 international quality/performance excellence awards (besides the Baldrige Program), most of which either use the Baldrige Criteria or some derivative of the Criteria.

In keeping with the continuous improvement philosophy of the Baldrige Program, the Criteria are updated regularly (every two years) through a consensus process to stay at the leading edge of validated management practice. The Criteria have evolved significantly over time to help organizations address a dynamic environment, focus on strategy-driven performance, and address concerns about customer and workforce engagement, governance and ethics, societal responsibilities, and long-term organizational sustainability. **The Criteria have continually progressed toward a comprehensive, integrated systems perspective of organizational performance management.**

The year-to-year changes to the Baldrige Criteria have been evolutionary. However, since the Baldrige Program's inception over 20 years ago, the changes to the Criteria have been revolutionary. They have evolved from having a specific focus on manufacturing quality to having a comprehensive strategic focus on overall organizational performance, competitiveness, and sustainability. , the Baldrige Criteria have changed over time to reflect the changing challenges faced by U.S organizations. While the history of management theory in the United States is littered with outmoded fads, most of these fads were tools that had a short shelf life. By contrast, the Baldrige Program reflects a nonprescriptive and dynamic systems approach to performance excellence. It is a system of assessment that does not prescribe the tools an organization should use, leaving those decisions to the organization itself. While specific tools go in and out of fashion, the Baldrige Criteria, which define what constitutes performance excellence, have remained and continue to evolve. What it takes to be competitive today is much different than 20 years ago. Award recipients are sharing much different strategies today that help other U.S. organizations meet today's challenges.

The Baldrige is far more than just an awards program; it's a culture of performance excellence. While the Program has touched hundreds of thousands of American citizens in overwhelmingly beneficial ways, it directly provides a significant economic payback to America far in excess of the underlying cost of the program. From the employees of the Program applicants (those who apply for the award and use the Baldrige framework to improve their operations) to the customers of these organizations who benefit from the focus on customer service and efficient management structure, participants in the Baldrige community strive to implement the principles of Baldrige in a way that measurably improves the fabric of American society.

It would send an unfortunate and misguided signal if we eliminated a program or reduced a program that our government has supported for over two decades as the model in performance excellence. Certainly this is not the right message to our U.S. Business (Large and Small) organizations, educational institutions, health care organizations, and non-profit/government agencies that have learned firsthand how beneficial the Program is. And, with the popularity the Program has gained globally, it would not be a positive message to other countries.

I respectfully urge that you vote to invest in the Baldrige Program. The net return on the annual investment in the Program cannot only be measured in positive payback dollars, but in the sustainability of organizational performance excellence. Once you review the facts, I'm sure you will agree that the \$10 million appropriation for the program is one of the best investments taxpayers can make to promote economic growth, improve America's competitiveness, and contribute to the goal of reducing our national debt and deficit.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. I have no questions, but thank you for your work in this area.

Mr. SPONG. Thank you.

Mr. WOLF. Thank you, sir.

University Corporation for Atmospheric Research, Dr. Roberta Balstad. Welcome.

FRIDAY, MARCH 11, 2011.

**UNIVERSITY CORPORATION FOR ATMOSPHERIC
RESEARCH**

WITNESS

**DR. ROBERTA BALSTAD, MEMBER, BOARD OF TRUSTEES, UNIVERSITY
CORPORATION FOR ATMOSPHERIC RESEARCH**

Ms. BALSTAD. Thank you very much.

Mr. Chairman, on behalf of the University Corporation for Atmospheric Research or UCAR, I appreciate the opportunity to testify before you today.

I am a trustee of UCAR and a special research scientist at Columbia University.

UCAR is consortium of over 100 research institutions that operate the national center for research on atmospheric research.

My testimony regarding the NSF begins with a cautionary tale. Last December Richard Anthes, UCAR's president, was on a team to evaluate China's national science foundation. His experience was eye opening. The budget of the Chinese NSF has increased by over 20 percent annually since its founding in 1986. In 1949 there were about 600 Chinese citizens working on scientific research and development. By 2009 there were 51 million. China now has the world's fastest super computer and its students have the world's top scores in reading, mathematics, and science.

China is investing in R&D and education in the same aggressive manner as the United States did decades ago, and because of this investment over the past several decades we have created the world's largest and most successful economy. If we abandon that approach to economic growth at the same time as our competitors are adopting it the consequences could be dire.

For evidence of how NSF effects the economy and jobs just one example look at Sergey Brin, cofounder of Google, who began his work on search engines with the support of an NSF graduate fellowship.

On behalf of UCAR I urge you to support the full fiscal '12 requests of 7.8 billion for NSF.

NASA's new and ongoing satellites as recommended by the National Academy of Sciences decadal survey are also essential both to support national priorities and to respond to catastrophic natural hazards which are on the rise here and globally.

Given the critical importance of these satellite measurements to the private sector, to state and local government, managers, and decision makers, to first responders, and to scientific research, the

nation must not allow any further delay in the deployment of these resources.

On behalf of UCAR I urge the committee to fund the full fiscal '12 request of \$5 billion for NASA science mission directorate.

NOAA operations save lives, protect valuable natural resources and property and serve many industrial sectors. Despite these critical functions NOAA faces an uncertain budgetary outlook year after year.

Now in addition to a request for fiscal '12 funding that the below the fiscal '11 levels NOAA is having difficulty in getting approval to organize itself in a manner that is responsive to the needs of the nation. We must have sustained information to deal with changes and long-term weather patterns that cause droughts and floods, hurricanes, and blizzards, and effect all aspects of the economy, including national security.

On behalf of UCAR I ask that the committee allow NOAA to implement the planned no cost reorganization that will provide this country with a much needed climate service. Further I ask the committee to fund NOAA at least at the fiscal '12 request level of \$5.5 billion. This will allow NOAA to make progress in replacing aging weather satellites with a joint polar satellite system. The economy and the safety of the American people depend upon having access to accurate weather information.

Mr. Chairman, we know that we all must become more economical, and I believe that we are up to making the sacrifices that task entails, but I urge the committee to give high priority to funding for science agencies that support our nation's R&D, that promote economic and job growth, and that contribute to the continued global competitiveness of our nation.

I thank members of the committee for your stewardship of the nation's science enterprise.

[The information follows:]

**Testimony Regarding Fiscal Year 2012 Funding for
Federal Science and Technology Programs
Submitted to the Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
United States House of Representatives
March 3, 2011**

**Submitted by
Dr. Roberta Balstad, Trustee
University Corporation for Atmospheric Research**

On behalf of the University Corporation for Atmospheric Research (UCAR), I submit this testimony to the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies for the Committee record. UCAR is a consortium of over 100 research institutions, including 76 doctoral-degree granting universities, that manages and operates the National Center for Atmospheric Research (NCAR) for the National Science Foundation.

On behalf of the geosciences research community represented by UCAR, we urge the Subcommittee to support the President's request for science funding in the Fiscal Year 2012 Commerce, Justice, Science and Related Agencies Appropriations Act, including \$7.767 billion for the NSF, \$5.017 billion for the Science Mission Directorate of the National Aeronautics and Space Administration (NASA), and at least \$5.498 billion for the National Oceanic and Atmospheric Administration (NOAA).

At a time when our nation is facing both significant economic challenge and the need for fiscal restraint, preserving and strengthening our nation's talent and investments in scientific research is prudent and more necessary than ever. Since World War II, federally-funded scientific research and development (R&D) produces innovations that spawn new industries and reinvigorate existing industries, driving the engines of worker productivity, job growth, and the economy. Countless economic studies over the years have demonstrated this link between federally-funded science R&D and economic vitality and competitiveness.

The bipartisan National Commission on Fiscal Responsibility and Reform noted: "While we should cut red tape and unproductive government spending that hinders job creation and growth, we must invest in education, infrastructure, and high-value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs."

In the field of atmosphere sciences, research programs funded by NSF, NASA and NOAA improve our ability to forecast weather that impacts key sectors of our economy such as agriculture, transportation, and aviation; understand how long-term weather trends will affect public health and national security; help communities, businesses, and the nation as a whole become more resilient to extreme weather, predict the effects of solar storms on global communications networks; and contribute to the search for solutions to the challenge of delivering energy, food, and water in more sustainable ways. In short, NSF, NASA and NOAA help meet the pressing economic and environmental challenges of our times. I would like to comment in some detail on the budget requests for these agencies:

National Science Foundation. NSF provides for over 60 percent of the nation's basic, non-health research conducted at U.S. colleges and universities, including close to 70 percent of the nation's basic geosciences research. Nearly all of this work is funded through a competitive, peer review process that ensures that grants and cooperative agreements are awarded for the best proposals. In total, NSF supports almost 300,000 researchers, fellows, teachers, and students every year. It is indispensable to our nation's scientific R&D enterprise.

We urge the Subcommittee to support the President's ongoing commitment to double NSF funding, consistent with the America COMPETES Act of 2010, which Congress passed last year with bipartisan support. ***The President's \$7.767 billion FY 2012 budget request for NSF keeps the agency on track to reach this goal. We urge you to support this overall NSF request and to fund the \$979 million request for NSF's Geosciences Directorate (GEO).***

GEO supports a broad and diverse academic field that contributes to our understanding of long term weather, extreme weather, dynamics of water resources, effects of the Sun on the Earth, effects of space weather on global communications, interactions of the Earth's systems, energy resources, geologic hazards, and all aspects of the global oceans. GEO's Atmospheric and Geospace Science (AGS) program supports research that saves lives and property through better prediction and understanding of weather-related and other natural hazards such as tornados, hurricanes, snow storms, droughts, and solar storms. Cities, communities, and businesses use this research to prepare for and mitigate the effects of these and other hazards.

Within GEO, we urge you to support the President's AGS FY12 request of \$286.3 million and the \$100.0 million request for the National Center for Atmospheric Research (NCAR). NCAR is the national hub for research for the atmospheric sciences community, and the entire community depends on having access to its facilities, data, and research collaborations. While we are supportive of NSF's efforts to create interdisciplinary cross-directorate programs, without adequate overall funding these activities come at the expense of base programs like NCAR. Thus, we urge you to support the President's full request of \$100 million for NCAR as well as the requested additional funds to support new activities.

National Aeronautics and Space Administration – Science Mission Directorate. The research conducted and data collected by NASA's Science Mission Directorate are essential to atmospheric sciences research and global Earth observations. Through the use of space observatories, satellites, and other probes, NASA helps us achieve a deeper understanding of Earth, including answers to how the Earth's long-term weather patterns may be changing. ***We urge the Subcommittee to support the President's FY 2012 budget request of \$5.017 billion for NASA's Science Mission Directorate, including \$1.653 billion for Earth Science.***

As the federal government and NASA prioritize among competing priorities, the National Academy of Sciences decadal survey, *Earth and Science Applications from Space: National Imperatives for the Next Decade and Beyond*, released in 2007, continues to provide a critical set of recommendations of the most compelling needs in Earth observation in the years to come. After years of study and risk reduction, we commend NASA and Congress for enabling the implementation of this report and with it the measurements, science, and applications needed to meet societal needs.

The anticipated launches in 2011 and ongoing development of new satellites as recommended by the scientific survey will contribute to essential support of national priorities regarding the mitigation, assessment, and response to catastrophic natural hazards on the rise globally as well as environmental change observations needed to develop appropriate national and regional responses in the future. Given the critical importance of these measurements to scientists, state and city planners, first responders, and governors, the nation must not allow any further delay in the deployment of these resources needed for our states and localities to wisely and appropriately adapt in the decades to come.

The **Orbiting Carbon Observatory 2 (OCO-2)**, **Landsat Data Continuity Mission (LDCM)**, and the **Global Precipitation Measurement (GPM) Mission**, are in preparation for launches in FY 2013, and FY12 funding must be sustained to ensure that prior taxpayer investments are leveraged for the full benefit of society. The OCO-2 is being designed to make precise, time-dependent global measurements of atmospheric carbon dioxide that should greatly expand our understanding of the sources, sinks, and behavior of this key greenhouse gas.

FY12 will initiate the first two decadal survey missions, the **Soil Moisture Active & Passive (SMAP) Mission**, which will map soil moisture and freeze / thaw states from space, and the **Ice, Cloud, and Land Elevation Satellite-2 (ICESat-2)**, which will quantify polar ice sheet contributions to sea level change and collect better data on the characteristics of sea ice. At the same time, it is a disappointment that a delay is proposed for two critical probe missions: the **Deformation, Ecosystem Structure and Dynamics of Ice (DESDynI) Mission**, a dedicated U.S. InSAR and LIDAR mission optimized for studying hazards and global environmental change; and the **Climate Absolute Radiance and Refractivity Observatory (CLARREO) Mission**, which will monitor the pulse of the Earth to better understand climate change. We urge speedy development of these valuable probes.

I want to thank the Committee for its past support of **Global Learning and Observations to Benefit the Environment (GLOBE)** at \$5 million and ask that you fund its inclusion in both the NASA and NOAA budgets. This proven, experiential program supports the collaboration of students, teachers, and scientists on inquiry-based investigations of the environment and the Earth system involving more than 1 million students, 50,000 teachers and 20,000 schools around the world. NASA and NOAA have both supported this important program for many years. In FY11, NOAA was willingly directed by the Congress to rejoin the program. This renewed partnership between NASA and NOAA has been critical for the program and for the fulfillment of both agency missions relating to education. However, NOAA was directed to treat GLOBE as a congressionally directed project and to zero out NOAA's \$3 million commitment to NASA for FY12. We ask that those GLOBE funds of \$3 million, preferably as a stand-alone item, or be restored from NOAA's Competitive Education Grants Program in order to keep this proven global education program operating.

National Oceanic and Atmospheric Administration. Last fall, well before the temperatures dipped and the snow and ice assaulted much of the nation, NOAA issued its winter forecast, calling for a season of extremes – blizzards, ice storms and heavy snow were predicted far enough in advance to warn the public to take the necessary steps to prepare for disruptive weather. This is the type of economically beneficial and life-saving activity provided to the nation by this agency.

Without ongoing collaborations with universities and industry partners, NOAA would struggle to meet the needs of the nation, given inadequate funding for numerous activities. **For FY 2012, the President requests a total of \$5.498 billion for NOAA, roughly the same as the current fiscal year's request – definitely not enough for this critical service and research agency.** Following are programs of the highest priority to the broad atmospheric sciences research community that supports NOAA's mission:

National Environmental Satellite Service (NESS) – The Joint Polar Satellite System (JPSS) is NOAA's portion of the restructured National Polar-orbiting Operational Environmental Satellite System (NPOESS). ***UCAR urges the Committee to provide the requested \$1.07 billion for JPSS in FY 2012.*** JPSS is a national priority, with the capacity to meet civil and military needs for weather-forecasting, storm tracking and the study of long-term weather trends. This investment will improve warning lead times for severe storms; information used by such sectors as agriculture, transportation, and energy production. The system will address NOAA's requirement to provide global environmental data used in operational weather prediction models used for near-term (1-3 day) and mid-term (3-5 day) forecasts. Because of the lack of an FY11 appropriations bill, the launch of JPSS has slipped two years to 2016. ***To meet the increasingly dire needs of the nation, JPSS must ramp up immediately before current systems fail.***

JPSS instruments will provide critical atmospheric measurements of sulfur dioxide, nitrous oxide, water vapor, methane, ozone, soot, carbon dioxide, aerosols, and solar energy reaching the Earth's atmosphere and the Earth's reflected and radiated energy. These data were identified in 2007 as the top priority by the joint NOAA-NASA climate assessment of the National Research Council. The Total Solar Irradiance Sensor, the Clouds and Earth's Energy System and the Ozone Mapping and Profiler Suite-Limb sensors will provide critically important continual data to researchers and decision-makers. ***We urge you to support the President's request of \$30.4 million for Joint Polar Satellite System instruments.***

Also within NESS, the COSMIC program is an example of a cost effective means of improving weather forecasts. The COSMIC-1 proof of concept using GPS Radio Occultation proved so successful five years ago, that NOAA is committed to transitioning it to operational use. Currently, approximately 1,000 weather balloons are launched in the world each day, typically over land. COSMIC-1 provides more global coverage with an additional 2,000 soundings per day that have an even distribution and accuracy rate over the ocean and land. COSMIC-2 will provide over 8,000 soundings per day, resulting in significantly more accurate long range forecasts. ***UCAR urges the Committee to appropriate the requested \$11.3 million for COSMIC-2 in FY 2012.*** This program has been delayed considerably; further delay could jeopardize the funding of international partners including Taiwan, an ally that is providing the bulk of the program funds. This is an excellent leveraging opportunity that must not be lost.

Climate Service Office – Decision-makers spanning diverse sectors – from recreation to water use – have been asking for better, more concise information about climate variability. NOAA has responded to the demands for climate information by proposing a reorganization that would shift relevant resources from various line offices to this new office. ***UCAR supports NOAA's forward-thinking and responsive reorganization, and encourages Congress to approve it.***

The proposed Climate Service line office will manage the Competitive Research Program in which NOAA funds climate science to advance understanding of the Earth's climate system and its atmospheric, oceanic, land, and snow and ice components. Grants in the FY 2012 budget will address priority research topics in the areas of climate monitoring; earth system science; modeling, analysis, predictions, and projections; and climate and societal interactions. ***UCAR urges the Committee to provide \$64 million for NOAA's Competitive Research Program.***

Office of Oceanic and Atmospheric Research (OAR) – Among OAR's responsibilities is the successful extramural U.S. Weather Research Program (USWRP). The university community plays a pivotal role in this research program that works in close collaboration with the National Weather Service to transition research to useful weather and air quality applications. University collaboration in this work leverages what OAR can accomplish with minimal resources. The FY11 request for USWRP was \$5.5 million. ***UCAR urges the Committee to appropriate \$5.5 million for the U.S. Weather Research Program.***

OAR includes also the Integrated Ocean Acidification (OA) program. There is evidence that rising atmospheric carbon dioxide concentrations will cause changes in the ocean's chemistry, and that those changes will affect some of the most fundamental biological and geochemical processes of the sea. Seawater chemistry may change in coming decades and centuries that will dramatically alter marine life. NOAA's Integrated Ocean Acidification program will provide mitigation and adaptation strategies to address such changes. ***UCAR asks the Committee to provide the requested \$11.6 million for Integrated Ocean Acidification in FY 2012.***

National Weather Service (NWS) – NWS is a 24/7 operation, and is this nation's sole authoritative source for issuing warnings and forecasts related to weather, severe weather, and long term weather trends. Every day for the U.S., its territories, adjacent waters and ocean areas the NWS provides vital information regarding transportation safety, marine conditions, fire weather, air quality, agriculture, and flooding. ***The value of the National Weather Service cannot be overstated, and UCAR urges Congress's continued strong support for its many critical activities.***

In upcoming years, solar activity, including flares that release immense magnetic energy that can harm power grids, electronic communication, and satellite systems, is predicted to peak. NOAA's Space Weather Prediction Center (SWPC), part of NOAA's National Weather Service, is the nation's official source of space weather forecasts, alerts, and warnings. With a solar max expected in 2013, this is a critical time when NOAA must continue to provide alerts, watches, warnings, and forecasts to customers to ensure the nation's infrastructure is not disrupted. ***UCAR asks the Committee to provide the requested \$11.6 million for NOAA's Space Weather activities in FY 2012.***

Thank you for your service to our nation's scientific enterprise and for the opportunity to express these views on behalf of the geosciences community.

Mr. WOLF. Thank you very much for your testimony. On the re-organization that has not been authorized yet, and I think Mr. Hall is looking at that. I think they are going to have hearings and I think that is the one hang up.

Ms. BALSTAD. Okay.

Mr. WOLF. But I appreciate your testimony.

Mr. Fattah.

Mr. FATTAH. I want to thank you and I thought the numbers relative to China were startling. You know, we get distracted a lot. We spend a lot of time on earmarks, which are about half of one percent, and we are focused on these spending cuts, which is a one and a half percent proposition at the maximum, neither of which solves our problems. You know, our tax rates are at the lowest they have been since 1950.

Ms. BALSTAD. Yes.

Mr. FATTAH. But you were right, our competition is moving quickly and we are going to have to really think hard and long on all of this.

So thank you very much.

Ms. BALSTAD. Thank you.

Mr. WOLF. That is a very depressing figure about the 51 million.

Ms. BALSTAD. Yes.

Mr. WOLF. Association of Science-Technology Centers, Anthony Bud Rock, executive director. Did I skip over one? Oh, I did. Well, it does not matter, unless you are catching a plane and since you are there just go ahead. Go ahead, you look like you are looking at your watch, come on, go ahead.

Mr. FATTAH. You can come up together if you like.

FRIDAY, MARCH 11, 2011.

ASSOCIATION OF SCIENCE-TECHNOLOGY CENTERS

WITNESS

ANTHONY "BUD" ROCK, EXECUTIVE DIRECTOR, ASSOCIATION OF SCIENCE-TECHNOLOGY CENTERS

Mr. ROCK. Chairman Wolf, Ranking Member Fattah, it is nice to see you again and thank you for the opportunity to come before you on what I know is a long day for you to speak on behalf of the education programs in the National Science Foundation, NOAA, and NASA.

My name is Bud Rock and I am the chief executive officer of the Association of Science-Technology Centers, ASTC. And ASTC is a non-profit organization of science centers that are providing quality education experiences to students and families and further in public engagement with science among increasingly diverse audiences. We have nearly 600 institutional members in 62 countries, we collectively count about 82 million visits to your institutions annually. In the United States alone your constituents are passing through the doors of your science centers about 60 million times a year and they are getting intriguing educational science activities when they do.

The message contained in my written statement focuses on the vital role of the science centers and science museums in providing

a substantive high quality educational offering in STEM education for students, for teachers, and for the general public.

I am here before you today because the subcommittee is vital in this STEM education debate. The subcommittee provides 40 percent of all of the federal support for STEM education through competitive merit based and appropriately mission focused programs at NSF, NOAA, and NASA.

In fiscal year 2010 the informal science education program with the National Science Foundation would receive \$68.14 million under the administration's request and the education programs at NOAA and at NASA would receive \$20.84 million and \$138.4 million respectively.

In defense of the modest resources designated for these programs let me simply acknowledge that there is a universal call in this country for improvements in STEM education, in student learning, and in teacher training to enable this nation to retain and sharpen its competitive edge, that is exactly why 90 percent of our science centers are providing curriculum oriented classes and demonstrations. Ninety percent are offering safe and productive science based outreach programs outside the school day. Almost 85 percent are providing teacher training in a range of forms from formal certifications in science teaching onward. Seventy-five percent are offering curriculum support materials for their school districts and beyond, and many of these programs and tools are made possible by the grants provided by NSF, NOAA, and NASA.

Mr. Chairman, as a proud Virginia resident myself I was informed of a story that you recounted some time back about going to a school in your district one evening to attend a science fair and the event was taking place on the same evening as a major televised sporting event, I think it may have been the NCAA.

Mr. WOLF. I think it was the World Series.

Mr. ROCK. Okay. I heard that it may have been George Mason in the final four, but—

Mr. WOLF. No, it was the World Series and Dr. Ballard was speaking at Rachel Carson Intermediate. No, it was the World Series.

Mr. ROCK. If I understand correctly from what I have heard is you yourself remarked that despite a major sporting event at that time the parking lot was filled and there was standing room only with students and teachers. Yes, remarkable, the excitement and the enthusiasm associated with a science-based activity.

And frankly, Mr. Chairman, this nation needs to find a way to bottle that and to distribute it over the entire country exactly what you observed that evening.

I think the hands on experiential opportunities that we are providing inspire you, they inspire their interest, they inspire them toward careers, and they prepare them for the future of national prosperity and security.

I deeply appreciate that this subcommittee and your colleagues have a nearly impossible task to allocate the scarce resources between so many worthy and important functions. Somehow we have to get both our fiscal house in order and your suggestions today have been heard and understood and will be taken back and we

still need to invest in these programs that guide our children and their children toward a brighter future.

Let me just simply say that I hope that this subcommittee will take into account the support that has already been provided, the resources that already have been provided to these federal agencies and that will help to meet the goals to the inspirational hands on activities that science centers and science museums can provide.

Thank you very much for the opportunity to appear and I am happy to take any questions you might have.

[The information follows:]

Testimony of Anthony F. (Bud) Rock
 Chief Executive Officer, Association of Science-Technology Centers
 Before the
 House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies
 March 11, 2011

Seeking Support for the Following Programs in FY 2012:
National Science Foundation – Education & Human Resources/Informal Science Education
National Oceanic and Atmospheric Administration – Education
National Aeronautics and Space Administration – Education

Introduction

Chairman Wolf, Ranking Member Fattah, and Members of the Subcommittee – thank you for the opportunity to testify before you today. My name is Bud Rock, and I serve as the Chief Executive Officer of the Association of Science-Technology Centers (ASTC). My testimony today will advocate for science, technology, engineering, and mathematics (STEM) education by focusing on the FY 2012 budgets for the Informal Science Education (ISE) program at the National Science Foundation (NSF), which would receive \$68.14 million under the Administration's request, and education programs at the National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA), which would receive \$20.84 million and \$138.4 million, respectively, under the request.

About ASTC and Science Centers

ASTC is a nonprofit organization of science centers and museums dedicated to providing quality educational experiences to students and their families as well as furthering public engagement with science among increasingly diverse audiences. Now, more than ever before, we must spark the interests of our young people in all that science has to offer. This is exactly why community-based science centers throughout the country are providing unique educational programs that excite, energize, and enrich our understanding of science and its many applications – frequently with support from NSF, NOAA, and NASA, among other federal agencies.

Science centers are unique places where visitors can discover, explore, and test ideas and, most importantly, learn how science impacts their quality of life. Their offerings are varied, and include interactive exhibits, hands-on science experiences for children, professional development opportunities for teachers, and educational programs for adults.

ASTC has 566 members, including 437 operating or developing science centers and museums in 42 countries. Collectively, these institutions garner 82 million visits annually worldwide. **Here in the United States, your constituents pass through science center doors nearly 60 million times to participate in intriguing educational science activities and explorations of scientific phenomena.** The most recent *Science and Engineering Indicators* (2010) supports this data, finding that 59% of Americans visited a science center, museum, or similar institution in the past year.

Science centers come in all shapes and sizes, from large institutions in metropolitan areas – like

the Franklin Institute in Philadelphia, the Center of Science and Industry (COSI) in Columbus, and the California Science Center in Los Angeles – to smaller centers in less populated areas – like the Shenandoah Valley Discovery Museum in Winchester, Virginia, the Mary G. Harden Center for Cultural Arts in Gadsden, Alabama, and the University of Kansas Natural History Museum in Lawrence, Kansas. ASTC member institutions range in size from 3,000 square feet of exhibit space to one that has more than 200 times that – nearly 650,000 square feet. ASTC works with science centers and museums – small, large, and everywhere in-between – to educate and inform visitors on critical societal issues, locally and globally, where understanding of and engagement with science are essential. As liaisons between the science community and the public, science centers are ideally positioned to heighten awareness of critical issues including energy, the environment, infectious diseases, and space; increase understanding of important new technologies; and promote meaningful informed debate between citizens, scientists, policymakers, and the local community.

Science Centers as an Integral Part of the Nation's Educational Infrastructure

Science centers are physical places where science and citizens can meet. Many have scientists on staff, and some feature research facilities on-site. Through exhibits and programming – such as lectures and science cafés – science centers help bring current research findings to the public while encouraging discussion and debate of current science issues. More and more, science centers are also getting members of the public involved in research projects themselves.

Our centers reach a wide audience, a significant portion of which are school groups. **Here in the United States, 90% of our members offer school field trips, and we estimate that nearly 11 million children attend science centers and museums as part of those groups each year.**

Field trips, however, are just the beginning of what science centers and museums contribute to the educational experience of students and teachers alike. In the United States:

- 90% offer classes and demonstrations
- 89% offer school outreach programs
- 82% offer workshops or institutes for teachers
- 75% offer curriculum materials
- 71% offer programs for home-schoolers
- 41% offer programs that target senior citizens, and
- 40% offer youth employment programs.

Furthermore, more than half offer afterschool programs – especially noteworthy given that more than 15 million school-age children – including more than 1 million in grades K-5 – are on their own after school. Research shows that kids who participate in such programs improved significantly in three major areas: feelings and attitudes, indicators of behavioral adjustment, and school performance. This translates, of course, to self-confidence and self-esteem, positive social behaviors, and accomplishment in school settings.

Serving All Youth - The ASTC Youth Inspired Challenge

In an effort to further expand these already strong educational programs – and to assist the

nation's youth in becoming the innovative and creative thinkers needed for the 21st century workforce – ASTC launched a major new initiative, the *Youth Inspired Challenge*, in September. The *Challenge* – extended to more than 300 science centers in all 50 states – sets a three-year goal to engage thousands of youth, ages 10-19, in 2 million hours of science enrichment. Building on the valuable science education and youth employment programs ASTC members already offer, the goals of the *Youth Inspired Challenge* include: (1) increasing the STEM literacy of America's students; (2) expanding opportunities for STEM engagement of underrepresented groups, including minorities and women; and (3) moving America's students from the middle to the front of the pack in STEM achievement over the next decade. As part of the *Challenge*, ASTC and its member institutions will also collect, catalog, and share best practices for improving STEM literacy for all youth, and will measure and report success based on participation and reach of programs in specific audiences. That process has already begun. **I am pleased to report that nearly 100 science centers in 31 states – including Alabama, California, Kansas, New York, Ohio, Pennsylvania, Texas, Virginia, and Texas – have formally accepted our *Challenge* to date.** I look forward to keeping the Subcommittee abreast of our numbers – and even more importantly, our impact – as this initiative matures.

The Importance of Federal Support for STEM Education

For fiscal year 2010, Congress – led by this Subcommittee – appropriated about \$1.4 billion for STEM education through the National Science Foundation, the National Oceanic and Atmospheric Administration, and the National Aeronautics and Space Administration. **In fact, this Subcommittee is singularly responsible for nearly 40% of all the federal support for STEM education.**

As you know, there is a strong consensus that improving science, technology, engineering, and mathematics education is critical to the nation's economic strength and global competitiveness in the 21st century. Reports like the National Academies' *Rising Above the Gathering Storm* (2005) and the recent offering from the President's Council of Advisors on Science and Technology (PCAST), entitled *Prepare and Inspire*, have emphasized the need to attract and educate the next generation of American scientists and innovators, and have recommended that we increase our talent pool by vastly improving K-12 science and mathematics education. Clearly, in order to improve STEM education, we must draw on a full range of learning opportunities and experiences, including those in non-school settings.

In its report entitled *Learning Science in Informal Environments: People Places, and Pursuits*, the National Research Council (NRC) of the National Academies, *Pursuits*, said "beyond the schoolhouse door, opportunities for science learning abound..." The NRC found, among other things, that there is ample evidence to suggest that science learning takes place throughout the life span and across venues in non-school settings. Furthermore, the report highlighted the role of afterschool STEM education in promoting diversity and broadening participation, finding that non-school environments can have a significant impact on STEM learning outcomes in historically underrepresented groups, and that these environments may be uniquely positioned to make STEM education accessible to all.

Given the important role science centers and museums play in the education of both students and

teachers, ASTC strongly supports the STEM education activities of NSF, NOAA, and NASA.

National Science Foundation

Located within NSF's Directorate for Education and Human Resources (EHR) and the Division of Research on Learning in Formal and Informal Settings (DRL), the Informal Science Education (ISE) program supports innovation in anywhere, anytime, lifelong learning, through investments in research, development, infrastructure, and capacity-building for STEM learning outside formal school settings. The ISE program invests in projects that advance knowledge through research and evaluation about STEM learning in informal environments; design, implement, and study models, resources, and programs for STEM learning in informal environments; and/or build the STEM and education expertise of informal science education's broad community of professionals, volunteers, parents and caregivers, and all those with potential to facilitate the learning of others.

For years, ISE funding has supported museum-community partnerships like the *Community Ambassadors in Science Exploration* (CASE) project, conducted by the Philadelphia/Camden Informal Science Education Collaborative (PISEC), which includes the Franklin Institute, the Philadelphia Zoo, the Academy of Natural Sciences, and the New Jersey State Aquarium. CASE offers a new model for encouraging the appreciation and understanding of science among underserved families through a corps of teen and adult peer presenters; a curriculum of hands-on learning experiences for families of diverse ages and backgrounds; a regional network of museum-community collaboration; integration of community and museum resources through joint programming; and a longitudinal research study of program impacts. CASE will serve over 20,000 people over three years with peer-presented family learning opportunities and museum experiences. In addition, CASE will train a total of 108 science ambassadors who will offer science workshops at community-based organizations in the languages spoken by their constituencies. Through CASE, the ambassadors will gain training and experience in informal science education that can open the door to possible future career opportunities in community and museum settings.

The FY 2012 budget request for NSF's Informal Science Education program is \$68.14 million. Support for ISE has hovered between \$62.5 million and \$66 million since FY 2004.

National Oceanic and Atmospheric Administration

Since 2005, NOAA's Office of Education has promoted the improvement of public environmental literacy through competitive grants like the Environmental Literacy Grants for Informal/Nonformal Science Education program. The program has consistently demonstrated alignment with NOAA's mission goals and its Education Strategic Plan, and awards require a robust project evaluation plan; promote best practices; emphasize partnerships with NOAA offices and programs; and promote ocean and/or climate literacy. The agency strives to fund projects that complement rather than duplicate grant programs and other educational efforts offered by other NOAA offices and other Federal agencies. To date, 75 competitive awards have been made, supporting a wide range of projects including teacher training, experiential learning for youth and families, and the development of media products and public opinion research.

Just last year, NOAA provided funding to help the Science Museum of Virginia – along with a unique team of federal, state, and private institutions – create the Earth System Display Center based on the popular *Science on a Sphere* (SOS) platform. The Center's goal is to capture visitor attention, spur interest in climate change literacy, and demonstrate how the local impacts of energy consumption, stormwater management, agriculture practices, and climate change can have an aggregate effect globally. SOS will serve as an iconic centerpiece in the museum's overall interpretive program and a catalyst for meaningful visitor-docent interaction and community learning.

The FY 2012 budget request for Competitive Educational Grants and Programs at NOAA is \$20.84 million.

National Aeronautics and Space Administration

NASA's Informal Education Program provides support to individual learning and informal education communities by facilitating access to NASA staff, research, technology, information, and/or facilities. It also provides professional development opportunities for science educators and works to facilitate collaborative partnerships within the educational community, both inside and outside the agency. The Informal Education Program goals are to: (1) increase interest in and understanding of STEM disciplines by inspiring and engaging individuals of all ages; (2) establish linkages between out of school settings and formal education; and (3) stimulate parents and others to support children's STEM learning endeavors by becoming informed proponents for high-quality, universally available STEM education.

Science centers have received funding through the NASA's Competitive Program for Science Museums and Planetariums, which supports NASA-themed STEM education, including exhibits, on topics like space exploration and science, aeronautics, earth science, and microgravity. To date, 32 projects have been funded, including a 2010 award to the Boonshoft Museum of Discovery in Dayton, Ohio to develop and install a new Exoplanets Exploration exhibition and circulate a traveling version that will cross the country. The exhibition will be integrated into all aspects of STEM and space-related programming at the museum and will address relevant Ohio Academic Content Standards for Earth and Space Science, based on National Science Education Standards. Support materials will be available for educators, parents, and caregivers for use in classrooms, in the home, and in other learning venues.

The FY 2012 budget request for NASA includes \$138.4 million for Education Programs, \$41.7 million less than the FY 2010 enacted level.

Conclusion

ASTC urges the Subcommittee to continue to recognize the importance of the STEM education offerings science centers and museums provide for students and teachers – and the federal support provided by NSF, NOAA, and NASA for the same purpose. To that end, ASTC encourages the Subcommittee to see these programs as integral to meeting the STEM education needs of our students and teachers by providing them with the resources they need to carry out this important service to the country. Thank you once again for the opportunity to present these views. I would be happy to respond to any questions or provide additional information as needed by the Subcommittee.

Mr. WOLF. Thank you very much for your testimony.

Mr. Fattah.

Mr. FATTAH. I think almost everything has been said. Everyone has not said it, but thank you for your contribution.

Mr. ROCK. Thank you so much.

Mr. WOLF. Thank you again.

And again I apologize for jumping ahead. The International Research Institute for Climate Society of the Earth Institute at Columbia University.

FRIDAY, MARCH 11, 2011.

THE EARTH INSTITUTE AT COLUMBIA UNIVERSITY

WITNESS

DR. STEPHEN E. ZEBIAK, DIRECTOR-GENERAL, INTERNATIONAL RESEARCH INSTITUTE FOR CLIMATE AND SOCIETY, THE EARTH INSTITUTE AT COLUMBIA UNIVERSITY

Mr. ZEBIAK. Thanks. Chairman Wolf, Ranking Member Fattah, thank you for giving me the opportunity to speak to you today.

My name is Steve Zebiak and I am the director general of the International Research Institute for Climate and Society, we call ourselves IRI for short, we are based at Columbia University.

My remarks concern international climate research and are relevant to the proposed fiscal year 2012 NOAA budget.

Last fall Medhin Reda who farms about one acre of land in Adi Ha, Ethiopia was able to afford crop insurance for the first time. She bought what is called index insurance, an innovation created by the IRI in partnership with Oxfam America, Swiss Re insurance, and local banks in Ethiopia.

What makes it affordable is that it is indexed to climate conditions verifiable by rain gauges and satellite remote sensing. Farmers everywhere are subject to the vagaries of climate variations. With this innovation the poor can obtain some of the protection which previously has been available only in rich countries.

Insurance is a form of adaptation to climate which is basically the core business of your program. Our immediate concern is with natural variations like El Niño and La Niña, but our products apply to all climate variations whatever their causes.

Savvy American farmers think about global markets and global competitors. They tell us that they are keenly interested in climate impacts on their competitors around the world and on export markets. The worldwide rise in food prices fed in good measure by climate calamities like last summer's heat wave in Russia have potent implications for our own security interests.

Over the past 15 years the IRI has built a unique capability to address the need for climate information of both average American citizens and those engaged with our national security throughout the world. Our work is about understanding tomorrow's environment and creating strategies to deal with it. IRI helps developing countries understand and adapt to the climate variations that can imperil people by flooding, contaminating water supply, increasing vector-borne diseases such as malaria and other climate sensitive diseases like meningitis.

Our program is the main part of NOAA's international climate program and, the only federal program in the climate area doing this kind of work and providing this kind of information. We are proud of your humanitarian contributions, but also proud of the value of what we do for policymakers at all levels.

Mr. Chairman, we are concerned that the fiscal year 2012 NOAA budget proposes to cut support for this valuable international climate activity by two-thirds, thus jeopardizing its future. We believe that it is in the United States' national interest to continue the existing international climate activity for some of the reasons that I have already mentioned, and urge the committee to restore funding for it to its current levels.

Thank you very much.

[The information follows:]

Testimony of Dr. Stephen E. Zebiak
Director-General
International Research Institute for Climate and Society
Columbia University
Before the
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
House of Representatives
Washington, D.C.
March 11, 2011

Mr. Chairman, thank you and the Subcommittee for giving me the opportunity to speak to you today. My name is Steve Zebiak, and I am Director-General of the International Research Institute for Climate and Society (IRI), at Columbia University. My remarks concern international climate research, and are relevant to the proposed FY12 NOAA budget.

Last fall, Medhin Reda, who farms about 1 acre of land in Adi Ha, Ethiopia, was able to afford crop insurance for the first time. She bought "index insurance", an innovation created by the IRI in partnership with Oxfam, Swiss Re, and local banks in Ethiopia. What makes it affordable to small farmers is that it is indexed to climate conditions verifiable by rain gauges and satellite remote sensing. Farmers everywhere are subject to the vagaries of climate variations; with this innovation, the poor can obtain some of the protection previously available only in rich countries. Insurance is a form of adaptation to climate, which is the business of the IRI. Our immediate concern is with natural variations such as those associated with El Niño and La Niña, but our products apply to all climate variations, whatever their cause.

Savvy American farmers think about global markets and global competitors. They tell us that they are keenly interested in climate impacts on their competitors around the world and on export markets. The worldwide rise in food prices, fed in good measure by climate calamities like last summer's Russian heat wave, have potent implications for our own security interests. Over 15 years, the IRI has built a unique capability to address the need for climate information of both average American citizens and those engaged with our national security. Our work is about understanding tomorrow's environment and creating strategies to deal with it.

The IRI helps developing countries understand and adapt to the climate variations that can imperil people by flooding, by contaminating water supply, by increasing vector-borne diseases such as malaria as well as other climate related diseases such as meningitis. The IRI is the main part of NOAA's international climate program and the only federal program in the climate area doing this kind of work and providing information of this kind. We are proud of our humanitarian contribution, but also proud of the value of what we do for policy makers at all levels.

Mr. Chairman, we are concerned that the FY12 NOAA budget proposes to cut support for this valuable international climate activity by two-thirds, thus jeopardizing its future. We believe that it is in the US national interest to continue the existing international climate activity, and urge the Committee to restore funding for it to current levels.

Thank you, and I'll be glad to take questions.

Fifteen Years of Foundational experiences in international climate services

Below are four examples of IRI collaborations that allowed climate information and climate risk management innovations to be developed and tested in specific geographic and problem settings. They also demonstrate a key strength of the IRI: the expertise and ability to identify and bring together stakeholders who are relevant to the problem at hand. These four experiences have helped shape IRI's commitment and contribution to the establishment of effective climate services.

Agricultural Management in Southeast South America

For the last twelve years, the IRI has collaborated with the National Agricultural Research Institutes, or INIAs, of countries throughout Latin America. A key objective of this collaboration has been to establish Information and Decision Support Systems (IDSS) for the agricultural sector. These innovative systems offer an excellent opportunity to provide climate services to the agricultural community. They bring together relevant, state-of-the-art climate information--such as climate monitoring, weather forecasts, seasonal climate forecasts and plausible future climate scenarios--with other information, such as vegetation monitoring tools, databases of natural resources and crop simulation models. Agricultural agencies can then utilize these innovative platforms to create easily understandable and *usable* information, maps and products for both public- and private-sector purposes. Decision makers have used IDSSs to develop early warning systems and monitoring products for droughts, floods, frosts, crop disease outbreaks. Insurance providers look to IDSSs to help assess the risks associated with different production systems and with different agronomic management practices. Agencies can also use IDSSs to define the feasibility of producing different crops or using different technologies in various regions.

IRI created the first IDSS in collaboration with Uruguay's INIA. In 1999-2000, Uruguay suffered one of the worse droughts in its history. During the drought, the country's Ministry of Agriculture and the National Emergency System used the information and products created by the IDSS to successfully plan and prioritize aid responses to affected regions of the country.

The successes of the IDSS approach in Uruguay created demands from other countries in the region to establish similar systems. Efforts are currently ongoing in Paraguay, Chile and southern Brazil, and are likely to expand to several other countries. Work is underway now using the IDSS approach and tools with the INIAs of countries in the Southern Cone (Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay) to assess the vulnerabilities associated with the expansion of the agricultural frontier in the context of near-term climate change.

Water resource management in the Philippines

The Angat reservoir in the Philippines provides 97% of the water supply for metro Manila, home to 11 million people. Water from Angat also irrigates 30,000 hectares of rice fields in Bulacan Province, supplies 250 megawatts of hydropower for the island of Luzon, and the dam offers flood protection for tens of thousands of people living in downstream communities. The region is strongly affected by climate variability, particularly related to the El-Niño Southern Oscillation (ENSO) cycle. During drier-than-normal years, there is not enough water in the reservoir for all uses, and in wetter-than-normal years, the Angat dam operators need to carefully manage reservoir levels to avoid serious floods.

The IRI, along with the National Water Resources Board (NWRB) of the Philippines, the national meteorological service (PAGASA) and other stakeholders, developed practical *climate-smart* strategies for allocating Angat's water across all the competing uses, especially during years that see extremely low or high rainfall.

This work addressed three principal elements, each critical to developing a climate risk management strategy for Angat, and each requiring a deep and ongoing commitment on the ground, over a number of years. The first was understanding the institutional and decision-making landscape surrounding the reservoir and its management. For example, the IRI partnered with the University of the Philippines, Los Baños to conduct an analysis, based on extensive stakeholder dialogues, of the policies, regulations and processes of Angat water allocation. This led to a nuanced understanding of the specific needs and constraints of decision-makers, which has been a critical guide to climate research and tool development.

The second was to put focus on climate research and capacity building. The IRI collaborated with PAGASA to more reliably predict the start of the summer monsoon, to identify the seasonal reversal of ENSO rainfall signals, and to produce more skillful forecasts of Angat inflow. IRI staff trained PAGASA counterparts on how to use IRI's *Climate Predictability Tool* to produce downscaled climate information, and on state-of-the-art techniques for regional climate modeling.

The third element was to develop specific risk management tools and strategies. With the NWRB, the IRI created a reservoir model that integrates seasonal climate forecasts within the current reservoir decision process. The tool is user-friendly and allows NWRB staff to visualize the probabilities associated with specific scenarios of future water availability. In doing so, it helps stakeholders better assess possible outcomes from decisions they make on allocations, given climate conditions in a particular year.

Malaria in Ethiopia

Ethiopia's population of 80 million people makes it the second most populous country in Africa. Given Ethiopia's prevailing poor economic conditions, its complex topography and its highly variable climate, the population remains vulnerable to all too-frequent and often prolonged droughts, food insecurity and epidemics of climate sensitive diseases such as malaria. The *Roll Back Malaria Partnership*, which started in 1998, generated significant interest in developing early warning systems to improve prevention and control of this deadly, but preventable, disease. For their part, the IRI, the World Health Organization and other partners have helped frame, develop and test integrated early warning, surveillance and response systems for epidemic malaria, known as *MEWS*. These systems are supported by climate monitoring and prediction information. Initial work in Botswana provided clear evidence of a relationship between rainfall and malaria, and demonstrated the ability to estimate seasonal risks at least a season in advance using operational seasonal forecasts. The subsequent establishment of an epidemic early warning system has been influential in creating strong demand from other countries in Africa and in other regions.

In 2008, Google.org began to support IRI in new efforts to help develop early warning systems for climate-sensitive diseases in Ethiopia. Climate services will have little value unless potential user communities are capable of accessing and utilizing existing climate information, and are able to request products that better suit their needs. In this spirit, the IRI helped to establish a multi-agency

Climate and Health Working Group (CHWG) chaired by Ethiopia's Federal Ministry of Health and co-chaired by the National Meteorological Services. The working group aims to foster stronger collaboration between the climate and health community so that climate information is used effectively for protecting the Ethiopian people from climate-related health problems such as malaria, meningitis and others. The development of the Ethiopian CHWG has already been influential in encouraging other African countries to follow suit and, to date, CHWGs have been established in Kenya and Madagascar, two other countries where epidemic malaria threatens large, vulnerable populations.

Global Disaster Risk Management and the Red Cross

Climate services offer a range of benefits to the humanitarian community. While three-day weather forecasts are generally good only for last-minute life-saving decisions, medium-term and seasonal forecasts can be used to guide contingency planning, logistical preparations, and resource management decisions. At longer timescales, information about climate change over the next decade or longer can help disaster managers evaluate how decisions and investments taken today will stand up to future extremes.

The International Federation of Red Cross and Red Crescent Societies (IFRC) Operations Support unit in Geneva is responsible for coordinating preparations and response to disasters around the world. It also coordinates appeals for funding and resources to manage disasters. Its role is especially vital in countries that have little or minimal capacity for disaster preparedness. And yet, despite its invaluable function to the global community, the IFRC did not have a way to quickly understand where in the world a weather or climate-related disaster might take place in the next week, or to know where droughts were likely to happen in the coming three months. The IRI designed a dynamic map-based tool to meet this need. The tool has been incorporated into day-to-day operations in Geneva, and now, any user there can quickly access timely, reliable information on areas that are potentially vulnerable to weather and climate extremes in the coming days, weeks and months. As a complement to the map tool, the IRI also runs an email-based "helpdesk" that provides IFRC staff scientific expertise on demand, answering questions regarding climate forecasts and evolving extreme weather conditions, for example. The IFRC has used these IRI products as part of its preparations and response to recent disasters in Senegal and Mozambique.

The IRI has also worked closely with national and zonal Red Cross offices across Latin America, Asia and Africa. Thanks to the training and collaborations fostered by IRI with the African Center for Meteorological Applications for Development (ACMAD), the West and Central Africa Zonal Office issued the *first ever appeal for resources based on a seasonal forecast* before the rainy season of 2008.

Support of U.S. Climate Activities

The IRI supports our nation's climate enterprise in a multitude of ways. The institution's seasonal forecast products feed into the consolidated seasonal forecast produced every month by the Climate Prediction Center (CPC) for the entire United States. The CPC also uses IRI's multiple model El-Nino sea-surface temperature forecast product in its development of seasonal forecasts for the U.S., and to forecast future sea-surface temperatures in the central and eastern equatorial Pacific Ocean. As witnessed during the recent *Climate Prediction and Application Science Workshop* in Des Moines, Iowa, this product is extremely valuable to and popular with many diverse user communities, including NOAA climate scientists and scientists involved in applying climate information to agricultural planning and other sectoral problems.

The next generation of seasonal forecasting systems will benefit greatly from climate-model correction and weighting strategies being developed through collaborations between IRI and CPC scientists. They are also working on cutting-edge drought monitoring and diagnostic tools for North America in partnership with the Earth System Research Laboratory (ESRL).

The IRI collaborates with NOAA to understand the processes that cause decade-to-decade variability in climate, and to assess if there is predictive skill on this timescale. IRI scientists contribute to this national effort as members of the US CLIVAR Working Group on Decadal Predictability, as well as through targeted research projects.

The outstanding contributions of research and leadership that IRI climate scientists make to their field is perhaps most clearly evident by their invited participation to key research groups. Affiliations and titles include:

- a. Chair of the U.S. Climate Variability and Predictability Research Program (US CLIVAR).
- b. Co-chair of the US CLIVAR Working Group on Decadal Predictability.
- c. Member of the National Academy of Sciences, Climate Research Committee.
- d. Member of the International CLIVAR Working Group on Seasonal to Interannual Prediction.
- e. Membership on the International CLIVAR Variability of the American Monsoon Systems.
- f. Member of the Scientific Steering Group of International CLIVAR.
- g. Member of NOAA Climate Observing System Council

Mr. WOLF. Well, thank you. You ought to tell your local newspaper, the New York Times, they ought to get with the program though. They never say anything constructive on this.

People can come and say we need funds. I want to fund every single entity that has testified today. Maybe there is one or two that I might take difference with on an earlier panel. Unless we ask how are we going to pay for it; \$14 trillion of debt, last month we had the largest deficit we have ever had for one month.

Now I may not have the best approach. Five years ago I put in a bill. We had 140 co-sponsors, for a bipartisan commission that put every single thing on the table. I was the author of this Iraq Study Group, Baker-Hamilton. We cannot get this administration to come forward.

And I hope it does not make Mr. Fattah uncomfortable, because I was equally critical of the Bush administration. I am going to put all those letters in the record. I am going to give Mr. Fattah copies of them all so he can see, because there is a normal inclination that I respect, that when someone is going after your team, your administration, you sort of feel this obligation to sort of defend them.

I did in the past, but for a whole period of time, and when you get the printed record of this testimony you will be able to see the letters that I sent to Paulson and to the last administration who frankly did nothing. They did nothing.

But now we are at a tipping point and we really have to come forward to say okay, we are going to fund these programs, but here is how we are going to do it.

Also I have not signed the no tax pledge. I am not intimidated by anybody. I am going to do whatever I have to do. I do not like to raise taxes. I do not want to raise taxes. I want to see how we can cut first. But, I also want to deal with the entitlements. The Simpson Bowles Commission is sort of a grand compromise. A grand compromise that not everyone really feels totally comfortable with. But you know that they are kind of moving in the right direction. So we really are going to have to get it out of this administration to participate with us.

I mean the President has a much more powerful office than I have. I can say from my congressional district that I am going to support the Simpson Bowles Commission. He certainly can say it. He is much more articulate than I am. He can give his better speech. I have been a lifelong stutterer, I could not compare speaking to as well as he does, but I know in my heart of hearts that I cannot kid myself. I cannot pretend that there is something else out there. I know the realities. It is kind of like when you go take a test. A doctor says this is what the MRI has demonstrated your problem is, and we cannot hide from it. At the State of the Union message the President had an opportunity to lead the way that President Reagan did on a couple of things in a bipartisan way and to sort of force the Congress. I believe, and I want to say on behalf of the leadership of my side, I believe that John Boehner is committed deeply to deal with this issue. To deal with the issue of the debt and the deficit by dealing with the entitlements, but we have got to do both. So I think we can. That is what leadership is about.

Maybe some people will be defeated by it. I do not know what is going happen. We do not know where this is going to go. My

sense is though that the American people are actually ahead of the political leadership on both sides of the aisle and on both sides of the Senate.

So when you tell the editorial board of the New York Times that we want to do these things, let's come together again in a bipartisan way, because you know we can make points. It is easy, this place is a point making place. Do we want to make a difference? And if we want to make a difference for the future for the programs we have got to come together in a bipartisan way. There is no other way. It is impossible to do this if it does not have the support, not of a majority of everybody on both sides of the aisle, but a majority of both sides of the aisle whereby we basically link arms together and say okay, this is a tough vote. But we are going to do it because we think we want to fund the sciences, and to protect the poor. You got to though say then what will your recommendation be and how will you deal with the issue of Medicare, Medicaid, and Social Security?

And I appreciate your testimony. I am glad you are helping the third world like in Ethiopia.

Mr. Fattah.

Mr. FATAH. Let me try to make a difference.

The chairman and I voted the same way on the question of trade relationships with China years ago. We share a lot more in common than one might suspect, but that is because we are both from Philadelphia originally.

So here is the deal. I was here, we balanced the budget under Clinton, we made some tough cuts, we raised some taxes on the highest income people, and we balanced the budget. And that shows that as a matter of science it can be done again. That is, it was done once, it can be done again, and it cannot be repeated unless it is done in the same way. That is, if it is done in a bipartisan way, there is going to have to be a balance between new revenues and cuts.

And David Walker said that yesterday. I think that what is called the Simpson Bowles Commission is in fact the President's commission on debt appointed by the President under an executive order after supporting a bipartisan bill in the Senate that failed.

So the President does have a responsibility to lead and I believe that with Speaker Boehner we have the team to make this happen. We just have to kind of get past the distractions first, and we spend a lot of time on distractions.

One and a half percent of the spending cut, the \$61 billion, will not solve our problem. Cutting earmarks, half of one percent, will not solve our problem. We have to have a comprehensive approach. I support Simpson Bowles, or the President's Commission. It is not enough. It does not balance the budget. It still leaves us in the hole. We need to take a non-incremental approach to getting our fiscal house in order because we actually have more important work to do, which is to compete in a global economy.

So I want to support any comprehensive approach to solve this problem. I am even going to offer my own next week. I think there is a lot more support among the members of the Congress to get this resolved. There have to be points made on the political side,

we are going through that now, but I believe that over the horizon we will have an opportunity to resolve this matter.

Thank you.

Mr. WOLF. Thank you, Mr. Fattah, thank you very much for your testimony.

The next, University of Virginia, Tom Skalak, Ph.D. from Charlottesville. Good to see you. Two of my kids went to UVA.

FRIDAY, MARCH 11, 2011.

RESEARCH AND EDUCATION

WITNESS

TOM SKALAK, PH.D. PROFESSOR, BIOMEDICAL ENGINEERING & VICE PRESIDENT FOR RESEARCH, UNIVERSITY OF VIRGINIA

Mr. SKALAK. That was a good choice.

Chairman Wolf and other members of the subcommittee thank you for the opportunity to provide this testimony today.

As the vice president for research at the University of Virginia, a public university located in Charlottesville, Virginia, I speak on behalf of our Research and Education Programs. Founded by Thomas Jefferson to serve the entire nation, UVA sustains the ideal of developing leaders who shape the nation. UVA conducts science and engineering research that helps maintain our national economic strength and competitive edge in the world. In 2010 UVA received over \$276 million in federal funding for research.

I urge the committee to support the President's proposed increases for the federal science agencies including the National Science Foundation, NIST, the Department of Commerce's Economic Development Administration, and science aeronautics and space technology within NASA.

Last year UVA received over \$29 million in NSF grants to conduct research that improves our nation's wireless networks and enhances cyber security, develops new heating technologies that moves a nation toward energy independence, revolutionizes tissue regeneration of injured nerves and ligaments helping to reduce health care costs, and increases the number of women and minority students in STEM fields.

NSF is at the forefront of efforts to insure that scientific research is transformed into products that help the lives of Americans.

My own NSF partnership for innovation grant created a global network linking universities and industries in bioengineering and biomedical engineering, enhancing innovation in this important American industry, one of the few in which exports greatly exceed imports.

UVA in partnership with the Coulter Foundation is bringing discoveries to the marketplace. An independent audit showed this year that our proof of concept funds produced a 5 to 1 return on investment after five years and a 42 to 1 return on investment for the top 10 percent of our portfolio projects spinning out new small businesses and creating new jobs in the United States. This high performance and proof of concept research makes a difference and offers a model that could guide enhanced federal funding for proof of concept programs nationwide.

UVA supports the proposed increases for NIST and the EDA because their technology innovation program and regional innovation program promote collaboration between universities and industries. A successful example of this is the Commonwealth Center for Advanced Manufacturing, a partnership between UVA, Virginia Tech, John Tyler Community College, and industry partners. This partnership has created a research facility at a new Rolls Royce manufacturing site in an impoverished region of Prince George County. This center will spur manufacturing innovation that will improve U.S. competitiveness.

I would like to thank the committee, particularly Chairman Wolf for your support of the federal science and engineering agencies and I hope that you will choose to support these strategic increases for the agencies. They lie at the heart of the U.S. innovation system which is the envy today of the rest of the world, they are the foundation of American competitiveness over the long term, they represent the pioneering American spirit for exploring new frontiers, and they are the only way to insure America's future, economic strength, and security.

Thank you.

[The information follows:]

**Testimony Regarding the FY 2012 Budget Request
Submitted March 3, 2011 to the
Subcommittee on Commerce, Justice, Science, and Related Agencies
U.S. House Committee on Appropriations by
Thomas C. Skalak, Vice President for Research
University of Virginia**

This testimony is submitted for the record on behalf of the University of Virginia, a non-profit public institution of higher education located in Charlottesville, VA. Founded by Thomas Jefferson in 1819, the University sustains the ideal of developing, through education, leaders who are well-prepared to help shape the future of the nation. In fiscal year 2010 the University received research awards totaling over \$375.34 million from all sources (federal and state agencies, industry and private foundations). Of this amount, \$276.47 million, or 73 percent, came from federal grants and contracts.

As the Vice President of Research and on behalf of the University of Virginia (UVa), I urge the Committee to support the President's proposed increases for the federal science agencies in the fiscal year (FY) 2012 budget, including: \$7.767 billion for the National Science Foundation (NSF); \$1.001 billion for the National Institute of Standards and Technology (NIST); \$325 million for the Department of Commerce's Economic Development Administration (EDA); and the funding proposed for Science, Aeronautics, and Space Technology within NASA. These increases, many of them authorized in the America COMPETES Reauthorization Act of 2010, will help universities make new discoveries at the frontiers of knowledge, conduct critical research, design and engineer new technologies and systems that help to solve national challenges, and power our innovation-based economy.

Innovation as an Economic Driver

Fiscally responsible increases for the federal science agencies will spur innovation and drive the economy. According to the Science Coalition, more than half of our economic growth in the United States since World War II can be traced to science-driven technological innovation. The platform for this innovation has been scientific and engineering research conducted at universities and supported by the federal government through agencies such as the National Science Foundation, the Department of Commerce, and NASA.

Innovation is invisible until it bursts into view! We have trouble imagining change. Our nation's research scientists and engineers must continue to feed the bubbling swamp of innovation, out of which must rise the new small ventures and the next giant redwoods of the American economy! The private sector is waiting at the edge of this risky swamp to take promising ideas forward to product development and launch. This ecosystem is the envy of the rest of the planet and we should re-invest in the very qualities that make it unique and able to produce U.S. innovation advantage over the long-term. This is the pioneering U.S. spirit for exploring frontiers.

UVa is devoting significant institutional resources to the process of bringing discoveries to the marketplace. An independent audit has shown that our proof of concept funds have led to a 5:1 return on investment after five years and a 42:1 return on investment for the top ten percent of

portfolio projects. For example, UVa has entered into a strategic research collaboration with AstraZeneca to enhance development of new treatments primarily for coronary artery disease (CAD) with a secondary focus on peripheral vascular disease (PAD). This partnership with industry helps us to bring innovative research, funded by federal research grants, to the marketplace quickly and efficiently.

Another example is Directed Vapor Technologies International, Inc. (DVTI). Formed in 2000 to capitalize on patents associated with the creation of a new coating method, Directed Vapor Deposition (DVD), a novel physical vapor deposition tool invented at the UVa School of Engineering and Applied Science Materials Laboratory. The new method allows coatings to be applied faster, with a greater variety of materials, with greater control and at lower cost than other methods and is used on products such as turbine engines, batteries, and liquid crystal displays. This new small business operates a 6,000 sq. ft. manufacturing facility in Albemarle County, VA and maintains its relationship with the University and the region by hiring interns, recent graduates and alumni. Development of the technologies behind DVTI was supported by grants from the National Science Foundation and the Department of Defense.

National Science Foundation

The University of Virginia supports the President's budget request of \$7.767 billion for the National Science Foundation (NSF) in FY 2012. This would represent an increase of \$894 million or 13.0 percent above the FY 2010 enacted level, keeping NSF on the path for doubling as authorized by the America COMPETES Reauthorization Act of 2010. NSF is a significant source of funding for University of Virginia research in engineering and biological, physical, computational, social, and environmental sciences. NSF also funds efforts at UVa to improve education in the STEM (science, technology, engineering, and mathematics) disciplines, which is critical for the future of our country and the Commonwealth.

In the last fiscal year, researchers at UVa received over \$29 million in competitive NSF grants that support research in all areas of science and engineering. NSF funding has allowed faculty and students at UVa to conduct ground-breaking research to improve our nation's wireless networks, study the chemistry of the universe, develop cutting-edge heating and cooling technologies, understand how environmental change impacts the Virginia coastal ecosystem, and revolutionize tissue regeneration of nerves and ligaments, among many other initiatives. Funding has also supported critical efforts to increase the number of women and minority students in STEM fields, enhance teacher training, develop improved curricula for elementary school students in math and engineering, and extend pathways for community college students to earn four-year degrees in fields such as engineering. NSF is also at the forefront of efforts to ensure that basic research is transformed into products and knowledge that improve everyday life and power our innovation economy. UVa has also utilized NSF funding to power improved networks between the university and industry in fields such as bioengineering to enhance innovation.

According to the Taskforce for American Innovation (TFAI), the 5.2 percent overall cut to NSF contained in the recently passed Continuing Resolution Appropriations Act of 2011 (H.R.1) would mean that 10,000 fewer university researchers would receive support for critical research and education projects. The 16.4 percent cut to vital STEM education programs embedded in the

5.2 percent overall NSF cut would in reality amount to a 28.1 percent reduction during the last seven months of the fiscal year. At a time when our nation desperately needs to enhance its technological workforce, the reduction is dangerously counterproductive, and I urge Congress to keep NSF on the doubling path proposed by President Obama and authorized by America COMPETES.

Specifically within NSF, we support the proposed increases to Research and Related Activities, which funds ground-breaking research across the NSF directorates, and Education and Human Resources, which funds critical education efforts.

National Institute of Standards and Technology (NIST)

UVa supports funding for the National Institute of Standards and Technology (NIST), located within the Department of Commerce, at the level of \$1.001 billion as included in the FY 2012 budget request, \$144.4 million or 16.9 percent above the FY 2010 enacted level. This increase for NIST programs reflects the Administration's continued emphasis on innovation, manufacturing, and economic competitiveness. The increase would fund key extramural NIST programs such as the Technology Innovation Program (TIP), which funds high-risk, high-reward collaborative research at universities and private partners that address national needs, and the Hollings Manufacturing Extension Partnership (MEP) which helps manufacturers streamline manufacturing techniques and increase efficiency and profits through training resources as well as specific project assistance. Universities, including UVa, continue to work to strengthen manufacturing within the U.S. through research and development.

For instance, within the Commonwealth of Virginia, UVa is partnering with Virginia Tech (VT) and the John Tyler Community College to create the Commonwealth Center for Advanced Manufacturing (CCAM) at a new Rolls Royce manufacturing site in an impoverished section of Prince George County. Along with private partners such as the Rolls-Royce North America, Siemens, and Northrup Grumman Shipbuilding this research facility will spur .

innovations and improvements that can be applied directly to real manufacturing processes and technologies. The facility, ready to be constructed in the Commonwealth at the Crosspointe site, will bring industry and high-tech jobs to the region by providing member companies with applied research to reduce costs, speed time to market and maintain a global competitive advantage.

Although CCAM has not yet received funding from NIST, the facility plans to apply for future competitions which are dependent on appropriations funding. I urge you to fund NIST at the President's budget request so these programs can hold future competitions.

I would also note that funding for the NIST Extramural Construction Grant program is not included in the President's request. This program, which provides extramural funding for construction of research facilities at universities and research organizations, has been supported by Congress in the past and we urge you to restore funding for this important NIST activity. As public universities such as UVa face funding shortfalls for facilities in state budgets, they are increasingly turning to the federal government for support to improve and build facilities

that help create new high-technology jobs, and this is one of the few programs which will fund that type of activity.

Economic Development Administration (EDA)

I urge the Committee to support the President's FY 2012 budget request for the Economic Development Administration (EDA) at \$325 million.

EDA's mission is to lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy. No other federal agency provides funding for local, state, and regional partners to create sustainable economic drivers, such as research parks. Currently, UVA has a pending application with EDA for support of the CCAM project. This federal support would help to supplement and leverage already awarded state and institutional funds.

UVA supports the requested amount of \$40 million for a new Regional Innovation Program, as authorized in the America COMPETES Act. This program would help build regional innovation clusters based on the strength of local communities and regions through competitive awards for activities relating to the formation and development of regional innovation clusters, including research parks. I urge you to support the FY 2012 budget request for EDA, including the new Regional Innovation Program.

National Aeronautics and Space Administration (NASA)

UVA supports the increases proposed in the budget request for NASA science, aeronautics, and space technology. Specifically, UVA supports funding of \$5.017 billion for Science, an increase of \$548 million or 12.2 percent over FY 2010. Funding for NASA Science is critical to the exploration of our planet and universe that powers inspiration for future generations, the development of cutting-edge technologies, and knowledge to protect our country from hazards such as national disasters. ***UVA also supports funding of the Space Technology program at \$1.024 billion.*** This program, first proposed in the FY 2011 request and authorized in the NASA Authorization Act of 2010, would catalyze partnerships between NASA, universities, and industry to develop advanced technologies to power future exploration in areas such as communications, sensors, robotics, materials, and propulsion. In addition, ***UVA supports funding for NASA Aeronautics at \$569 million,*** an increase of \$68 million, or 13.6 percent above the FY 2010 level. Aeronautics research funding supports efforts to develop new materials, alternative fuels, and the Next Generation Air Transportation System.

As a member of the National Institute of Aerospace (NIA), a non-profit research and graduate education institute, UVA and other consortium members work with the NASA Langley Research Center to conduct leading-edge aerospace and atmospheric research, develop new technologies for the nation and help inspire the next generation of scientists and engineers.

Investing in U.S. "Innovation Security" – All Agencies

UVA recommends that Congress and the Administration consider the creation of a new program at each of the federal science agencies equal to one percent (1%) of their current

extramural funding to support proof-of-concept research and development at universities, or \$300 million per year. More specifically, our recommendation is that \$2 million of this proof-of-concept funding be provided to each of the 50 top research universities (provided they demonstrate a minimum level of competence and impact in performing translational or proof-of-concept research) \$1 million per year at the next 150 universities interested in proof-of-concept research; and \$500,000 per year at another 100 universities demonstrating potential to develop successful and high impact programs in translational and proof-of-concept research and development.

It is important to note that the initiatives we are suggesting should not be for later stage product development or for more applied pre-commercial research; rather, it should be for true proof-of-concept research or prototype development best conducted in the settings where discoveries and innovations perceived to have commercial application are first developed. Such funding should be allocated after rigorous evaluation by carefully assembled panels of local experts in translational and proof-of-concept research – this is key to scaling success to the national level. Among the criteria for awards under this initiative should be the demonstrated willingness and capability of a university in engaging project management boards comprised of industry, start-up, venture capital, technical, financial, and business/market experts. Additionally, successful applicants for this funding should be required to prove their willingness and agility in managing translational projects stressing market-relevant milestones, in conducting rigorous oversight and management of such projects, and in their willingness to withdraw funding from projects failing to reach essential milestones so that funding can be re-allocated to projects with more potential.

We attribute UVA's success in proof-of-concept research to the now nationally well-known Coulter process, involving a very diverse review board, in-person final review sessions, milestone-driven projects, quarterly reporting that is simple yet effective in re-directing projects, the "will to kill" projects or re-direct funds if insurmountable obstacles occur, and excellent networking to the venture capital and private sector. The Coulter program projects have generated a 5-1 overall return on investment (ROI) in new follow-on funding, and 42-1 ROI for the top 10 percent of portfolio projects. The key differentiators of this process as we employ it at UVA versus most prior proof-of-concept funding mechanisms is the in person diligence on the involved people and ideas, dedicated project manager, the diverse composition of the board, the urgency of quarterly reviews and re-direction of projects, and will to re-direct funds as results emerge.

Conclusion

I would like to thank the Committee, specifically Chairman Wolf, for your support of the federal science agencies in these tough budgetary times. While we understand that funding is greatly constrained, I hope that you will choose to support these strategic increases for the federal science agencies that will foster American competitiveness and ensure our future economic vitality.

I thank you for your consideration of these important issues.

Mr. WOLF. Thank you, I appreciate your testimony very much. Thank you. Mr. Fattah.

Mr. FATTAH. I concur with the chairman.

Mr. WOLF. Okay. Again, thanks for coming.

Mr. SKALAK. Thank you.

Mr. WOLF. All right. The last witness is the Consortium of Social Science Associations, Howard Silver. Dr. Silver, welcome.

FRIDAY, MARCH 11, 2011.

CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

WITNESS

HOWARD J. SILVER, PH.D., EXECUTIVE DIRECTOR, CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

Mr. SILVER. Thank you.

Mr. WOLF. It says in the Bible “the last shall be first,” and so you are it.

Mr. SILVER. Yes, I appreciate it.

I am Howard Silver, I am the executive director of the Consortium of Social Science Associations or COSSA. For almost 30 years now we have been promoting attention to and federal funding for the social, behavioral and economic sciences.

Our first executive director you just heard from, Dr. Balstad, who is also the person who hired me 28 years ago when she wanted somebody with a pair of young legs to run around the Hill, and I understand that completely 28 years later.

I am here today to talk about three agencies, the NSF, the National Institute of Justice, and the Bureau of Justice Statistics. I usually also talk about the Census Bureau and the Bureau of Economic Analysis, but this year I would just like to associate COSSA with the previous testimony from Dr. Reamer.

With regard to NSF, we support the President’s fiscal 2012 request as many of my predecessors up here today.

I do want to talk about the role of SBE directorate. As you know, NSF is very important to the social, behavioral and economic sciences, and as I have heard over the years most discussions of scientific discovery leading to innovation—we hear a lot about activities in the physical and natural sciences and engineering, and I would like to argue that two of the most important discoveries in innovation came from research in the SBE sciences.

In the mid 1980’s NSF made a commitment to fund the National Center for Geographic Information Analysis at three universities. The basic research supported has evolved into the multi-billion dollar geographic information systems industries. These systems are now applied by states, counties, and localities for many purposes from planning to disaster response evidenced in New York City during the 9/11 attacks. GIS has also become the backbone of crime activities such as CompuStat that played such an important role in the crime reduction America has experienced in the past two decades.

The second you heard about yesterday, that basic economic research has helped win Nobel prizes for some people as well as cre-

ating the maximizing of the option of the spectrum, and as you know NSF in the 2012 budget is involved in that as well.

I would also like to say that the other day I was at the Press Club and there was a presentation that included people from IBM and Microsoft talking about cyber security which I know you spent some time on yesterday, and the emphasis there was on the technology will only go so far, we really have to pay attention to the human element, and so in the 2012 budget NSF is asking for cyber security funds that include the SBE sciences as well.

And then with regard to the earlier talk about the tsunami and the earthquake, a lot of the research undergirding some of the things I think Congressman Farr talked about on risk communication, disaster response come from the SBE sciences.

With regard to NIJ and BJS we are delighted with the new leadership—research scientists now leading the agency. Because these agencies have been underfunded for so long we ask the subcommittee to fund them at the fiscal '11 request level and also endorse Assistant Attorney General Robinson's request over the past few years for a 3 percent set aside of OJP funds for research and statistics.

I want to thank the chairman for helping us present a briefing in the middle of February on crime and imprisonment, how to reduce both, which included former Attorney General Thornburgh and former police commissioner Bill Bratton, and I brought the journal that helped us do this that has the comments from Thornburgh and Bratton as well as James Q. Wilson.

The NIJ has a new NAS report and John Laub the director is moving quickly to implement its recommendations, former Attorney General Meese, former D.C. police commissioner and now Philadelphia Commissioner Charles Ramsey were on the committee. The results brought a lot of attention to the relationship between research and practice. NIJ has been funding these hard rated executive sessions for years that included a number of police commissioners including D.C.'s Cathy Lanier.

With regard to the Bureau of Justice Statistics, Jim Lynch is moving to implement the 2009 academy report and to upgrade the national crime victimization survey to making it more useful.

And with that I thank you.

But before I go I would like to say one other thing. I was here yesterday and I strongly endorse the subcommittee's field trip to Pat's Steaks in Philadelphia. You may remember from last year my wife is from Philadelphia and with due respect to you two gentlemen, the best thing to come out of Philadelphia besides her is cheesesteaks.

Thank you.

[The information follows:]

Testimony of Howard Silver, Executive Director, Consortium of Social Science Associations (COSSA), to the House Commerce, Justice, Science Subcommittee, House Appropriations Committee. Honorable Frank Wolf, Chairman. March 11, 2011.

Mr. Chairman and Members of the Subcommittee:

My name is Howard Silver and I am the Executive Director of the Consortium of Social Science Associations (COSSA). The Consortium represents over 110 professional associations, scientific societies, universities and research institutes concerned with the promotion of and funding for research in the social, behavioral and economic sciences. COSSA functions as a bridge between the research world and the Washington community. A list of COSSA's membership is attached.

COSSA appreciates the opportunity to comment on the proposed FY 2012 budgets for the National Science Foundation (NSF), for which we recommend at least \$7.767 billion, which is the Administration's request; \$70 million for the National Institute of Justice (NIJ) and \$62.5 million for the Bureau of Justice Statistics (BJS), which are the Administration's FY 2011 requests. COSSA also strongly endorses the Administration's renewed request to set aside three percent of Office of Justice Programs' funds for research and statistics. NIJ and BJS have been underfunded for so long that as two National Academies' reports have noted they need enhanced resources to fulfill their missions. NSF, NIJ, and BJS all impact significantly federal support social and behavioral scientists receive to investigate issues important to the nation's future.

COSSA is well aware that each year the Subcommittee confronts difficult choices among competing agencies under its jurisdiction. Especially in this era of budget reductions, we hope that you can provide sufficient funding for these agencies so that we do not curtail this nation's capacity for scientific research, education, and evidence-based policy making. COSSA appreciates your generosity to these agencies in the past and hopes that this can continue.

NATIONAL SCIENCE FOUNDATION (NSF)

With its distinguished new Director, Subra Suresh, and with Cora Marrett as Deputy Director (her Senate confirmation hopefully occurring in the near future), NSF has an exciting new top leadership team. The FY 2012 NSF budget submission reflects director's Suresh's vision that scientific research has entered a new era of observation, data, and information. Thus, we are disappointed that the House has proposed for NSF's FY 2011 funding, a \$359 million reduction from FY 2010 and an \$857 million reduction from the FY 2011 request. This is especially discouraging in light of the enactment with bipartisan support of the NSF reauthorization in last year's America COMPETES Act. Therefore, we strongly support the Administration's request to recoup some of these losses in FY 2012 by urging an NSF budget of \$7.767 billion, which would be a 13 percent boost over FY 2010 levels.

COSSA also strongly supports the FY 2012 request for \$6.254 billion for the Research and Related Activities Account, an increase of 12.4 percent over FY 2010 funding. We also want to express our appreciation to the Subcommittee for its support of ALL the disciplines that NSF funds.

In a new era of observation, data and information, the Social, Behavioral, and Economic Sciences (SBE) are superbly situated to contribute to the nation's scientific agenda and by extension its competitiveness and innovation. NSF remains extremely important for federal support for basic research in the SBE sciences, contributing 57 percent of that support. For some fields in these sciences, NSF is the only source of federal support for basic research and infrastructure development. NSF understands that important role and has requested a significant increase for the SBE directorate in FY 2012 that would push its funding above \$300 million for the first time. As noted last year, COSSA is delighted with Dr. Myron Gutmann as SBE's AD, who in addition to being a superb researcher, is our former president.

In most discussions of scientific discovery leading to innovation we hear a lot about activities in the physical and natural sciences and engineering. Two of the most important however, come from research in the SBE sciences. In the mid-1980s NSF made a commitment to fund the National Center for Geographic Information and Analysis (NCGIA) at three universities, the University of California, Santa Barbara, the University of Maine, and the State University of New York at Buffalo. The research supported there evolved into the multi-billion Geographic Information Systems (GIS) industry. These systems are now applied by states, counties, and localities for many purposes from planning to disaster response, evidenced in New York City during the September 11, 2001 attacks. GIS also became the backbone of crime mapping activities such as CompuStat that have played such an important role in the crime reduction America has experienced in the past two decades. These GIS are also used by the private sector to improve delivery systems and store location planning. The NCGIA continues to this day, now as an independent body, continuing to explore ways of making GIS better and helping to educate new users.

Basic economic research that won Nobel Prizes for Leonid Hurwicz and Vernon Smith as well as NSF-supported research conducted on maximizing auctions by economists Paul Milgrom, Robert Wilson, Charles Plott and others, has earned the federal government \$80 billion since spectrum auctions began in 1994. One of the proposals in the NSF's FY 2012 budget is to Enhance Access to the Radio Spectrum (EARS), once again using the knowledge from economics research to maximize returns. In addition, as with any expanded new technology, there are always social implications and unintended consequences that must be investigated.

Within NSF's initiatives for FY 2012 the SBE sciences plan to play significant roles. The nation's concern over Cybersecurity involves SBE research on the role of economic incentives. It will also enhance its role in the Science, Engineering, and Education for Sustainability (SEES) program, which involves research on understanding human behavior and decision making about energy use, as well as continued work on resilience in the face of natural disasters, particularly in coastal communities.

Social scientists have conducted significant research on social networks, whether investigating terrorist activities or the spread of sexually transmitted diseases. The FY 2012 proposed SBE budget will allow for research on cybernetworks, again useful for anti-terrorist activities, as well as examining the impact of Facebook and other social media for political activities such as the demands for democracy we are seeing in the Middle East.

Other highlights of the FY 2012 proposal include a new initiative that will support research on understanding population change in the 21st Century. The small investment would examine

migration patterns and aging and their impact on job creation. Continued funding would occur for the Science of Science and Innovation Policy (SciSIP) and the enhancement of the Star Metrics system that will allow for future measurements of science's impact on economic outcomes, on scientific outcomes, and on social outcomes, such as public health.

The proposed budget will also enhance access to the three Gold Standard SBE Surveys – the Panel Study on Income Dynamics, the General Social Survey and the American National Election Studies. Each of these has painted a remarkable longitudinal portrait of Americans' economic, social, and political attitudes and behavior, so important for policy making at all levels of government.

Finally, SBE has begun an exercise in which it asked for input from the scientific community with regard to innovative research topics for the next ten years. SBE received over 250 responses. Former Nobel Prize Economists and Council of Economic Advisers members proposed broad research agendas in economics. A former American Political Science Association President proposed "a major funding effort across the social sciences to research and improve global indicators of governance and democracy," which has immediate resonance. The head of a private research lab recommended an agenda on real-world speech recognition. While a military sociologist called for an examination of "the long-term consequences of modern military service." Other proposals want to further examine links between biology and behavior, develop a new U.S. household survey, investigate the problems with non-responses to all surveys, and a renewed call for a "Science of the Mind" initiative. All the proposals are under discussion by SBE, its Advisory Board, and the broader social/behavioral science community.

COSSA is delighted that the former Science, Resources, Statistics division is now the National Center for Science and Engineering Statistics. A significant part of the FY 2012 request is the Center's proposed pilot project to test the feasibility of tagging and extracting agencies' administrative records to measure research and development activity in order to improve the quality and timeliness of the data.

COSSA strongly supports the FY 2012 budget request for the Education and Human Resources (EHR) of \$911.2 million. We particularly endorse the initiative to fund evaluation, synthesis, and comparison studies designed to increase knowledge of effective practices in STEM learning and education, and program evaluation studies. In line with COSSA's commitment to broadening participation in science through its leadership of the Collaborative for Enhancing Diversity in Science (CEDS), we strongly support the 15.2 percent increase over FY 2010 levels for the programs of EHR's Division of Human Resource Development (HRD).

NATIONAL INSTITUTE OF JUSTICE AND BUREAU OF JUSTICE STATISTICS

On July 2, 2010 the National Academies' released its report, *Strengthening the National Institute of Justice* (NIJ). The report reviews the agency's structure and operations and suggests opportunities for new directions. The report also asks Congress to provide NIJ with the resources it has sorely lacked for many years to revitalize itself. Charles Wellford, Department of Criminology at the University of Maryland, chaired the committee that prepared the report. Committee members included former Attorney General Ed Meese and current Philadelphia and former DC Police Superintendent Charles Ramsey, as well as many researchers.

The report argues that "a federal research institute such as NIJ is vital to the nation's continuing efforts to control crime and administer justice," because no other governmental or private organization can provide similar activities and service. The report recognizes that NIJ "has accomplished a great deal" in its forty-year history including developing a body of knowledge on such important topics as hot spot policing, violence against women, the role of firearms and drugs in crime, drug courts, and forensic DNA analysis". NIJ, the report continues, has also built a crime and justice research infrastructure and widely disseminated the results of the research it supported to help guide practice and policy.

The Committee recommended the establishment of an Advisory Board to help NIJ develop a long-term research agenda. On January 28, 2011 an Office of Justice Programs Scientific Advisory Board (SAB), chaired by Carnegie Mellon Criminologist and former COSSA President Al Blumstein, held its first meeting. At the meeting, new NIJ Director John Laub, distinguished criminologist and co-winner of the 2011 Stockholm Prize in Criminology, outlined his vision for the agency.

Within NIJ, Laub explained to the Board that he sees three distinct scientific endeavors: social science research, technology research, and forensics research. For the new director, integrating these activities through interdisciplinary research is a major goal.

In discussing an agenda, Laub indicated that he wanted NIJ to: 1) Continue its traditional examination of crime trends; 2) Take a special look at mentally ill offenders; 3) Investigate the issues around procedural justice; 4) Examine the victim-offender overlap; 5) Try to understand offender thinking; 6) Evaluate the technology NIJ research has developed; and 7) Disseminate the results of NIJ research through Translational Criminology; and 8) Ascertain how practitioners use evidence from research in their decision making. Laub also committed himself to improving NIJ's peer review process calling it "central to good science." He suggested that standing peer review panels, similar to other science agencies, would help NIJ.

The practitioner community has been working with the NIJ research community more and more. Sophisticated police chiefs all around the country use criminal justice research to reform how they combat crime. At a recent briefing, co-sponsored by COSSA and the American Society of Criminology, former Attorney General Richard Thornburgh and former LA, NYC, and Boston Police Commissioner Bill Bratton responded positively to a paper by researchers Daniel Nagin of Carnegie Mellon and Steven Durlauf of the University of Wisconsin-Madison describing strategies to reduce crime and imprisonment by concentrating on better policing strategies that would focus on prevention. The NIJ-supported Harvard Executive Sessions on Policing and Public Safety have brought together police chiefs like DC's Cathy Lanier with researchers to discuss evidence-based policing practices that have led to crime reduction. The work of George Mason's Center for Evidence-Based Crime Policy, led by 2010 Stockholm Prize winner and COSSA Board member David Weisburd, has also led the way in practitioner-researcher cooperation.

The BJS has its own National Academies' report, *Ensuring the Quality, Credibility, and Relevance of U.S. Justice Statistics*, issued in 2009. That report repeatedly emphasized the fact that BJS, as the agency responsible for the nation's criminal justice statistics, is grossly underfunded, and recommended increasing its scope and support. COSSA is grateful for the

Subcommittee's generosity in helping BJS implement the part of the report calling for the revitalization of the National Crime Victimization Survey (NCVS).

BJS's new director James Lynch, another distinguished criminologist, also discussed his initiatives at the SAB. They include:

1) Redesign and Rebuild the National Crime Victimization Survey (NCVS) by enhancing the sample, improving quality control, and developing sub-national data. Within the NCVS, there is also a need to improve rape and sexual assault data and to determine how to measure juvenile crime victimization; 2) Explore operational data for statistical purposes so that BJS can develop better and more accurate statistical systems for crime; 3) Institute information exchanges with police departments, especially since many departments are collecting their own crime data; 4) Improve sentencing and pre-trial data; 5) Enhance data on corrections: How do we better measure the flow into and out of our prison systems? and 6) Expand data on law enforcement management.

The Bureau's data are used daily by policymakers at all levels of government to make informed decisions. BJS' data collection series includes correctional populations and facilities; courts and sentencing; prosecution; law enforcement; sex offender registries; and criminal history records. The agency is collecting and analyzing recidivism data and making the results available to the states for their own analyses, which will provide valuable information for decision makers at a time when reducing incarceration and making evidence-based decisions are priorities for every state. BJS is also working to improve the precision of data across all series, collect better statistics for Indian country, and respond to recommendations to study the operations of police agencies.

The state Statistical Analysis Centers (SACs), receive modest support from BJS through the State Justice Statistics program, and have provided vital service to BJS over the years. SACs constitute the majority of data collection providers for the BJS Arrest-Related Deaths data series. The SACs also conduct research—including multistate efforts—on topics such as drug use, sex offenders, and parole revocations. In FY 2010, the SJS program provided funds to 46 SACs for approximately \$3 million. It is critical that this minimal level of funding be sustained.

Providing enhanced funding for NSF, NIJ, and BJS are good investments for the nation's future. Scientific discoveries leading to innovation, educated citizens in an increasingly science and technology focused world, and providing safe communities, should be part of any national priority list. Be as generous as you can to these vital programs!

Thank you for the opportunity to present our views.

CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS

GOVERNING MEMBERS

American Association for Public Opinion Research	Association of American Geographers
American Economic Association	Association of American Law Schools
American Educational Research Association	Law and Society Association
American Historical Association	Linguistic Society of America
American Political Science Association	Midwest Political Science Association
American Psychological Association	National Communication Association
American Society of Criminology	Population Association of America
American Sociological Association	Rural Sociological Society
American Statistical Association	Society for Research in Child Development

MEMBERSHIP ORGANIZATIONS

Academy of Criminal Justice Sciences	National Association of Social Workers
American Finance Association	North American Regional Science Council
American Psychosomatic Society	North Central Sociological Association
Association for Asian Studies	Social Science History Association
Association for Public Policy Analysis and Management	Society for Behavioral Medicine
Association of Academic Survey Research Organizations	Society for Research on Adolescence
Association of Research Libraries	Society for Social Work and Research
Council on Social Work Education	Society for the Psychological Study of Social Issues
Eastern Sociological Society	Southern Political Science Association
Economic History Association	Southern Sociological Society
Justice Research and Statistics Association	Southwestern Social Science Association
Midwest Sociological Society	

COLLEGES AND UNIVERSITIES

Arizona State University	Maxwell School of Citizenship and Public Affairs, Syracuse
Boston University	University of Michigan
Brown University	Michigan State University
University of California, Berkeley	University of Minnesota
University of California, Irvine	University of Missouri, St. Louis
University of California, Los Angeles	University of Nebraska, Lincoln
University of California, San Diego	New York University
University of California, Santa Barbara	University of North Carolina, Chapel Hill
Carnegie-Mellon University	Northwestern University
University of Chicago	Ohio State University
Clark University	University of Oklahoma
Columbia University	University of Pennsylvania
University of Connecticut	Pennsylvania State University
Cornell University	Princeton University
University of Delaware	Rutgers, The State University of New Jersey
Duke University	University of South Carolina
Georgetown University	Stanford University
George Mason University	State University of New York, Stony Brook
George Washington University	University of Texas, Austin
Harvard University	Texas A & M University
Howard University	Tulane University
University of Illinois	Vanderbilt University
Indiana University	University of Virginia
University of Iowa	University of Washington
Johns Hopkins University	Washington University in St. Louis
John Jay College of Criminal Justice, CUNY	University of Wisconsin, Madison
Kansas State University	University of Wisconsin, Milwaukee
University of Maryland	Yale University
Massachusetts Institute of Technology	

CENTERS AND INSTITUTES

American Academy of Political and Social Sciences	Institute for Women's Policy Research
American Council of Learned Societies	National Bureau of Economic Research
American Institutes for Research	National Opinion Research Center
Brookings Institution	Population Reference Bureau
Center for Advanced Study in the Behavioral Sciences	RTI International
Cornell Institute for Social and Economic Research	Social Science Research Council
Institute for Social Research, University of Michigan	Vera Institute of Justice

Mr. WOLF. Thank you very much for your testimony, we appreciate it.

Mr. Fattah.

Mr. FATTAH. I want to thank the chairman for conducting this hearing. And again, just so everyone knows, these statements, the complete statements are in the record. It is very important that we have a record so that when the subcommittee takes action, the record is clear. But the chairman has been here throughout and I have learned a lot from our witnesses.

I agree with the associate attorney general's request for the evidence-based approach in the three percent set aside. I think that is critically important.

I thank the chairman and look forward to continuing our work as we go towards getting our bill together. Thank you.

Mr. WOLF. Great, thank you. Thank you very much, thank you all the witnesses.

Testimony of the Honorable Elton Gallegly
Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies
March 11, 2011

Chairman Wolf, Ranking Member Fattah and Members of the Subcommittee. Thank you for allowing me to testify in support of grants that are specifically targeted to the prosecution of DNA cold cases.

DNA technology is unquestionably the most significant scientific advance in crime fighting since the advent of basic fingerprinting technology at the turn of the 20th century. Congress has recognized the value of DNA evidence by authorizing and appropriating \$161 million in Fiscal Year 2010 in federal funding for expansion of DNA databases and clearing the backlog of untested DNA samples.

This investment in DNA testing has aided in solving many cold cases over the last few years. New advances in DNA technology have allowed analysis of limited, aged, or degraded biological evidence. As a result, testing of crime scene samples that were once unsuitable for testing may now yield DNA profiles that can be used to prosecute criminals.

In my home state of California, a law approved by the voters, Proposition 69, requires law enforcement officials to take DNA samples from all adults arrested for felonies. In my home state of California, the state Department of Justice operates the largest working DNA data bank in the country, processing more than 200,000 DNA samples from convicted felons and matching them to old, unsolved cases that now averages one case a day.

California's cold "hit" program has allowed local law enforcement agencies to clear their DNA evidence backlog of over 13,000 unsolved cases and propelled the number of hits from one per year to an average of one per day. A "hit" occurs when DNA evidence from an unsolved crime sample matches a DNA profile from evidence in another case or an offender's DNA profile in the CAL-DNA Convicted Felons database.

Two examples of high profile murder cases in which law enforcement officials from my Congressional district highlight the importance of asking DNA evidence to solve cold cases :

- Beatrice Bellis, then aged 87 and completely deaf and functionally mute, was sexually assaulted and murdered in her bed by a knife wielding assailant on June 27, 1993. There were no witnesses. Ten years later, DNA tests on pubic hair recovered from the crime scene were matched to Ricardo Villa.
- Crystal Hamilton was kidnapped, raped and murdered on April 21, 2001. Semen was recovered from Ms. Hamilton's body—even though she had been dumped into the ocean following her murder. In March 2002, in the course of

regular work done by the California DNA data bank, a DNA match was made with convicted rapists Douglas Dworak. Dworak was sentenced to death in June 2005.

As these cases demonstrate, matching a DNA sample to a crime scene alone is not enough to ensure justice for the countless crime victims across the nation. Even with a DNA match, the passage of time makes these cases extremely difficult to investigate and prosecute as witnesses move and die or their memories fade. Prosecutors must literally reconstruct the case based upon the new DNA evidence. All of this takes hundreds and hundreds of hours and significant prosecutorial resources.

In Fiscal Year 2010, Congress appropriated \$570,000 in funding for the Ventura County District Attorney's Office for the purpose of investigating and prosecuting cold cases involving DNA

In an attempt to provide greater resources for DNA code case prosecutions, I introduced H.R. 1602 in 2005 to authorize prosecution grants for DNA cold cases. This measure was later included in the Adam Walsh Child Protection and Safety Act (P.L. 109-248). As you know, this bill was signed into law on July 27, 2006. With the enactment of this bill, Congress expressly recognized that federal assistance for prosecution of cases cleared through DNA was vitally important.

It is my belief that this important grant program, which has been so successful in Ventura County, should be expanded to other jurisdictions. Therefore, I respectfully request that the Subcommittee continue its support for the use of DNA evidence to resolve cold cases by appropriating \$5,000,000 specifically for grants to prosecutors to investigate and try cases solved by DNA testing. Thank you for your time and consideration of this important request.

Testimony of Congressman Walter B. Jones (NC-3)
House Appropriations Subcommittee on Commerce, Justice, Science
Member Hearing
March 11, 2011

Chairman, I want to thank you and the Ranking Member for allowing members to weigh in on Fiscal Year 2012 funding matters under the Subcommittee's jurisdiction. I come to you today on behalf of fishermen in my Eastern North Carolina congressional district and across the country who strongly oppose the National Oceanic and Atmospheric Administration's (NOAA) Fiscal Year 2012 budget proposal to add \$36.6 million to expand implementation of catch share programs into fisheries across the nation. **I urge you to include language in the FY12 bill to prohibit the federal government from funding approval of new catch shares programs for fisheries in the Gulf of Mexico, South Atlantic, Mid Atlantic and New England.**

The use of catch shares as a fisheries management tool is very controversial. Catch share programs give shares of the total allowable catch in a given fishery to particular fishermen or groups. Commercial and recreational fishermen in North Carolina and throughout America vehemently oppose catch share programs as nothing more than thinly veiled attempts to get fishermen to leave the business and to destroy fishing communities. These sentiments were validated by a 2009 assessment of catch share programs and the resulting industry consolidation performed by Dr. Julia Olson of the National Oceanic and Atmospheric Administration's (NOAA) Northeast Fisheries Science Center. Dr. Olson's report found:

"The primary social impacts that have been documented in empirical cases involving consolidation range from employment loss, decreased income, decreased quality of life, changing relations of production, structural disadvantages to smaller vessels and firms, dependency and debt patronage, concentration of capital and market power, inequitable gains, regulatory stickiness, reduced stewardship, decreased community stability, loss of cultural values, and so on."

Given these problems, the last thing the federal government should be doing in these economic times is spending millions of taxpayer dollars to expand catch share programs that will put even more Americans out of work. To the extent that solid science demonstrates that catch reductions in any given fishery are necessary, there are far better options than catch shares for achieving those reductions. Expanding catch shares is the wrong policy for the United States, for North Carolina and for other states in the South Atlantic, Mid Atlantic, the Gulf and New England regions in particular.

The depth of opposition to catch shares was verified on February 19th when, during consideration of the long-term continuing resolution to fund the government through FY 2011 (H.R. 1), the House passed my Amendment #548 on a bipartisan vote of 259 to 159. That amendment would prohibit the federal government from funding approval of new catch shares programs for fisheries in the Gulf of Mexico, South Atlantic, Mid Atlantic and New England. The amendment was supported by a broad coalition of the largest commercial and recreational fishing groups, boat builders and consumer groups including:

- Recreational Fishing Alliance;
- American Sportfishing Association;
- Coastal Conservation Association;
- National Marine Manufacturers Association;
- Saving Seafood;
- Southern Shrimp Alliance;
- Commercial Fishermen of America;
- Southeast Fisheries Association;
- North Carolina Fisheries Association;
- Garden State Seafood Association;
- Florida Keys Fishermen's Association;
- Long Island (NY) Fishermen's Association;
- Monkfish Defense Fund; and
- Food & Water Watch.

Given the broad support for the Jones Amendment, I respectfully urge the Subcommittee to include the following, identical language in its FY12 bill:

"None of the funds made available by this Act may be used to develop or approve a new limited access privilege program (as that term is used in section 303A the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1853a) for any fishery under the jurisdiction of the South Atlantic, Mid-Atlantic, New England, or Gulf of Mexico Fishery Management Council."

I would also urge the Subcommittee to consider redirecting the savings from this prohibition to stock assessments and cooperative research on fisheries in these regions.

Thank you again for the opportunity to provide testimony. I would be happy to answer any questions you might have regarding this request.

GREGORIO KILI CAMACHO SABLÁN
NORTHERN MARIANA ISLANDS

COMMITTEE ON AGRICULTURE
SUBCOMMITTEE ON CONSERVATION, FORESTRY, AND FISH AND WILDLIFE
SUBCOMMITTEE ON NUTRITION AND BIOETHICS

COMMITTEE ON NATURAL RESOURCES
SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES
SUBCOMMITTEE ON FORESTRY, WILDLIFE, AND FISHERIES
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March 10, 2011

The Honorable Frank Wolf,
Chairman
House Committee on Appropriations
Subcommittee on Commerce,
Justice, Science, and Related Agencies
H-310, The Capitol
Washington, DC 20515

The Honorable Chaka Fattah, Ranking
Member
House Committee on Appropriations
Subcommittee on Commerce,
Justice, Science, and Related Agencies
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairman Wolf and Ranking Member Fattah,

Thank you for this opportunity to comment on the President's Fiscal Year 2012 Budget proposal for the Department of Justice, Juvenile Justice Programs. I am particularly concerned about the recommendation to eliminate \$75,000,000 for the Part B Juvenile Justice Grants and \$55,000,000 for the Juvenile Accountability Block Grant and to replace these two formula grant programs with a new, competitive, Race to the Top-style, Juvenile Justice Improvements Grant in the amount of \$120,000,000.

We all know that the Federal Government has to cut spending. We need to weed out wasteful programs. We have to get more efficient and effective with our own spending. But the money that supports the Part B Juvenile Justice Grants and Juvenile Accountability Block Grant is not wasted. These funds are targeted to the goals of preventing juvenile delinquency, rehabilitating juvenile offenders, and improving accountability measures and play a vital role in the administration of justice in my district, the Northern Mariana Islands.

The formula grants already come with significant requirements that assure effective use. The Part B Juvenile Justice Grants, for instance, require adherence to four core mandates set by Congress and Department of Justice approval of the plans for funds use. There are also important guidelines to assure that funding reaches all areas of each state or territory and that at least 75% of funds are used for such key services as counseling, community-based alternatives to incarceration, and youth development.

Replacing formula grants with a new competitive program based on achievement of certain performance standards may actually work to reduce progress towards improving the justice system. The resources and administrative structure in small jurisdictions, such as the Northern Mariana Islands, face real limits of capacity that make it difficult to reach certain national norms and are thus at a competitive disadvantage. As an example, several years ago the only juvenile detention facility on the island of Saipan was found not to be meeting the standards of the Civil Rights of Institutionalized Persons Act because the facility did not always have hot

March 10, 2011
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science
and Related Agencies
Page 2

water for washing kitchen utensils. Yet, Saipan is the only major U.S. community that does not have 24-hour water service. Reducing the award of justice assistance grant funding because the facility did not meet this standard would do nothing to improve the availability of water to detainees or to the community at large.

Furthermore, should funds no longer be available to the Northern Mariana Islands, or other jurisdictions that cannot compete successfully under the proposed new program, reforms already instituted will be put at risk. In 2009 the Northern Mariana Islands enacted the Juvenile Justice Act of 2008 that creates a comprehensive juvenile justice system to meet specific goals of accountability, prevention, and rehabilitation. But the Northern Mariana Islands is counting on continued federal assistance to implement its plan. Without the continued federal assistance the juvenile detention unit, probation office, juvenile public defender division, juvenile pre-trial program, juvenile police unit, and juvenile justice task force are likely to be unable to achieve the goals already established.

I would also note that there is a lack of clarity about the Department of Justice proposal that only "states that are in compliance with the core requirements of the JJDP Act will be eligible to compete for funding." Under the Part B Juvenile Justice Grants there are four core mandates and one under the Juvenile Accountability Block Grant. It is not clear whether a state or territory must be in full compliance with all core requirements or whether some level of substantial compliance would allow the jurisdiction to compete for funds. Nor is it clear whether jurisdictions that are not in full compliance will be provided an opportunity to address deficiencies before losing the funds needed to correct problems.

Lastly, even jurisdictions that comply fully with all requirements and restrictions will have no guarantee of funding under the President's proposal. The expenditure of effort needed to compete — which can require trade-offs and diversion of resources from other important public services — could easily end up resulting in a net loss, especially to small jurisdictions such as the Northern Mariana Islands, and ultimately a reduction of services that the new proposal intends to improve.

I urge the Committee to reject this proposal and maintain the existing formula-based grant programs for Juvenile Justice.

Sincerely,



GREGORIO KILILI CAMACHO SABLAN
Member of Congress

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March 11, 2011

The Honorable Hal Rogers
Chairman
House Appropriations Committee
H-307, The Capitol
Washington, DC 20515

The Honorable Norm Dicks
Ranking Member
House Appropriations Committee
1016 Longworth HOB
Washington, DC 20515

Dear Chairman Rogers and Ranking Member Dicks,

In light of today's tragic earthquake and tsunami in Japan, it is vital that the Congress focus on adequately funding agencies that provide natural hazard mitigation and response programs.

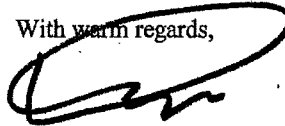
In the 111th Congress, the House of Representatives passed the Natural Hazards Risk Reduction Act to reauthorize federal natural hazards reduction programs. This legislation included provisions to develop cost-effective ways of retrofitting existing structures, as well as research provisions aimed at identifying the best methods of encouraging people to plan for natural disasters and adopt mitigation measures.

I have strong concerns about proposed cuts to the agencies that comprise our nation's natural hazards preparedness and response mechanisms. Defunding these programs put Americans' lives at risk. If NIST is unable to set structural standards, buildings are more likely to collapse in a natural disaster; if FEMA is unable to create response plans, there will be no guidance for coordinating evacuations or directing first responders; if NOAA and USGS are unable to deploy and maintain monitoring and mapping devices, we will not have the capacity to predict tsunamis and earthquakes; and if federal and state agencies are unable to educate Americans about how to recognize and respond to natural hazards, we obstruct our citizens from making informed decisions about their safety in times of crisis. Funding directed toward mitigating the impact of natural disasters saves American lives.

In December 2007, the Pacific Northwest experienced a once-in-a-generation storm that wiped out power and roads throughout the region. The storm's impact would have been far more disastrous had the National Weather Service not been adequately funded and able to predict accurately the timing and intensity of the most hazardous winds.

Our constituents, often unknowingly, rely on federal programs when natural disasters occur. Defunding these services comes at much too high a cost.

With warm regards,

A handwritten signature in black ink, appearing to read 'David Wu', enclosed within a large, loopy oval shape.

David Wu
Member of Congress

Cc: John Holdren, Director, OSTP
Patrick Gallagher, Under Secretary of Commerce for Standards and Technology
Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere
Marcia McNutt, Director, USGS
W. Craig Fugate, Administrator, FEMA



Learn, Share, Connect.

<http://www.baldrigepe.org/alliance/>

March 4, 2011

CONTACT: Brian Lassiter, Vice Chair
612-868-3519
brian.lassiter@councilforquality.org

Alliance for Performance Excellence Supports Continued Funding of Baldrige Performance Excellence Program

The Alliance for Performance Excellence, a 501(c)3 nonprofit that represents 33 Baldrige-based state quality award programs nationwide, strongly supports the mission and continuity of the Baldrige Performance Excellence Program (BPEP) program.

Collectively, the Alliance trains over 2000 state-level Baldrige examiners each year and works with hundreds of organizations on their improvement efforts using the Baldrige framework. As such, we have seen the direct impact of the Baldrige Criteria on helping businesses improve product/service quality, productivity, and competitiveness; on helping schools improve academic achievement; on helping healthcare organizations improve clinical outcomes at lower costs; and on helping not-for-profit and public sector agencies improve social outcomes. We have seen how Baldrige helps organizations improve performance, create/sustain jobs, improve competitiveness, and enhance communities across the U.S.

On behalf of our 33 state/local Baldrige-based award programs, the Alliance fully supports continued full funding of the Baldrige Performance Excellence Program, a true national asset.

ABOUT THE ALLIANCE FOR PERFORMANCE EXCELLENCE

The Alliance for Performance Excellence is dedicated to enhancing the growth and sustainability of Baldrige focused programs by serving our membership. Our key stakeholders include Baldrige focused programs, organizations wanting to improve and key partners including the Baldrige Foundation and the Baldrige Performance Excellence Program. For more information, visit <http://www.baldrigepe.org/alliance/>.

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WRITTEN STATEMENT OF

**Stephen N. Zack, President
AMERICAN BAR ASSOCIATION**

**to the
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED
AGENCIES
of the
UNITED STATES HOUSE OF REPRESENTATIVES**

on the subject of

The Legal Services Corporation

March 11, 2011

I am Stephen Zack, President of the American Bar Association and a partner in the law firm of Boies, Schiller & Flexner LLP in Miami, Florida. I submit this testimony on behalf of the American Bar Association to voice the Association's views with respect to the essential role of the Legal Services Corporation (LSC) in assuring equal justice in America. The ABA urges that LSC receive a FY2012 appropriation of at least \$450 million, the amount requested in the Administration's budget proposal.

Appropriations for the Legal Services Corporation is not just about funding another federal agency. This is about providing legal services for the 57 million Americans at or below the poverty line, including 19 million children, who are eligible for assistance. The most important issues on the minds of every American are jobs and the economic climate. In the midst of economic uncertainty and turmoil, all Americans should have somewhere to turn for assistance on their most basic civil legal needs. The need for increased funding for the Legal Services Corporation is paramount. Programs like LSC that keep working class and poor people from falling into a legal and financial tailspin are essential. Every cent spent helping families deal with crises such as eviction, child support and custody, or a domestic violence restraining order ultimately saves taxpayer money. We urge the House Committee on Appropriations and the Subcommittee on Commerce, Justice, Science and Related Agencies to fund the Legal Services Corporation at \$450 million, the level requested by the Administration.

**The Poor In America Have Very Limited Access to the Justice System, Yet the
Legal Needs of the Poor are Expanding During These Difficult Economic Times.**

The tough economy has made demand for the local legal aid funded by LSC grants skyrocket. At this time when LSC cannot respond to existing demand for services, the number of people in poverty and needing LSC help continues to grow. The Census Bureau reports that the poverty rate continues to rise and now is at levels not seen since the early 1960s. Foreclosure and

homelessness rates continue to rise, resulting in increased numbers of people seeking legal help with housing issues. Layoffs are still occurring, and the unemployment rate remains high, resulting in more Americans than ever qualifying for and seeking legal assistance.

Rich or poor, all Americans deserve to have access to justice. The Preamble to the U.S. Constitution states that the first enumerated function of government is to “establish justice.” President Washington wrote that “The due administration of justice is the firmest pillar of good government.” However, many different indicators show that poor and working class Americans are not getting the legal aid they need.

Surveys conducted by the Legal Services Corporation confirm the situation is already dire. Due to limited resources, LSC-funded programs must turn away one-half the eligible people who seek assistance in resolving legal problems affecting their health, housing, employment, or other critical areas of life. The actual level of need is even larger, as many do not seek legal aid because they know it is unlikely that they can secure assistance. The need for adequate funding for LSC is more critical than ever.

Now More Than Ever, the Legal Services Corporation is the Foundation of a System That Helps Americans in Crisis.

LSC-funded programs provide services for low-income persons in every congressional district in the country, assisting constituents with many different basic legal needs. LSC disburses 95% of its annual federal appropriation to 136 legal aid programs, with over 900 total offices, nationwide. People who are unable to resolve basic legal problems are more likely to require assistance from public social services programs; LSC programs prevent a long-term reliance on other government programs.

LSC grantees provide a wide range of civil legal assistance to their clients. Overall, those benefiting from legal services are the most vulnerable Americans, including the working poor, veterans, homeowners and renters facing foreclosure or evictions, families with children, farmers, people with disabilities, victims of domestic violence, the elderly, and victims of natural disasters.

Many times, the need for help is sudden and urgent. Housing and foreclosure cases account for over 25% of legal aid cases. The many different issues addressed include resolution of landlord-tenant disputes, prevention of foreclosure, renegotiation of home loans and mortgages, and assistance to renters with eviction notices whose landlords are being foreclosed on, among others.

LSC grantees also assist returning military veterans and their families. Veterans who served in combat zones often face serious legal problems upon returning to civilian life. Issues such as child custody, employment, and homelessness commonly arise. LSC-funded programs help those who serve our country with many different types of legal matters once they return. More than a third of all cases closed by local LSC grantees deal with some type of family law matter. LSC grantees assist victims of domestic violence with protective and restraining orders,

help parents obtain and retain custody of their children, assist family members in acquiring guardianship for children without parents, and provide other family law legal counseling.

Another area in which LSC programs provide assistance is disaster relief. When natural or national disasters occur, LSC grantees assist with many different issues, including identity verification, housing matters, and family law issues. September 11th families, flood victims, and hurricane evacuees are all examples of those who have received assistance from LSC-funded programs.

While LSC grantees can assist Americans struggling with these and other civil legal issues, the need for legal services far outstrips funding for LSC; particularly in this economic climate, more Americans than ever qualify for legal assistance. One in two eligible clients seeking help from a federally funded legal aid program is turned away due to lack of resources. Further, other sources of funding for legal aid programs are also experiencing difficulty in providing support due to current economic conditions; legal aid revenue from Interest on Lawyers' Trust Accounts has decreased due to low interest rates, and states and private contributors are also struggling with budget issues in the current recession. Federal funding through LSC provides the foundation and catalyst for the development of other funding and must be maintained.

LSC funding also provides the framework for pro bono efforts, and reducing funding for LSC could not only harm the LSC programs themselves, but also diminish pro bono efforts due to lack of resources. In fact, LSC constitutes the foundation and essential catalyst for the national pro bono network. LSC grantees devote 12.5% of their funding to private attorney involvement, with most of that funding going to support pro bono programs. Private bar pro bono efforts are important, but they cannot replace government support for civil legal services. For pro bono to thrive and increase, the financial resources that the LSC provides to support the infrastructure for pro bono delivery systems must not be reduced. Any reduction in funding for the LSC will impede efforts to expand pro bono contributions, and therefore the Administration's budget request of \$450 million for Fiscal Year 2012 should be granted.

The ABA is a Long-Time Leader in Access to Justice Issues, and the Organized Bar and the American Public Support a Vibrant Legal Aid System.

The American Bar Association has supported legal services for the poor since the establishment of the Standing Committee on Legal Aid and Indigent Defendants in 1920. Supreme Court Justice Lewis F. Powell, while serving as ABA President in 1964, called for an assurance of access to justice for poor and working class Americans, and the ABA worked closely with many others meet the need through the creation of the Legal Services Corporation ten years later. We have consistently advocated for funding for this vital institution. Bar Presidents of all 50 States, plus the District of Columbia, the US Virgin Islands and Puerto Rico, have joined to urge Congress to increase funding for LSC. The four major bars of color (the National Bar Association, the Hispanic National Bar Association, the National Asian Pacific American Bar Association and the National Native American Bar Association) have also added their voices.

The American Bar Association, the world's largest, voluntary professional organization with nearly 400,000 members, is the national representative of the legal profession, serving the public

and the profession by promoting justice, professional excellence, and respect for the law. The ABA is nonpartisan; it includes Republicans and Democrats, plaintiff and defense lawyers, corporate general counsel and private lawyers, prosecutors and defenders. The ABA does not endorse candidates or make political contributions. We appreciate the opportunity to address funding for the LSC, encourage the Committee to support the Administration's request of \$450 million, and offer our ongoing assistance to continuing to improve the delivery of legal services to low-income individuals.

**AGI Fiscal Year 2012 Testimony to the House Commerce, Justice, Science,
and Related Agencies Appropriations Subcommittee**

Testimony Submitted by
Wilson Bonner, Policy Associate and Linda Rowan, Director, Government Affairs
American Geological Institute
in support of Fiscal Year 2012 Appropriations for the
National Science Foundation, National Oceanic and Atmospheric Administration,
National Institute of Standards and Technology and the National Aeronautics and Space
Administration

United States House of Representatives
Subcommittee on Commerce, Justice and Science and Related Agencies Appropriations
March 11, 2011

To the Chairman and Members of the Subcommittee:

The American Geological Institute (AGI) supports Earth science research sustained by the National Science Foundation (NSF), the National Oceanic and Atmospheric Administration (NOAA), the National Institute of Standards and Technology (NIST) and the National Aeronautics and Space Administration (NASA). Frontier research on the Earth, energy, and the environment has fueled economic growth, mitigated losses and sustained our quality of life. The Subcommittee's leadership in supporting geoscience-based research is even more critical as our nation competes with rapidly developing countries, such as China and India, for energy, mineral, air and water resources. Our nation needs skilled geoscientists to help explore, assess and develop Earth's resources in a strategic, sustainable and environmentally-sound manner and to help understand, evaluate and reduce our risks to hazards. **AGI supports a total budget of \$7.767 billion for NSF; \$1.101 billion for NIST, \$5.498 billion for NOAA, and \$1.797 billion for Earth Science at NASA.**

AGI is a nonprofit federation of 49 geoscientific and professional societies representing more than 120,000 geologists, geophysicists, and other Earth scientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice for shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources and interaction with the environment.

NSF: AGI supports an overall budget of \$7.767 billion for NSF. AGI greatly appreciates Congress's support for science and technology in recent appropriations and through the America COMPETES Reauthorization Act of 2010. The forward-looking investments in NSF are fiscally responsible and will pay important dividends in future development that drives economic growth, especially in critical areas of sustainable and economic natural resources and reduced risks from natural hazards. Support for science will save jobs, create new jobs, support students and provide training for a twenty first century workforce.

NSF Geosciences Directorate: The Geosciences Directorate (GEO) is the principal source of federal support for academic Earth scientists and their students who are seeking to understand the processes that sustain and transform life on this planet. About 63 percent of support for university-based geosciences research comes from this directorate and more than 14,300 people will be directly supported through GEO in FY 2012 with thousands of others deriving support indirectly.

The President's request for FY 2012 asks for \$286 million for Atmospheric and Geospace Sciences, \$207 million for Earth Sciences, \$385 million for Ocean Sciences and \$101 million for Integrative and Collaborative Education and Research (ICER) within GEO. Much of the geosciences research budget is for understanding that is critical for current national needs, such as water and mineral resources, energy resources, environmental issues, climate change, and mitigation of natural hazards. AGI asks the Subcommittee to strongly support these funding levels.

GEO supports infrastructure and operation and maintenance costs for cutting edge facilities that are essential for basic and applied research. Ultimately the observations and data provide knowledge that is used by researchers and professionals in the public, government and private sector. GEO research and infrastructure helps drive economic growth in a sustainable manner. Geoscience-based research tools and academic expertise helped to end the BP Deepwater Horizon oil spill, saving billions of dollars for industry and untold costs to the environment. Research funding continues to help the Gulf coast recover - environmentally and economically.

Among the major facilities that NSF supports, the Academic Research Fleet would receive \$69 million, EarthScope Operations would receive \$26 million, Incorporated Research Institutions for Seismology (IRIS) would receive \$12 million, Ocean Drilling Activities would receive \$45 million, the Ocean Observatories Initiative would receive \$36 million, and the National Center for Atmospheric Research would receive \$100 million. AGI strongly supports robust and steady funding for infrastructure and operation and maintenance of these major facilities.

NSF's Office of Polar Programs (OPP) funds basic research in the Arctic and Antarctica that helps the United States' maintain strategic plans, international efforts, security goals, natural resource assessments, cutting-edge polar technology developments and environmental stewardship of extreme environs. OPP's funding helps support researchers and students, the U.S. military, and the private sector. OPP is estimated to directly support almost 3,000 people in FY 2012 and thousands of others indirectly. AGI supports the President's request of \$477.4 million for this important program.

Now is the time to boost geosciences research and education to fill the draining pipeline of skilled geoscientists and geo-engineers working in the energy and mining industries; the construction industry; the environmental industry; the risk management and insurance industries; the academic community; K-12 education; the federal, state and local governments; and the communications and tourism industries.

NSF Support for Earth Science Education: Congress can grow the depleted geosciences workforce; stimulate economic growth in the energy, natural resources and environmental sectors; and improve natural resource literacy by supporting the full integration of Earth science information into mainstream science education at the K-12 and higher education levels. AGI strongly supports the Math and Science Partnerships (MSP), the Graduate Research Fellowships (GRF) and the Research Experiences for Undergraduates (REU) within NSF's Education and Human Resources Division. These programs are effective in building a science and engineering workforce for the twenty first century.

Improving geoscience education, one of the goals of NSF-EHR, to levels of recognition similar to other scientific disciplines is important in the following ways:

- Geoscience offers students subject matter that has direct application to their lives and the world around them, including energy, minerals, water and environmental stewardship. All students should be required to take a geoscience course in primary and secondary school.
- Geoscience exposes students to a range of interrelated scientific disciplines. It is an excellent vehicle for integrating the theories and methods of chemistry, physics, biology, and mathematics. A robust geoscience course would make an excellent capstone for applying lessons learned from earlier class work.
- Geoscience awareness is a key element in reducing the impact of natural hazards on citizens -- hazards that include earthquakes, volcanic eruptions, hurricanes, tornadoes, and floods. Informal geoscience education that leads to reducing risks and preparing for natural events should be a life-long goal.
- Geoscience provides the foundation for tomorrow's leaders in research, education, utilization and policy making for Earth's resources and our nation's strategic, economic, sustainable and environmentally-sound natural resources development. There are not enough U.S.-trained geoscientists to meet current demand and the gap is growing. Support for geoscience research and education is necessary to stay competitive and to wisely manage our natural resources.

NOAA: AGI supports the President's request for a budget of \$5.498 billion for NOAA. We hope the Subcommittee will continue to support the National Weather Service; the Oceanic and Atmospheric Research program; the National Climate Service; and the National Environment Satellite, Data and Information Service. All three programs are critical for understanding and mitigating natural and human-induced hazards in the Earth system while sustaining our natural resources. These four programs at NOAA prevent billions of dollars of losses, keep the private and public sectors growing and save lives. For example, drought forecasts are worth up to \$8 billion to the farming, transportation, tourism and energy sectors while NexRad radar has prevented more than 330 fatalities and 7,800 injuries from tornadoes since the early 1990s.

NIST: We support a total budget of \$1.101 billion for NIST in fiscal year 2012.

Basic research at NIST is conducted by Earth scientists and geotechnical engineers and used by the public and private sector on a daily basis. The research conducted and the information gained is essential for understanding climate change and natural hazards in order to build resilient communities and stimulate economic growth with reduced impact from risk. In particular, we support Measurements and Standards to Support Increased Energy Efficiency and Reduced Environmental Impact and Measurements and Standards to Support Advanced Infrastructure Delivery and Resilience. Energy efficiency and reduced environmental impact research will improve the health of our planet and reduce energy costs. The advanced infrastructure research will help to reduce the estimated average of \$52 billion in annual losses caused by floods, fires and earthquakes.

NIST is the lead agency for the National Earthquake Hazard Reduction Program (NEHRP), but has received only a small portion of authorized and essential funding in the past. AGI strongly supports the reauthorization of the National Earthquake Hazards Reduction Program (NEHRP) in 2012. We hope the appropriations subcommittee will continue to support this effective and cohesive program, even if the authorizing legislation takes more time to complete. NEHRP is an excellent example of how to coordinate different entities for the safety and security of all. NEHRP develops effective practices and policies for earthquake loss reduction and accelerates their implementation; improves techniques for reducing earthquake vulnerabilities of facilities and systems; improves earthquake hazards identification and risk assessment methods and their use; and improves the understanding of earthquakes and their effects.

NASA: AGI supports the vital Earth observing programs within NASA. **AGI strongly supports a budget of \$1.797 billion for Earth Science programs within the Science Mission Directorate at NASA.** The investments are needed to implement the priorities of the National Academies *Earth Science and Applications from Space* Decadal Survey. NASA needs to maintain its current fleet of Earth-observing satellites, launch the next tier and accelerate development of the subsequent tier of missions. The observations and understanding about our dynamic Earth gained from these missions is critical and needed as soon as possible. Earth observations are used every day, not just for research, but for critical information to aid society in mundane tasks, like weather forecasting, to emergency services, such as tracking volcanic ash plumes or oil spills that disrupt the economy and the environment. The requested increase for fiscal 2012 and proposed increases for future years are wise and well-planned investments that affect everyone.

We appreciate this opportunity to provide testimony to the Subcommittee and would be pleased to answer any questions or to provide additional information for the record. Linda Rowan can be reached at 703 379 2480 ext. 228 (voice), 703 379 7563 (fax), rowan@agiweb.org, or 4220 King Street, Alexandria VA 22302-1502.

**Outside Witness Testimony in Support of FY 2012 Funding for the
National Science Foundation**

March 11, 2011

Submitted by:
Julie Palakovich Carr
Senior Public Policy Associate
and
Robert Gropp, Ph.D.
Director of Public Policy

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Submitted to:
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies

The American Institute of Biological Sciences (AIBS) appreciates the opportunity to provide testimony in support of fiscal year (FY) 2012 appropriations for the National Science Foundation (NSF). We encourage Congress to provide the \$7.767 billion requested by the Administration.

AIBS is a nonprofit 501(c)(3) scientific association dedicated to advancing biological research and education for the welfare of society. Founded in 1947 as a part of the National Academy of Sciences, AIBS became an independent, member-governed organization in the 1950s. AIBS is sustained by a robust membership of some 200 professional societies and scientific organizations whose combined individual membership exceeds 250,000. AIBS advances its mission through coalition activities in research, education, and public policy; publishing the peer-reviewed journal *BioScience* and the education website ActionBioscience.org; providing scientific peer-review and advisory services to government agencies and other clients; convening meetings; and managing scientific programs.

NSF is a vital engine for our nation's continued economic growth. The agency's support for scientific research and education programs fosters innovation, improves science education, and maintains our scientific infrastructure. Through its competitive, peer-reviewed research grants, NSF is leading the development of new knowledge that will help to solve the most challenging problems facing society. The agency's education and training programs are preparing the next generation of skilled workers in science, technology, engineering, and math (STEM). NSF's investments in research equipment and facilities will enable our nation to continue to innovate and compete globally. These efforts, however, require a sustained and predictable federal investment. Unpredictable swings in federal funding can disrupt research programs, create uncertainty in the research community, and stall the development of the next great idea.

NSF is a sound investment that pays dividends. The use of peer-review to evaluate and select the best research proposals means that NSF is funding the most promising research. Recent discoveries that stem from NSF-funded research include the development of a faster and less expensive method for identifying bacteria in water and food samples; the identification of a high yielding biofuel that can grow on degraded lands; the creation of tomatoes that provide increased levels of the essential nutrient folate; and insight into the spread of the West Nile virus.

As the primary federal funding agency for fundamental research in the non-medical sciences at our nation's universities and colleges, NSF is responsible for generating new scientific discoveries, patents, and jobs. For many scientific disciplines, NSF is the primary funding source for basic research. For instance, NSF provides approximately 68% of extramural federal grant support for fundamental research in the areas of non-medical and environmental biology.

Importantly, the FY 2012 budget request would allow NSF to fund nearly 2,000 additional research grants, thereby supporting more than 6,000 additional researchers and students. This added support would build upon the agency's central role in science and STEM education. In FY 2010, NSF programs reached almost 300,000 scientists, teachers, and students across the nation. NSF provides vitally important research support to early career scientists, helping them to initiate their research programs. Support for the scientific training of undergraduate and graduate students is also critically important to our research enterprise. Students recruited into science through NSF programs and research experiences are our next generation of innovators and educators. In short, NSF grants are essential to the nation's goal of sustaining our global leadership in science, technology, engineering and mathematics, and reigniting our economic engines.

The Biological Sciences Directorate (BIO) funds research in the foundational disciplines within biology. These fields of study further our understanding of how organisms and ecosystems function. Additionally, BIO supports innovative interdisciplinary research that improves our understanding of how human social systems influence – or are influenced by – the environment, such as the NSF-wide Science, Engineering, and Education for Sustainability program. In collaboration with NSF's engineering, math, and physical science directorates, BIO is working to develop new, cutting-edge research fields. For example, the BioMaPS program is accelerating understanding of biological systems, and applying that knowledge to new technologies in clean energy.

The FY 2012 budget request for NSF would enable the agency to continue to fund highly competitive grant proposals in BIO's five core programmatic areas: Molecular and Cellular Biosciences, Integrative Organismal Systems, Environmental Biology, Biological Infrastructure, and Emerging Frontiers. Equally important, BIO provides essential support for our nation's place-based biological research, such as field stations and natural science collections. Each of BIO's program areas also contribute to the education and training of undergraduate, graduate, and postdoctoral students.

The budget includes a request for \$10 million to support the digitization of high priority U.S. specimen collections. We strongly encourage Congress to provide at least this level of funding. This investment would help the scientific community ensure access to and appropriate curation of irreplaceable biological specimens and associated data, and would stimulate the development of new computer hardware and software, digitization technologies, and database management

tools. For example, this effort is bringing together biologists, computer and information scientists, and engineers in multi-disciplinary teams to develop innovative imaging, robotics, and data storage and retrieval methods. These tools will expedite the digitization of collections and, more than likely, contribute to the development of new products or services of value to other industries.

The FY 2012 budget request includes funding in the Major Research Equipment and Facilities Construction account for the continued construction of the National Ecological Observatory Network (NEON). Once completed, NEON will collect data across the United States on the effects of climate change, land use change, and invasive species on natural resources and biodiversity. This information will be valuable to scientists, resource managers, and government decision makers as they seek to better understand and manage natural resources.

We encourage the Committee to provide the requested funding for the successful Graduate Research Fellowship program. The budget request would provide 2,000 new fellowships, which are important to our national effort to recruit and retain the best and brightest STEM students. The budget would also provide a needed \$1,500 increase to the fellowship's education allowance, which has not changed since 1998.

Thank you for your thoughtful consideration of this request and for your prior efforts on behalf of science and the National Science Foundation.



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**Statement
Of the
AMERICAN PUBLIC POWER ASSOCIATION
Submitted to the
HOUSE APPROPRIATIONS COMMITTEE'S
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED
AGENCIES
March 11, 2011**

Contact: Amy Hille, Government Relations Representative, APPA

The American Public Power Association (APPA) supports adequate funding for staffing antitrust enforcement and oversight at the Federal Trade Commission (FTC) and the Department of Justice (DOJ). For the FTC's FY 2012 budget, we support the President's budget request of \$326 million. For the DOJ Antitrust Division we support the President's FY 2012 request of \$166 million.

The American Public Power Association is the national service organization representing the interests of over 2,000 municipal and other state and locally owned utilities in 49 states (all but Hawaii). Collectively, public power utilities deliver electricity to one of every seven electric consumers (approximately 46 million people), serving some of the nation's largest cities. However, the vast majority of APPA's members serve communities with populations of 10,000 people or less.

The DOJ Antitrust Division and the FTC play critical roles in monitoring and enforcing antitrust laws affecting the electric utility industry. With the repeal of the Public Utility Holding Company Act (PUHCA) included in the Energy Policy Act of 2005, the electric utility industry has experienced an increase in mergers that could result in increased market power in certain regions. This development, coupled with the volatility and uncertainty continuing to occur in wholesale electricity markets run by regional transmission organizations, makes the oversight provided by DOJ and the FTC more critical than ever.

We appreciate the opportunity to submit this statement outlining our FY 2012 funding priorities within the Commerce, Justice and Science Subcommittee's jurisdiction.



AMERICAN
SOCIETY FOR
MICROBIOLOGY

Public and Scientific Affairs Board

*Statement of the American Society for Microbiology
Submitted to the
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
On the Fiscal Year 2012 Appropriation for the National Science Foundation*

March 11, 2011

The American Society for Microbiology (ASM) wishes to submit the following testimony on the Fiscal Year (FY) 2012 appropriation for the National Science Foundation (NSF). The ASM is the largest single life science organization in the world with over 38,000 members. The ASM mission is to enhance the science of microbiology, to better understand life processes and to promote the application of this knowledge for improved health and environmental well-being.

The ASM strongly supports the Administration's FY 2012 NSF budget proposal of nearly \$7.8 billion, a 13 percent increase over the FY 2010 level of spending. The ASM thanks Members of Congress for their support of the NSF and asks that Congress continue to recognize NSF's contributions to US research and development in science and engineering, by approving the President's proposed FY 2012 budget for the Agency.

The ASM recognizes the many challenges ahead in the federal budgeting process. However, the ASM maintains that strong investment in science and technology will continue to show substantial returns on federal investments. Moreover, strong investments in science are essential for the long-term vigor and vitality of the United States economy.

For more than sixty years, NSF funding has stimulated innovation in the United States by providing support to researchers across the breadth of scientific and engineering disciplines. Approximately 95 percent of the Agency's budget goes directly to support research, research infrastructure and STEM education (science, technology, engineering, and mathematics). Importantly, three-fourths of NSF funding is distributed each year to US colleges, universities and academic consortia, through merit based, competitive grants that engage more than 210,000 people participating in funded research and education programs.

The increased budget proposed for NSF programs will strengthen the American Competitiveness Initiative, the President's Plan for Science and Innovation and the NSF's 2011–2016 strategic plan that "envision[s] a nation that capitalizes on new concepts in science and engineering and provides global leadership in advancing research and education." The NSF plays a unique role in building US R&D capabilities and global competitiveness at a time when support from other sectors is shrinking. The NSF is the nation's largest source of non-medical academic research funding, providing 21 percent of the total federal budget for basic research.

The NSF sponsors fundamental and transformative research that supports new, economically critical disciplines, such as nanotechnology, genomics and information technology. For some

vitality important fields, such as computer science and environmental science, NSF is the dominant funding source. NSF grants catalyze scientific inquiry by a diverse set of recipients ranging from over 190 Nobel laureates to elementary school students participating in NSF sponsored STEM activities. The Agency estimates that in FY 2012 more than 302,000 people will be directly involved in NSF programs, including a large percentage of the nation's female and underrepresented minority scientists and students.

NSF Directorate for Biological Sciences

The ASM endorses the FY 2012 request of \$794.5 million for NSF's Directorate of Biological Sciences (BIO), roughly 11 percent over the enacted FY 2010 funding level. This request includes support for the Directorate's Emerging Frontiers initiative, which recognizes high risk, cutting-edge research with the potential to transform US science and technology. Through Emerging Frontiers and its core BIO programs, NSF provides about 68 percent of federal funding for basic research in life sciences at the nation's academic institutions.

Understanding living organisms and systems directly contributes to improving our economy, agriculture, environment and public health. Recent National Research Council reports have urged creative applications of "the new biology" to solve recalcitrant problems, such as balancing food security with clean energy needs and environmental impacts. BIO supported research is uniquely positioned to provide answers, and to address national priorities, including climate science, biotechnology and sustainable energy, as well as control of infectious diseases. BIO also maintains a capacity to respond rapidly to urgent research needs as they arise. In the past year, for example, NSF provided \$20 million for critically needed research on the biological impacts of the Gulf of Mexico oil spill. The FY 2012 budget request also highlights the Directorate's research portfolio within the NSF wide Science, Engineering and Education for Sustainability (SEES) initiative, particularly clean energy projects and cross cutting projects within the research at the interface of the Biological, Mathematical and Physical Sciences (BioMaPS) program.

The FY 2012 BIO appropriation will help realize two of NSF's strategic goals, "Transform the Frontiers" and "Innovate for Society." To illustrate, BioMaPS research areas will include advanced manufacturing techniques related to biosensors; new nano-scale technologies that collect data in real time; and the use of chemistry and engineering to build cellular systems for more efficient computational networks. Also in FY 2012, BIO will begin operations of its new National Ecological Observatory Network (NEON), which will collect data across the United States on the impacts of climate change, land use change and invasive species. NEON will be the first observatory of its kind, able to forecast ecological change nationwide over multiple decades.

Investments in the BIO Directorate consistently advance scientific knowledge with potential societal or economic benefits. BIO supported discoveries reported in the past year include: (1) soil microbes release less than expected carbon dioxide into the atmosphere during climate warming; (2) bacteria communicate with chemical signals and when a critical number of signaling molecules are detected on the bacteria cell surface (quorum sensing), the collective bacteria coordinate their attack on an infected host (suggesting new drug regimens); and (3) certain methane-metabolizing bacteria can leech copper out of the environment, thereby both cleaning up toxic waste and breaking down the greenhouse gas methane.

The NSF contributes to the fields of medical, agricultural and environmental microbiology, which are important to public health, food security, biotechnology and much more. An example is the Ecology of Infectious Disease (EID) initiative managed jointly by NSF and NIH, which supports research that combines ecological and biomedical methods to study interactions between human caused changes in the environment and the emergence and transmission of infectious diseases. The most recently funded EID projects include livestock movement in Central Africa as related to transmission of foot and mouth disease virus, how climate and human behavior influence the spread of dengue fever-carrying mosquitoes, and biological and environmental factors that affect the spread of wheat stripe rust disease. In the past year, EID-supported investigators reported results from studies that examined, for instance, (1) the cross-species transmission of infectious diseases using a rabies model; and (2) floating aggregates of organic material (called “marine snow”) as protective transports for pathogenic microorganisms, affecting water sampling outcomes and the transmission of waterborne diseases.

Annual NSF investments deliver a steady stream of discoveries that help fight costly infectious diseases of humans, other animals, and plants. Recent NSF supported research findings include:

- Stress-response genes in tuberculosis bacteria switch the pathogen into its dormant state within an infected host, increasing resistance to antibiotics and host immunity.
- The corkscrew-shape of the bacterium *Helicobacter pylori*, linked to ulcers and gastric cancer, is specifically tied to the microbe’s ability to colonize the acid-laden stomach.
- Microbial pathogens can hijack nutrient pathways in rice plants by using previously undiscovered plant cell pores that transport sugar out of the plant. Other researchers found a genetic mutation that allows plants to better withstand drought.
- A nanotechnology based diagnostic test for *Mycoplasma pneumoniae* can diagnose this common type of pneumonia within minutes, versus current tests that take several days.
- An international team will use a new technology called MHC tetramers to develop novel vaccines against cattle diseases that cause estimated annual losses of \$40 billion in sub-Saharan Africa, to quickly screen potential vaccines in the laboratory.

NSF Directorates for Geosciences, Engineering, Mathematical and Physical Sciences

The ASM supports the Administration’s FY 2012 proposed NSF funding for research activities at the Engineering Directorate (ENG), the Geosciences Directorate (GEO) and the Mathematical and Physical Sciences Directorate (MPS).

The ENG Directorate recognizes the centrality of engineering principles and multidisciplinary research to national priorities, including sustainability, the U.S. cyberinfrastructure, next generation manufacturing practices and technologies that mitigate environmental threats. ENG programs in clean energy and advanced manufacturing will also contribute to the FY 2012 activities in the NSF wide BioMaPS investment. Within the ENG request, the Division of Chemical, Bioengineering, Environmental and Transport Systems (CBET) will support sustainability research and education related to climate, water and energy as part of the Agency wide SEES initiative.

Increasingly, biology and engineering are collaborating to find solutions to societal, environmental, and economic challenges. Recent NSF funded examples are: (1) computer

modeling to predict how bacteria would respond to different drug doses and which doses are most effective in patients, to radically shorten drug development; and (2) potential drugs against HIV identified by combining optimization theory from mathematics with computational biology, with a formula based on statistical thermodynamics that predicts which drug structure would be most effective.

The Geosciences Directorate provides about 68 percent of federal support for basic geosciences at the nation's academic institutions, and is clearly a decisive player in research and education often ignored by other funding sources. GEO funds studies of the atmosphere and the oceans that increase our understanding of climate change, improve water quality and offer potential prediction of natural disasters, such as drought and earthquakes. Major FY 2012 GEO investments will include continued participation in the SEES initiative, with the Division of Earth Sciences (EAR) leading GEO efforts toward clean energy and contributing to sustainability research networks. Current EAR funding opportunities also include paleobiology studies of past changes in the Earth's environments that might inform present day challenges. In the past year, as examples, EAR supported studies concluded that cyanobacteria producing oxygen helped create a breathable atmosphere on Earth some 2.5 billion years ago; while comparisons of modern microbial mats with fossilized bacterial colonies provide clues to ancient cell biology.

Many of today's innovations in science and technology are powered by increasingly complex mathematical and statistical capabilities. The modest FY 2012 increase proposed, however, for the MPS Directorate is barely adequate to sustain MPS efforts that reach across NSF, for example, SEES and BioMaPS programs as well as the new Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21). There have been extraordinary changes in how science is done: explosions of data, the mandate for faster and larger networks among researchers, rapidly advancing technologies, many of which rely upon MPS funded discoveries. NSF provides more than 60 percent of federal support for basic mathematics at US colleges and universities; in certain specialties, the percentage is much higher. In addition, MPS frequently coordinates with other NSF directorates in activities such as the quest for renewable fuels, biosensors, and advanced imaging. MPS and BIO recently issued a joint solicitation for grant proposals involving collaborations among investigators from the biological, mathematical and physical sciences that "foster new interactions that span interfaces between MPS and BIO."

Conclusion

The ASM recommends that Congress approve the Administration's FY 2012 budget for the NSF which is the only federal Agency that supports all fields of science and engineering. As the principal sponsor of research and education in multiple disciplines, NSF investment undoubtedly catalyzes innovation essential our society and economy. The Agency's focus on high risk, interdisciplinary research clearly traverses the frontiers of discovery. NSF programs, such as the new Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE), uniquely encourage emerging fields, including synthetic biology. For decades, the NSF has helped train the next generation of scientists, engineers and mathematicians, and partnered industry and academia to generate a long list of new technologies and patented products. Congressional approval of the FY 2012 budget would sustain the NSF's many contributions to the nation's scientific achievements.

**Testimony of the Public Media Association (PMA)
Before the House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
Regarding NTIA's Public Telecommunications Facilities Programs**

On behalf of the nation's 1,302 local public broadcasting stations, the Public Media Association appreciates the opportunity to submit this testimony before you today on the critical importance of the Public Telecommunications Facilities Program (PTFP) to the nation's local public radio and television stations. **This year, public broadcasters respectfully request that your Subcommittee provide \$20 million for PTFP within the National Telecommunications and Information Administration.**

For more than four decades, PTFP has served as the critical infrastructure program for a public broadcasting system of radio and television systems reaching more than 95 percent of the American people.

PTFP actually predates the Public Broadcasting Act and has been helping America's communities build public television and radio stations since the 1960s. This work is not yet finished. Last year alone, nearly a quarter of the PTFP grants went to communities looking to provide first-time service. It is important to note that PTFP is the only federal source of start-up funding for stations looking to enter unserved and underserved communities. These stations often bring service to Native American reservations, rural communities and minority communities.

In 2010, 31 PTFP awards will provide first public radio service to over 500,000 people and provide additional service to almost 1.7 million people. Ten of the projects will provide new service to Native American communities. Nine of the projects are for new radio stations serving Native American communities in Arizona, California, Idaho, Minnesota, New Mexico and South Dakota. The television project will serve the Cheyenne and Arapaho Tribes in Oklahoma.

Moreover, the Federal Communications Commission (FCC) opened a filing window in 2007 for non-commercial educational radio stations, the first such frequency filing opportunity in more than seven years. Several hundred applications from public radio stations were filed for new frequencies to improve or provide first-time service for communities across America. Each of these new frequencies, once approved by the FCC, will require a build-out, adding to the vitally-important matching grant financing provided by PTFP.

Because of PTFP, nearly every U.S. household has access to the most trusted and highest quality educational, cultural and public affairs programming offered by their local public television and radio stations—regardless of where those households are located. PTFP has made it possible for public television and radio stations to bring their services to the most remote corners of this country including areas that have no access to cable or other broadcasters.

PTFP makes it possible for people who cannot afford to pay for cable or satellite to have continued access to quality programming that educates their families, enlightens their lives,

informs their opinions on the issues facing our democracy, and allows them to explore a world far beyond their own.

PTFP also gives the necessary support for stations to provide the millions of people who are hearing and visually impaired with radio and television captioned services and reading programs.

One of PTFP's key roles is that it also serves as the only dedicated source of federal funding for our stations in the event of an emergency—for instance the loss of a transmitter or other critical equipment due to natural or man-made disasters like floods, hurricane and wildfires. These disasters threaten the ability of public broadcasters to stay on the air to deliver needed services and information to their local communities especially during times of great need.

Without PTFP funds, many of these communities would be vulnerable to the compounded effect of losing their local news, including emergency evacuation information, offered by their local public television and radio stations in addition to the effects of disaster.

Following hurricanes Katrina and Rita, several stations in the Gulf region were awarded PTFP emergency grants to allow them to get back on the air and serve their communities. PTFP was critical in restoring the transmission capabilities of our stations in New York, whose transmitters were located atop the World Trade Center and were destroyed following the tragic events of September 11, 2001

Another critical role of PTFP is to provide stations with matching funds for the replacement and maintenance of aging infrastructure. If PTFP were eliminated, stations would have nowhere to turn when equipment needed to be replaced or upgraded.

In fact, today's digital equipment will age faster than analog equipment. Some stations that went digital 10 years ago are already looking to PTFP for replacement equipment assistance. Indeed, a number of stations are reporting a digital equipment depreciation rate that is 30% faster than they experienced with analog equipment. Last year alone, almost half the funds went to 72 grantees to replace urgently needed equipment at public radio and television stations.

PTFP has never been solely about financing the transition from analog to digital spectrum. It is not about that now. As part of its overall mission to provide stations with resources for upgrades and improvements, in recent years, *some* PTFP funds have gone to help stations meet the mandated digital conversion needs. However, in the same time period, PTFP has also been critical to addressing stations' non-digital conversion needs such as emergency equipment replacement, providing first-time service to communities and assistance for regular equipment upgrades and maintenance.

There are those that contend that public broadcasting infrastructure costs could be absorbed by the Corporation for Public Broadcasting (CPB) line-item or the CPB Digital Program. What that argument fails to realize is that those accounts are not set up to handle needs-based infrastructure funding which varies from year to year.

The CPB Digital program was established to address very specific digital equipment and content needs of local stations—not ongoing maintenance and infrastructure investments which are addressed by PTFP. And, unlike PTFP, which is a highly competitive grant program, the general CPB appropriation gives out money in the same proportional amount each year to stations in the form of Community Service Grants (CSGs) as established by the CPB formula. Furthermore, by statute, stations' CSGs are to be used by stations for "purposes related primarily to the production or acquisition of programming."

With that in mind in FY 2009, public broadcasting stations directly received nearly \$280 million in CSGs from the CPB appropriation. However, the programming costs for the system in FY 2009 reached nearly \$1.3 billion. In other words, stations had nearly 5 times the need for programming funds as what was provided to them through the CPB appropriation.

Additionally, in FY 2009, stations received nearly \$38 million from the PTFP and the CPB Digital Program. However, in that same time period, stations spent nearly \$191 million in equipment and infrastructure—reflecting the fact that both programs together have only been able to help stations address roughly 20% of their capital needs.

Therefore, the contention that funding exists elsewhere to fund critical infrastructure projects is simply not valid and is further negated by the statutory constraints on the CPB appropriation and the different missions of the CPB Digital program and PTFP.

Moreover, the Department of Commerce has vast experience administering this program and the staff at NTIA has carried out the competitive grant process and distribution with efficiency and great success.

PTFP has been drastically under-funded in the past several years. Since suffering an 18% cut in FY 2002 and FY 2003, compounded by an additional 50% cut in FY 2004, and subsequent cuts in the following years, PTFP has been unable to keep pace with the essential infrastructure needs of public broadcasting.

These cuts have directly resulted in a growing backlog of needed projects, with applications to the program outnumbering grants more than 2 to 1 in the last several years. Last year alone, NTIA received over \$40 million in applications for PTFP, but the agency only had \$20 million available for awards. Like all infrastructure projects, the costs and risks of failed service rise exponentially each year that vital projects are left unfunded.

On average, stations leverage PTFP funding to locally raise an additional 50 percent of infrastructure and maintenance costs—resulting in a very successful public-private partnership committed to protecting one of this nation's most valued resources.

More than 40 years after its inception, public broadcasting stations continue to serve as the treasured cultural institutions envisioned by their founders, reaching America's local communities with unsurpassed programming and services. Furthermore, the power of digital technology has enabled stations to greatly expand their delivery platforms to reach Americans where they are increasingly consuming media—online and on-demand—in addition to on-air.

None of this, however, would be possible if not for the assistance that PTFP provides local stations.

Thus, the program remains as important now as it has for the last 40 years. PTFP funding is about more than towers and antennas. Ultimately, it is the means that ensures that all Americans have access to the highest quality local, educational, and cultural programming and services that are delivered to communities nationwide by America's public broadcasters. As some of the last locally owned and operated media outlets in the country, PTFP is a critical resource for stations as they seek to share with their communities the breadth and depth of public broadcasting services from early childhood literacy, workforce training, public affairs, cultural programming, health education and emergency services.

We appreciate all the support this Committee has given PTFP, and public broadcasting, in the past and we believe Congress should renew its commitment to PTFP to ensure public broadcasting stations are able to continue to provide local communities nationwide with the highest quality of educational, cultural and public affairs programming. As such, we ask that your subcommittee approve this request of continued funding for PTFP.

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**Written Testimony from Rebekah Diller
Deputy Director, Justice Program
Brennan Center for Justice at NYU School of Law**

*Submitted to the House Committee on Appropriations
Subcommittee on Commerce, Justice, Science and Related Agencies
In Support of Funding for the Legal Services Corporation*

March 11, 2011

The Brennan Center for Justice submits this testimony¹ in support of the Legal Services Corporation's ("LSC") \$516.5 million budget request for fiscal year 2012 and the President's \$450 million budget recommendation for LSC.

Funding for LSC has never been more vital to our civil justice system. LSC is the largest single provider of funding to civil legal assistance programs for low-income Americans. LSC grantees – 136 independent local programs in each of the 50 states – assist veterans returning from war, domestic violence victims, individuals undergoing foreclosure or other housing issues, those coping with the after-effects of natural disasters, and families involved in child custody disputes. As the recession continues to wreak havoc on many American families, the need for legal help is rising. At the same time, other sources of assistance are diminishing. Only strong federal support can help low-income families and our civil legal system weather this storm.

The Recession Has Created Vast New Legal Needs

Increased funding for the Legal Services Corporation is necessary now more than ever. Even before the recession hit, study after study found that 80 percent of the civil legal needs of low-income people go unmet.² Now that chronic "justice gap" is exacerbated by the growing ranks of families living in poverty. Nearly 57 million Americans, including almost 20 million children, currently qualify for civil legal assistance, up from 54 million

¹ This testimony was prepared with substantial assistance from Nabanita Pal, a research associate at the Brennan Center for Justice.

² Legal Services Corporation, *Documenting the Justice Gap in America: The Current Unmet Civil Legal Needs of Low-Income Americans* 1 (2009).

people in 2008 and 51 million in 2007. Never before in the history of LSC have so many been eligible for services.

Here are just some of the areas in which burgeoning needs and a shortage of funding for legal representation are converging with serious consequences:

- *Foreclosures.* As foreclosures continue to mount across the country, the majority of families facing the loss of their home continue to do so without legal representation. Many courts have responded to this crisis by establishing mediation programs that permit homeowners and lenders an opportunity to negotiate refinancing or an alternative resolution of the case. More than 25 such mediation programs have been established in states and jurisdictions across the country. While these programs present an important opportunity for homeowners to avoid foreclosure, their effectiveness is hampered when homeowners lack the legal representation necessary to assess complex paperwork, identify legal flaws, and negotiate the byzantine refinancing process. A snapshot of data from several states demonstrates that despite valiant efforts by legal services offices, pro bono programs and local bars, there is still a major shortage of legal help. In New York, between January and October 2010, 63 percent of homeowners appeared at mandatory settlement conferences without counsel.³ In Connecticut, 74.1 percent of defendants in mediation did not have legal representation in 2010. The majority of homeowners in Maine also lacked representation; 61 percent participated in mediation in 2010 without a lawyer.
- *Domestic Violence.* Organizations that provide support for victims of domestic violence have reported more requests for help amid the recession. The National Domestic Abuse Hotline, headquartered in Austin, Texas, documented a 21 percent increase in calls from the third quarter of 2007 to the same period in 2008.⁴ Police departments across the nation are also reporting a spike in domestic violence. In 2009, Philadelphia saw a 67 percent increase in domestic homicides – 35 more cases than 2008 – prompting the police commissioner to institute protocol changes for handling emergency calls.⁵ The police department in Hingham, Massachusetts, also reported a similar increase, with the number of domestic violence cases up 62 percent between October 2008 and February 2009.⁶
- *Unemployment.* In February 2011, the overall unemployment rate was 8.9 percent, down from 9.7 percent in February 2010 but still up significantly from pre-

³ Anne Pfau, Chief Administrative Judge, State of New York Unified Court System, 2010 REPORT OF THE CHIEF ADMINISTRATOR OF THE COURTS 11, available at <http://www.nycourts.gov/publications/pdfs/foreclosurereportnov2010.pdf>

⁴ Malavika Jagannathan, *Domestic Abuse Shelters, Hot Lines See Increase in Calls*, Green Bay Press Gazette (Jul. 22, 2009).

⁵ Ian Urbina, *Philadelphia to Handle Abuse Calls Differently*, N.Y. TIMES, December 30, 2009, <http://www.nytimes.com/2009/12/31/us/31philadelphia.html?partner=rss&emc=rss>.

⁶ Maria Cramer, *Economy fuels rise in crime, policy say*, Boston Globe, Mar. 10, 2009, http://www.boston.com/news/local/massachusetts/articles/2009/03/10/economy_fuels_rise_in_crime_police_say/.

BRENNAN CENTER FOR JUSTICE

recession levels of 4.5 percent in February 2007.⁷ There were 149,799 initial claims for unemployment insurance filed in January 2011.⁸

- *Food Stamps.* Between 2007 and 2010, the average number of people receiving Food Stamps every month jumped from 26.5 million to 40.3 million.⁹ As applications rise, so too does the number of people who need legal help making their way through the process in order to feed their families.
- *Unpaid Wages.* More and more among the working poor are seeking legal help to obtain unpaid wages, as they contend that employers fail to pay the promised amount or pay less than minimum wage. Construction, restaurant and janitorial workers are among the most vulnerable, especially if they are not proficient in English. In 2009, the District of Columbia's Office of Wage-Hour saw a 20 percent increase in the number of workers seeking help to recover stolen wages since 2008. In March 2010, the Legal Aid Society of Cleveland reported that wage theft cases had tripled in the past year.¹⁰
- *Courts Face Pressure from Growing Numbers of Pro Se Litigants.* An American Bar Association survey of nearly 1,000 state judges in late 2009 shows that courtrooms are increasingly stretched thin by rising numbers of *pro se* litigants.¹¹ Sixty percent of judges surveyed reported that they observed fewer parties being represented by counsel. Sixty-two percent of judges surveyed stated that litigants without lawyers were negatively impacted by their lack of representation. Seventy-eight percent of judges surveyed also said that the court was negatively impacted when faced with unrepresented parties.

Other Sources of Funding Hit Hard

This rising need comes at a time when other, non-federal sources of funding for legal assistance are drying up. A federal role is all the more critical now as state-based sources of revenue decline. After LSC grants, state-administered Interest on Lawyer Trust Account (IOLTA) programs are the largest source of revenue for civil legal aid programs across the

⁷ See Bureau of Labor Statistics, U.S. Department of Labor, Economic News Release, Selected Unemployment Indicators, Seasonally Adjusted, available at <http://www.bls.gov/news.release/empsit.t10.htm>; Bureau of Labor Statistics, U.S. Department of Labor, Unemployment Rate in February 2007, available at <http://www.bls.gov/opub/ted/2007/mar/wk2/art02.htm>.

⁸ See Bureau of Labor Statistics, Department of Labor, Table 1. Mass layoff events and initial claimants for unemployment insurance, February 2006 to January 2010, seasonally adjusted, Economic News Release, available at <http://www.bls.gov/news.release/mmls.t01.htm>.

⁹ U.S. Dept. of Agriculture, Supplemental Nutrition Assistance Program Average Monthly Participation Data, (data as of Mar. 2, 2011), available at <http://www.data.gov/raw/2083>.

¹⁰ Olivera Perkins, *More workers being cheated out of wages, experts say*, The Plain Dealer, March 13, 2010, http://www.cleveland.com/business/index.ssf/2010/03/more_workers_being_cheated_out.html

¹¹ ABA Coalition for Justice, *Report on the Survey of Judges on the Impact of the Downturn on Representation in the Courts*, July 12, 2010 available at <http://www.americanbar.org/content/dam/aba/migrated/JusticeCenter/PublicDocuments/CoalitionforJusticeSurveyReport.authcheckdam.pdf>

country. However, a precipitous drop in interest rates – from 5.25 percent in September 2007 to rates hovering around 0.25 percent at present have resulted in a tremendous drop in IOLTA generated income. Nationally, IOLTA income fell to \$284 million in 2008, a 25 percent drop in income from 2007.¹² In 2009, income dropped a further 57 percent to \$124.7 million.¹³ A number of states, too, have cut back on support. For example, in 2010, the New Jersey legislature cut civil legal services funding by \$9.7 million. As result, programs laid off 100 staff members across the state and projected serving 11,000 fewer clients.¹⁴

Civil Legal Aid Is a Good Investment

The local programs supported by LSC funding assist 2.3 million Americans and close nearly 1 million cases each year. However, the benefits that civil legal services provide extend even beyond the critical difference made in the lives of those directly helped.

First, legal services programs provide the infrastructure for much of this country's pro bono efforts. In 2009, more than 11% of all cases closed by LSC programs involved private attorneys. LSC grantees train pro bono attorneys in the specialized areas lacking representation, provide referrals, and help connect law firms to communities. A reduction in LSC funding would only undercut this critical partnership and diminish the capacity of the private bar to undertake pro bono efforts.

Civil legal aid programs also return significant short- and long-term economic gains for the communities they serve.¹⁵ From reducing reliance on social services such as shelter or foster care to stemming domestic violence in families, legal aid saves public dollars in the following ways:

- When legal aid clients obtain wages or child support, they are more likely to be economically self-sufficient and therefore less likely to seek public benefits. For example, in 2007, clients of Legal Aid of Nebraska obtained over \$2 million in child support awards.
- When lawyers represent parents in child welfare cases, families are more likely to stay together and children are less likely to spend time in foster care. In Washington State, a 2003 study of a pilot project providing representation to parents in child welfare proceedings found that 56 percent of families who had a lawyer throughout their case were reunified, while only 37 percent of families without representation were reunified.

¹² Data supplied by the ABA Commission on IOLTA (on file with the Brennan Center).

¹³ *Id.*

¹⁴ Deena Yellin, *Free Legal Aid to Poor Dwindles After State Funding Cut*, The Record, July 17, 2010, available at http://www.northjersey.com/news/98654849_State_budget_cuts_force_legal_aid_group_to_limit_free_services.html

¹⁵ See Laura Abel, *Economic and Other Benefits Associated with the Provision of Civil Legal Aid*, 9 Seattle J. for Soc. Just. 139 (2010). All the examples in the bulleted text hereafter come from this article.

- When lawyers help domestic violence victims secure legal protections, further violence is often avoided. By preventing domestic violence, legal aid programs reduce costs related to law enforcement and prosecution, medical treatment for injured victims, special education and counseling for affected children, property loss and reductions in productivity by victims. A 2009 study by Southwest Virginia Legal Aid Society found that when the Society expanded its services for domestic violence victims during a five year period, requests for protective orders dropped 35.5 percent. Statewide, requests for protective orders had fallen by only 16.2 percent.
- When lawyers stave off eviction or foreclosure and keep families in their homes, they reduce the use of limited state and local resources for shelters and social services, and keep property values from declining. In fiscal year 2009, the Massachusetts Legal Assistance Corporation estimated that intervention by civil legal aid lawyers in delaying or preventing evictions saved the state \$8.4 million in shelter costs.

Outdated restrictions hamper efficiency

These are just some of the ways in which LSC provides benefits to our nation far beyond the immediately apparent examples. This extremely effective private-public partnership, however, is hobbled by a rider containing outdated and wasteful restrictions on the use of grantees' funds. The most crippling restriction imposes limits on state, local and private funds. As a result, in certain states with relatively greater amounts of non-LSC funding, justice planners have created entirely separate organizations and law offices, funded by state and local public funders and private charitable sources, and dedicated to performing the categories of work that LSC-funded programs cannot do. But, because the restriction requires this work to be done through a physically separate organization, overhead, personnel, and administrative costs are wasted. Dollars that could finance more services urgently needed by families across the country are eaten up by the costs of running duplicate offices. This "non-LSC funds" restriction, which the President's Budget recommends removing, also unwisely intrudes on the choices available to state and local governments, as well as private foundations and individual donors, who wish to be partners in innovative efforts to expand access to justice.

**Testimony Submitted to the
Appropriations Committee
Subcommittee on Commerce, Justice, Science and Related Agencies
of the
U.S. House of Representatives
by
Captain Randy Boggs, For-Hire Recreational Fisherman
Orange Beach, Alabama
March 11, 2011**

My name is Randy Wayne Boggs and I appreciate the opportunity to voice support for the National Oceanic and Atmospheric Administration's request for \$54 million in funding for the National Catch Share Program in Fiscal Year 2012. I also oppose any effort to prohibit funding for new catch shares in the U.S.

As you may know, the for-hire industry, including charter and head boats, provides access to millions of individual anglers in the Gulf of Mexico every year. I own five charter boats of which I personally operate one. I also manage the sale of fuel, bait and ice at SanRoc Cay Marina, in Orange Beach, Alabama for the recreational and charter for hire boats. Three of our vessels are engaged in party boat / head boat type fishing; this is where we place an individual or a small group together on the boat to go fishing. Since it is a large volume of people, we provide access to the fishery for a very modest fee.

In the past I have served on Ad Hoc and Advisory panels to the Gulf of Mexico Fishery Management Council. I have also served as vice president of the Orange Beach Fishing Association, and I hold three college degrees. I participate in the rule making process for Gulf of Mexico fisheries as much as possible.

Due to the Deepwater Horizon Oil Spill in April 2010 we are faced with an uncertain future. Millions of gallons of crude oil were released into the Gulf of Mexico in the summer months of 2010 when the reef fish that form the majority of our catch were spawning. It is unknown how the oil spill will effect or has affected the spawn of fish in the Gulf of Mexico. As a fisherman this is a great concern to me and many others. We are already facing the shortest fishing season on record.

We have seen the fishing industry suffer on the Atlantic coast with multiple closures for the recreational and charter for hire sectors. At the urging of the Council we are trying to become more accountable in our fishery. We have been working with the Council to develop a plan for the charter for-hire and head boat sectors so that we will not have to participate in a derby style

fishery where we fish 52 days regardless of weather, fatigue and at less than a premium price for the access to a premium fishery.

We are afraid if we continue in this derby fishery our seasons and bag limits will become so restrictive that we will be unable to continue as professional fishermen and we will have to seek some other way to make a living.

We have developed a plan for the head boats and are asking the Council for a voluntary, pilot Individual Fishing Quota (IFQ) program, a type of catch share, which we have seen work in the commercial red snapper fishing fleet in the Gulf. The price they receive for their fish has almost doubled. They have the freedom to manage their fish and fishery, work when sea conditions are safe and in a manner that promotes sustainable fishing for generations to come.

It has taken many years to get these programs on the agenda with the Council and now with the budget crises we face an even more uncertain future if the administrations fiscal year 2012 catch share budget is not passed. The head boats certainly would not mind absorbing a portion of the cost of these programs, but if administration has no money to monitor the programs all of our work would be in vain.

An IFQ program for the head boats would also improve the underlying data used for fisheries management by making the process computerized. Law enforcement fisheries management data would be provided in real time which has proven to be the saving grace of the commercial red snapper IFQ program.

Thank you for the opportunity to testify on this issue. If there is any additional information that I can provide I would welcome the opportunity to work with this committee in any way possible. It is imperative that we keep the \$54 million catch share budget that has been requested in the budget for 2012. There are far too many fishermen that have suffered through oil spills, hurricanes, bad weather and a slow process in order to become accountable fishermen to let the funding for these programs fall to the way side.

Captain Randy W. Boggs



COASTAL STATES ORGANIZATION

Official Written Testimony for programs under the National Oceanic and Atmospheric Administration (NOAA) for Fiscal Year 2012

Submitted To
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
United States House of Representatives
Washington, DC

Submitted By
Coastal States Organization
Kristen Fletcher, Executive Director
March 11, 2011

The Coastal States Organization (CSO) is a nonpartisan, nonprofit organization that represents the interests of the Governors of the 35 coastal states, territories and commonwealths in Washington, DC. Established in 1970, CSO focuses on legislative and policy issues relating to the sound management of coastal, Great Lakes, and ocean resources and is recognized as the trusted representative of the collective interests of the coastal states on coastal and ocean management. For fiscal year 2012, CSO supports the following coastal programs and funding levels within the National Oceanic and Atmospheric Administration (NOAA):

Coastal Zone Management Program (§§306/306A/309)	\$70 million
Coastal and Estuarine Land Conservation Program	\$25 million

Every American, regardless of where he or she lives, is fundamentally connected to our coasts, oceans, and Great Lakes. These valuable resources are a critical framework for commerce, recreation, energy, environment, and quality of life. The U.S. economy is an ocean and coastal economy: though federal investment does not reflect it, the oceans and coasts provide an irreplaceable contribution to our nation's economy and quality of life. With sectors including marine transportation, tourism, marine construction, aquaculture, ship and boat building, mineral extraction, and living marine resources, the U.S. ocean-based sector alone provides \$138 billion to U.S. GDP and over 2.3 million jobs to our citizens. In addition, the annual contribution of coastal counties is in the trillions of dollars, from ports and fishing to recreation and tourism. In 2007, our nation's coastal counties provided \$5.7 trillion to the economy and were home to 108.3 million people on only 18% of the U.S. land area. If these counties were their own country, they would have the world's second largest economy. Coasts and oceans also add to the quality of life of nearly half of all Americans who visit the seashore each year; the non-market value of recreation alone is estimated at over \$100 billion.

Today, our nation's coasts are as vital for our future as they are vulnerable. As a result of their increasing draw and economic vitality, we are exerting more pressure on our coastal and ocean

resources. This demand, combined with an increase in natural hazards such as sea level rise, hurricanes and other flooding events, can be proven to show that the country is in danger of losing these invaluable assets. Despite the difficult budgetary times, we need to provide more funding and support for the key programs that are on the front lines of this daily battle, the programs utilizing the advances in coastal and ocean science, research, and technology to manage our coastal and ocean resources for future generations.

Programs that are engaged in these important efforts and working to balance the protection of coastal and ocean resources with the need for sustainable development include the Coastal Zone Management Program and the Coastal and Estuarine Land Conservation Program. These programs reside within the National Oceanic and Atmospheric Administration (NOAA) and provide *direct* funding or services to the states and territories, which account for a small portion of the total NOAA federal budget. The funding for these programs is very cost-effective, as these grants are matched by the states and are used to leverage significantly more private and local investment in our nation's coasts. Increased funding for these programs that provide on-the-ground services to our local communities and citizens is well worth the investment.

Coastal Zone Management Program (§§306/306A/309)

CSO requests that these grants be funded at a level of *\$70 million dollars*, an amount just above fiscal year 2010 enacted levels. This funding will be shared among the 34 states and territories that have approved coastal zone management programs. Pursuant to the Coastal Zone Management Act (CZMA), NOAA and the states partner to implement coastal zone management programs designed to balance protection of coastal and ocean resources with the need for sustainable development of coastal communities. States have the flexibility to develop programs, policies and strategies that are targeted to their state priorities while advancing national goals. Under the CZMA program, the states receive grants from NOAA that are matched by the states and are used to leverage significantly more private and local investment in our nation's coastal areas. These grants have been used to reduce environmental impacts of coastal development, resolve conflicts between competing coastal uses, and provide critical assistance to local communities in coastal planning and resource protection.

The CZMA state grants have essentially remained level-funded for 10 years, resulting in a decreased capacity in the state coastal zone management programs and less funding being granted out to local communities. An increase in funding to \$91 million would mean level funding that accounts for inflation over the last 10 years and would provide an additional \$300,000 - \$800,000 for each state and territory; however, CSO recognizes that the fiscal climate makes this type of an increase difficult if not impossible. Under the requested level of \$70 million of funding, states and territories would receive between \$850,000 and just over \$2,000,000 to carry out their coastal management programs based on a formula accounting for shoreline miles and coastal population. With this funding, states and territories focus on activities that address coastal water pollution, work to conserve and restore habitat, help plan with and educate communities, provide for public access to the shore and prepare to adapt to changing sea and lake levels and the threat of increasing storms. The following are a few examples of activities in Virginia and

Pennsylvania that CZM state grants have funded over the last year. These types of examples and more can be found around the nation.

Virginia

- CZMA state grant funding has been used to acquire 26 acres of land to expand Kiptopeke State Park on the southern tip of the Eastern Shore and replant native trees and shrubs to create migratory bird habitat. The newly planted parcel is the last piece of the puzzle, connecting existing habitat areas of the State Park and providing a contiguous stretch of food and shelter for the 6-7 million migratory songbirds that use the southern tip as a rest stop during their fall migration. The CZM program also installed 2 observation blinds, a walking trail and interpretive signage, as well as produced a guide to native plants to engage residents in planting native species to improve habitat and protect water quality. This benefits tourism on the Eastern Shore, especially during prime migration times.
- The Virginia CZM program has continued to build new layers into its Coastal Geospatial and Educational Mapping System – Coastal GEMS – which has provided the Commonwealth with a gateway to information on the location, value, and management of Virginia's most important coastal resources. One of the newest layers is the Priority Conservation Areas (PCA) dataset, which was a joint project of the Department of Game and Inland Fisheries, Department of Conservation and Recreation – Division of Natural Heritage, and the Virginia Commonwealth University. The PCA is a synthesis of priority natural resource datasets from these entities and other partners that identify areas important for conservation of the state's wildlife, plants and natural communities and assist communities in understanding where ecological preservation can be balanced with economic development.

Pennsylvania

- CZMA state grant funding was utilized to complete a report investigating the ecological and restoration opportunities along the Delaware River's industrial North Philadelphia reach (Betsy Ross Bridge to the Bucks County line) including regarding riverbanks, planting native vegetation, enhancing and creating wetlands, creating backchannel tidal wetlands, restoring submerged aquatic vegetation and restoring hard, bulkheaded river walls to more natural shorelines to improve water quality and habitat. Within the report, screening criteria were developed to help identify and prioritize restoration opportunities. This was followed on by the planned start of specific case studies, including the shoreline restoration of Lardner's Point Park and Bridesburg waterfront.
- The Pennsylvania CZM program partnered with the City of Philadelphia to construct a park on vacant Pier 11, providing one acre of public access on the Delaware riverfront. The program also partnered with the Partnership for the Delaware Estuary to restore native freshwater mussels by rearing and seeding over 1,000 juveniles, resulting in 192 million liters of water filtered in their first 30 years of life, improving water quality in Southeast PA streams and creating new economic opportunities.

Several years ago and appropriate at the time, a cap of approximately \$2,000,000 was instituted to allow for funding to spread more evenly across the states and territories, so as to prevent most of the funding from going entirely to the larger, more heavily populated states. But, now, over half of the states have met the cap and no longer receive an increase in funding, despite increased overall funding for CZMA state grants. Therefore, CSO requests that language be included in the appropriations bill declaring that each state will receive *no less than 1% and no more than 5% of the additional funds over and above previous appropriations*. As was provided for in fiscal year 2010, CSO requests that language be included in the appropriations bill that *directs NOAA to refrain from charging administrative costs to these grants*. This is to prevent any undue administrative fees from NOAA from being levied on grants intended for states.

Coastal and Estuarine Land Conservation Program

CSO requests **\$25 million** for the Coastal and Estuarine Land Conservation Program (CELCP). Authorized by Congress in 2002, CELCP protects “those coastal and estuarine areas with significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreation states to other uses.” To date, Congress has appropriated nearly \$255 million for CELCP. This funding has allowed for the completion of over 150 conservation projects, with more in progress. CELCP projects in 27 of the nation’s 35 coastal states have already helped preserve approximately 50,000 acres of the nation’s coastal treasures. All federal funding has been leveraged by at least an equal amount of state, local, and private investments, demonstrating the broad support of the program, the importance of coastal protection throughout the nation, and the critical role of federal funding to its success.

The preservation of coastal and estuarine areas is critical to both humans and the environment. These areas shield us from storms, protect us from the effects of sea-level rise, filter pollutants to maintain water quality, provide shelter, nesting and nursery grounds for fish and wildlife, protect rare and endangered species and provide access to beaches and waterfront areas. CELCP is the only program entirely dedicated to the conservation of these vital coastal areas.

The demand for CELCP funding far outstrips what has been available in recent years. In the last three years, NOAA, in partnership with the states, has identified over \$270 million of vetted and ranked projects. As demand for CELCP funding has grown, the funding has not kept pace. Adequate funding is needed to meet the demand of the increasingly high-quality projects developed by the states and submitted to NOAA.

This March, the CELCP program was formally authorized as part of H.R. 146, the *Omnibus Public Lands Management Act of 2009*, once again showing the broad, bipartisan support for coastal and estuarine land conservation. In recognition of the significant demand for CELCP projects, H.R. 146 authorized the program at \$60 million annually.

CSO greatly appreciates the support the Subcommittee has provided in the past. Its support has assisted these programs in working together to protect our coasts and sustain our local

communities. We hope you will take our requests into consideration as you move forward in the FY 2012 appropriations process.



Testimony of Robert B. Gagosian
 President and CEO of the Consortium for Ocean Leadership
 House Appropriations Subcommittee on Commerce, Justice and Science
 March 11, 2011

On behalf of the 99 member institutions of the Consortium for Ocean Leadership, we respectfully recommend the Committee support the President's FY12 budget request of \$7.7 billion for the National Science Foundation (NSF); \$1.8 billion for NASA Earth Science; and that you fully fund the extramural research and observation programs at the National Oceanic and Atmospheric Administration (NOAA).

If we learned anything from the BP Deepwater Horizon oil spill last spring, it was that our nation was ill prepared to deal with a major environmental disaster along our coastline. Because we do not have a robust ocean observing system in the Gulf of Mexico, we were not able to detect, monitor and forecast the location of the subsurface oil plume. The lack of this basic information led to uninformed resource management decisions, dueling scientific predictions, and general confusion and disillusionment among the public.

Given that the majority of Americans live along our coasts, the ocean is a major driver for commerce, transportation, tourism, recreation, national defense and the economy. Our lack of scientific understanding and observational capabilities in these areas makes our nation unnecessarily vulnerable to future perturbations from the ocean, whether they are oil spills, hurricanes, toxic algal blooms or tsunamis. The extramural science and observational programs funded by NSF, NOAA and NASA are essential for helping our nation better prepare for and mitigate the impacts of future disasters. The BP oil spill is having a multi-billion dollar economic impact in the Gulf just five years after hurricanes Katrina and Rita caused more than \$60 billion in insured losses. In contrast, the scientific investment we support is minimal, but essential.

While we understand the current fiscal realities facing our nation, we believe that cutting Federal support for science now will do little to reduce the deficit. What it will do is to harm our current economy and do great damage to our nation's ability to compete in the global marketplace that is driven by innovation. Disinvesting in science will lead our country off of the sound financial path along which research has led us over the past 50 years, and will do lasting harm to our economy and security of our nation.

The Federal investment in research and development is but a fraction of the Federal budget, yet it has been critical in helping our nation lead the world economy. The Congressional Budget Office has estimated a 28% return on investment for federal research spending, and other economists have estimated that science and technology have accounted for well over half our economic growth in the last century.

It seems that everything is "made in China" and with China opening major research universities and investing billions of new dollars in science (increasing funding for its equivalent of NSF by 20% per year) it is clear their goal is for everything to also be "invented in China". How the United States responds to that challenge is in your hands. We recognize the extremely difficult decisions that face this committee, but I can assure you that compromising our nation's investment in science would be a grave mistake at this critical juncture.



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**WRITTEN STATEMENT OF STEPHEN SALOOM, ESQ.
 DIRECTOR OF POLICY, INNOCENCE PROJECT**

**BEFORE THE HOUSE COMMITTEE ON APPROPRIATIONS
 SUBCOMMITTEE ON
 COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES
 HEARING ON THE FISCAL YEAR 2012 BUDGET
 March 11, 2011**

On behalf of the Innocence Project, thank you for allowing me to submit testimony to the House Committee on Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies as it considers budget requests for fiscal year 2012. I write to request the continued funding of the following programs at the described levels:

- Paul Coverdell Forensic Sciences Improvement Grant Program (the “Coverdell Program”) at **\$35 million** through the Department of Justice, National Institute for Justice (the “NIJ”);
- Kirk Bloodworth Post-Conviction DNA Testing Program (the “Bloodworth Program”) at **\$5 million** through the NIJ; and
- The Capital Litigation Improvement Grant Program at the Senate’s proposed FY 11 level of **\$12.5 million, including \$10 million for the Wrongful Conviction Review Program**, through the Department of Justice, Bureau of Justice Assistance (the “BJA”).

In addition, I will discuss a concern with regard to Administration-proposed block-granting of two of these important programs.

As you may know, the Innocence Project represents convicted persons who seek to prove their innocence through post-conviction DNA testing. To date, 267 men and women have been exonerated by such testing nationwide. The mission of the Innocence Project is to free innocent people and prevent wrongful convictions through reform. Yet it is important to note that this work has tremendous benefit for public safety. There are two aspects to this. First, every time DNA identifies a wrongful conviction, it enables the identification of the real perpetrator of those crimes. *Indeed, the true perpetrators have been identified in 45 percent of the DNA*

Innocence Project, Inc.
 March 11, 2011
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exoneration cases. Even more, the reforms that can prevent wrongful convictions are simply measures to enhance the accuracy of criminal investigations and prosecutions, and thus have the effect of enhancing criminal investigations and strengthening criminal prosecutions.

We recognize, through our work with Congress, that these dual benefits are well recognized by this body, and it has been our great pleasure to work closely with many of you on the very programs we're supporting in this testimony. I am writing to underscore the value of these programs to both safety and justice, and to request the continued funding of each of these critical programs in fiscal year 2012.

Coverdell Program

Recognizing the need for independent government investigations in the wake of forensic scandals, Congress created the forensic oversight provisions of the Coverdell Program, which provides state and local crime laboratories and other forensic facilities with much needed federal funds. Specifically, in the JFAA, Congress required that

[t]o request a grant under this subchapter, a State or unit of local government shall submit to the Attorney General...a certification that *a government entity exists and an appropriate process is in place to conduct independent external investigations into allegations of serious negligence or misconduct substantially affecting the integrity of the forensic results* committed by employees or contractors of any forensic laboratory system, medical examiner's office, coroner's office, law enforcement storage facility, or medical facility in the State that will receive a portion of the grant amount.¹

The Innocence Project views the Congressional mandate under the Coverdell Program as a crucial step toward ensuring the integrity of forensic evidence. Now, more than ever, as forensic science budgets find themselves on the chopping block in state legislatures all over the country, their very survival may be dependent upon these federal funds. **With such import and capacity for positive change, we ask that you continue to fund the Coverdell Program at its current level of \$35 million.**

Section 413 Programs

Congress, recognizing the critical importance of requiring that states receiving federal support for forensic DNA evidence enable the wrongfully convicted to prove their innocence through post-conviction DNA testing, created the "innocence incentive" requirements outlined in Section 413 of the JFAA. The four DNA programs covered by Section 413 are the following JFAA Sections:

- 303, DNA Training and Education for Law Enforcement, Correctional Personnel, and Court Officers;

¹ 42 U.S.C. § 3797k(4) (emphasis added).

Innocence Project, Inc.
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- 305, DNA Research and Development;
- 308, DNA Identification of Missing Persons; and
- 412, Kirk Bloodsworth Postconviction DNA Testing Grant Program.

Under Section 413, all of these programs specifically require that recipient states properly preserve biological evidence and allow post-conviction DNA testing. However, despite the good intentions and great promise of Section 413, the Bloodsworth Program is the only Section 413 program that has been funded pursuant to the Section 413 mandate.

Bloodsworth Program

The Bloodsworth Program provides hope to inmates who might otherwise have none by helping states more actively pursue post-conviction DNA testing for those who claim innocence. Tied to funding are those “innocence incentive” requirements discussed above, these funds have had a positive impact that has led to much success. Many organizational members of the national Innocence Network have partnered with state agencies that have received Bloodsworth funding.² According to the Innocence Network’s President, Keith Findley, the Bloodsworth Program will dramatically improve the ability of Innocence Network members to meet the tremendous need for post-conviction DNA testing. Many of the projects funded under the Bloodsworth Program will enable projects in various states to proactively search for and identify forcible rape, murder and non-negligent manslaughter cases in which DNA testing can prove guilt or innocence, but which are otherwise overlooked or hidden.³

It is worth noting that the Bloodsworth Program does not fund the work of Innocence Projects directly. In fact, the Office of Justice Programs has encouraged state applicants to draft proposals that fund a range of entities involved in settling innocence claims, from law enforcement agencies to crime laboratories. Additionally, the Bloodsworth Program has fostered the cooperation of innocence projects and state agencies. For example, with the \$1,386,699.00 that Arizona was awarded for fiscal year 2008, the Arizona Justice Project, in conjunction with the Arizona Attorney General’s Office, began the Post-Conviction DNA Testing Project. Together, they have canvassed the Arizona inmate population, reviewed cases, worked to locate evidence and filed joint requests with the court to have evidence released for DNA testing. In addition to identifying the innocent, *Arizona Attorney General Terry Goddard has noted that the “grant enables [his] office to support local prosecutors and ensure that those who have committed violent crimes are identified and behind bars.”*⁴ Such joint efforts have followed in Connecticut, Louisiana, Minnesota, North Carolina and Wisconsin.

² The Innocence Network is an affiliation of organizations dedicated to providing pro bono legal and investigative services to individuals seeking to prove innocence of crimes for which they have been convicted and working to redress the causes of wrongful convictions.

³ Strengthening Our Criminal Justice System: Extending the Innocence Protection Act. 111th Cong., 1st Sess., 10 (2009) (testimony of Keith Findley, President of the Innocence Network).

⁴ Arizona receives federal DNA grant, <http://community.law.asu.edu/news/19167/Arizona-receives-federal-DNA-grant.htm> (last visited Mar. 11, 2011).

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The Bloodsworth program is a relatively small yet powerful investment for states seeking to do critically important work: to identify and free innocent people who were erroneously convicted. **As such, we ask that you continue to fund the Bloodsworth Program at its current funding level of \$5 million.**

Wrongful Conviction Review Program

Particularly when DNA isn't available, or when it alone isn't enough to prove innocence, being able to prove one's innocence to a level sufficient for exoneration is even harder than "simply" proving the same with DNA evidence. These innocents languishing behind bars require expert representation to help navigate the complex issues that invariably arise in their bids for post-conviction relief. And the need for such representation is enormous when only a small fraction of cases involve evidence that could be subjected to DNA testing (for example, it is estimated that even among murders, only 10% of cases have the kind of evidence that could be DNA tested).

Realizing the imperative presented by such cases, the BJA carved-out of its Capital Case Litigation Initiative funding to create the Wrongful Prosecution Review (now the Wrongful Conviction Review) discretionary grant program.⁵ The program provides applicants—non-profit organizations and public defender offices dedicated to exonerating the innocent—with funds geared towards providing high quality and efficient representation for potentially wrongfully convicted defendants in post-conviction claims of innocence.

The program's goals, in addition to exonerating the innocent, are significant: to alleviate burdens placed on the criminal justice system through costly and prolonged post-conviction litigation and to identify, whenever possible, the actual perpetrator of the crime. Above all, though, this program forms a considerable piece of the comprehensive federal package of innocence protection measures created in recent years; without it, a great deal of innocence claims might otherwise fall through the cracks. **Accordingly, we urge you to fund the Wrongful Conviction Review Program through the BJA at the FY 11 Senate-requested level of \$10 million.**

Additional Notes on the Department of Justice's Requested Budget for FY 2012

The Department of Justice's fiscal year 2012 budget request appears to do away with two of the above programs – the Coverdell and Bloodsworth Programs. These programs potentially would be rolled into a much broader "DNA Initiative" for a requested funding level of \$110 million.

We are concerned about the impact that "block-granting" the Bloodsworth and Coverdell programs would have on the requirements and incentives that they currently provide for states to

⁵ Reauthorization of the Innocence Protection Act. 111th Cong., 1st Sess., 8 (2009) (testimony of Lynn Overmann, Senior Advisor, Office of Justice Programs).

Innocence Project, Inc.
March 11, 2011
Page 5



prevent wrongful convictions and otherwise ensure the integrity of evidence.⁶ These incentives have proven significant for the advancement of state policies to prevent wrongful convictions. Indeed, the Coverdell program forensic oversight requirements have created in states nationwide entities and processes for ensuring the integrity of forensic evidence in the wake of the forensic scandals that have undermined public faith in forensic evidence. ***The Coverdell program oversight requirements are essential to ensuring the integrity of forensic evidence in the wake of identified acts of forensic negligence or misconduct.***

To the extent these programs and incentives would no longer exist, or be diminished, if delivered in block grant form, the Innocence Project would recommend that they not be so delivered and that Congress maintain and fund the individual programs in order to preserve their important incentive and performance requirements. Doing away with these requirements would thwart the intent of Congress, which was to provide funding only to states that demonstrate a commitment to preventing wrongful convictions in those areas.

Conclusion

Thank you so much for your time and consideration of these important programs, and the opportunity to submit testimony. We look forward to working with the Subcommittee this year.

⁶ Of course, the other Section 413 Programs once reauthorized and appropriated under Section 413 will add to these incentives.



The safety and security institute of the commercial explosives industry since 1913

March 10, 2011

The Honorable Frank R. Wolf
Chairman
Subcommittee on Commerce, Justice, Science and Related Agencies
U.S. House of Representatives
Washington, DC 20515

RE: FY 2012 Appropriations for the Bureau of Alcohol, Tobacco, Firearms & Explosives

Dear Mr. Chairman:

On behalf of the Institute of Makers of Explosives (IME), I am submitting a statement for inclusion in the Subcommittee's hearing record regarding the proposed FY 2012 budget for the Bureau of Alcohol, Tobacco, Firearms & Explosives (ATF) regulatory program for the commercial explosives industry.

Interest of the IME

IME is a nonprofit association founded in 1913 to provide accurate information and comprehensive recommendations concerning the safety and security of commercial explosive materials. IME represents U.S. manufacturers, distributors and motor carriers of commercial explosive materials and oxidizers as well as other companies that provide related services. The majority of IME members are "small businesses" as determined by the U.S. Small Business Administration.

Millions of metric tons of high explosives, blasting agents, and oxidizers are consumed annually in the United States. These materials are essential to the U.S. economy. Energy production, construction, and other specialized applications begin with the use of commercial explosives. IME member companies produce ninety-nine percent of these commodities. These products are used in every state and are distributed worldwide. The ability to manufacture, distribute and use these products safely and securely is critical to this industry.

The production, distribution, transportation, storage and use of explosives are highly regulated by a myriad of federal and state agencies. ATF plays a predominant role in assuring that explosives are identified, tracked, and stored only by authorized persons. We have carefully reviewed the Administration's FY 2012 budget request for ATF, and have the following comments about its potential impact on the commercial explosives industry.

ATF's Explosives Regulatory Program Budget Request

The administration's FY 2012 budget request proposes to decrease resources devoted to ATF's regulation and oversight of explosives industries by 23 FTE, a six percent reduction, from 383 FTE and 360 FTE, for a savings of \$5.9 million.¹

¹ FY 2012 ATF Budget Submission, page 41.

We understand the current urgency to address the federal budget deficit. We understand the shared sacrifice that all segments of the government are asked to make to help the economy recover by spurring job growth and investment. Yet, members of Congress understand that budgetary cuts to the bureaucracy should not cut essential services. By law, ATF must inspect explosives licensees and permittees at least once every three years. During the last full fiscal year, ATF conducted over 4,000 such compliance inspections and identified 1,620 public safety violations.² In addition to this workload, ATF must process applications for new explosives licenses and permits as well as those submitted for renewal of existing licenses and permits. Nearly 3,000 applications were processed during the last full fiscal year.³ The agency must also conduct inspections of all new applicants. Over 1,000 new applicants needed to be inspected last fiscal year.⁴ These are significant workload indicators. Without approved licenses and permits from ATF, the industry would collapse and with it major segments of the economy that are dependent on these products and materials.

At the same time, the U.S. Government Accountability Office (GAO) recently released a report identifying unnecessary duplication in government programs.⁵ Among the programs highlighted were those of the ATF and the Federal Bureau of Investigation (FBI) that relate to explosives incidents. As early as 2004, duplication and overlap were identified in the areas of investigations, training, information sharing and use of databases, and laboratory forensic analysis. While plans for consolidating and eliminating redundancies were begun last November, the GAO recommended that Congress monitor progress to ensure that “the plans have their intended effect and are enforced.”

The costs attributable to these duplicative explosives enforcement activities far exceeds the cost-savings ATF expects to realize from the cuts to its regulatory compliance program for the explosives industry. As the Subcommittee considers ATF’s budget request, we ask that ATF’s ability to perform its regulatory oversight of the explosives industry in a timely fashion not be compromised in the push for fiscal discipline when other areas of duplication and overlap are ripe for reform.

ATF’s Regulatory Workload

In the last ten years, ATF has issued nine rulemakings of importance to IME (including two interim final rules). It has finalized three and withdrawn one. Of the five rulemakings still pending, the oldest dates to 2001. In the absence of a process to ensure timely rulemaking that is capable of keeping up with new developments and safety practices, industry must rely on interpretive guidance and variances from outdated requirements in order to conduct business. While we greatly appreciate the Bureau’s accommodations, these stop-gap measures do not afford the continuity and protections that rulemaking would provide the regulated community, nor allow the oversight necessary to ensure that all parties are being held to the same standard of compliance. These regulatory tasks are critical to the lawful conduct of the commercial enterprises that the Bureau controls. ATF should be provided the resources to make timely progress in this area.

Industry Standards

We take seriously the statutory obligation that ATF take into account industry’s standards of safety when issuing rules and requirements.⁶ We continue to fulfill this obligation through our development of industry best practices for safety and security, membership in relevant standard-setting organizations, and active participation in forums for training. We have offered ATF recommendations that we believe will enhance

² FY 2012 ATF Budget Submission, page 35.

³ FY 2012 ATF Budget Submission, page 35.

⁴ FY 2012 ATF Budget Submission, page 35.

⁵ “Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue,” GAO, March 2011, pages 101-104, <http://www.gao.gov/new.items/d11318sp.pdf>.

⁶ 18 U.S.C. 842(j).

safety and security through participation in the rulemaking process, in the Bureau's important research efforts, and in other standard-setting activities.

In this regard, IME has spent years developing and validating a credible alternative to strict interpretation of quantity-distance tables used to determine safe setback distances from explosives. IME collaborated with the Department of Defense Explosives Safety Board and Canadian and U.S. regulatory agencies, including ATF. The result is a windows-based computer model for assessing the risk from a variety of commercial explosives activities called IMESAFAFR.⁷ Not only can IMESAFAFR determine the amount of risk presented, but it can also determine what factors drive the overall risk and what actions would lower risk, if necessary. The probability of events for the activities were based on the last 20 years experience in the U.S. and Canada and can be adjusted to account for different explosive sensitivities, additional security threats, and other factors that increase or decrease the base value. Following this effort, ATF is starting to recognize that this powerful assessment tool has potential to help the Bureau meet its statutory mandate to ensure safety through quantity-distance limitations. ATF has taken advantage of opportunities to partner with IME and is evaluating existing locations with this risk-based approach. The benefits of risk-based modeling should be recognized and ATF should be provided resources to develop policies that allow the use such models to meet regulatory mandates.

Leadership

The resolution of these issues may have to wait the appointment of a new ATF director. The Bureau has been without a director since August 2006. We support President Obama's nomination of Andrew L. Traver for this position.⁸ We hope that the Senate will timely act on this nomination. The Bureau has been too long without permanent leadership.

Conclusion

The manufacture and distribution of explosives is accomplished with a remarkable degree of safety and security. We recognize the critical role ATF plays in helping our industry achieve and maintain safe and secure workplaces. Industry and the public are dependent on ATF having adequate resources to fulfill its regulatory responsibilities. It is up to Congress and, in particular, this Subcommittee to ensure that ATF has the resources it needs. We strongly recommend full funding for ATF's explosives program.

Respectfully,



Cynthia Hilton
Executive Vice President

⁷ IMESAFAFR was built on the DDESB's software model, SAFER. The DDESB currently uses SAFER and table-of-distance methods to approve or disapprove Department of Defense explosives activities.

⁸ Received in the Committee on the Judiciary, United States Senate, January 05, 2011, PN44.



**WRITTEN TESTIMONY OF JEFFREY CARLISLE, EXECUTIVE VICE PRESIDENT,
REGULATORY AFFAIRS & PUBLIC POLICY, LIGHTSQUARED**

March 11, 2011

The Honorable Frank Wolf
Chairman
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Committee on Appropriations
Washington, DC 20515

The Honorable Chaka Fattah
Ranking Member
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Committee on Appropriations
Washington, DC 20515

Dear Chairman Wolf and Ranking Member Fattah:

LightSquared's mission is to revolutionize the U.S. wireless industry. Through the creation of the first-ever wholesale-only integrated nationwide 4G-LTE network and satellite coverage, LightSquared plans to offer people the speed, value, and reliability of universal broadband connectivity, wherever they are in the United States. By 2015, LightSquared expects to cover at least 92 percent of people in the U.S. with its wireless broadband network and will offer the entire nation wireless coverage through its satellite.

LightSquared's network will be especially useful for public safety and critical infrastructure industry users. Because the satellite component can provide reliable connectivity, first responders can maintain communications and coordinate relief efforts in the event of a disaster. Meanwhile, LightSquared's 4G-LTE network will help meet the growing broadband communications needs of public safety and critical infrastructure industry users.

LightSquared has already invested well over a billion dollars to build its satellite network and create devices capable of communicating with the satellite and ground

networks. . LightSquared plans to invest more than \$10 billion in network infrastructure, deployment and operations over the next 8 years and will support 16,000 American jobs in each year over the network buildout.

LightSquared's planned services will be especially critical in unserved and underserved rural and tribal locations. The just-announced partnership with Open Range Communications, a broadband wireless provider of Internet and digital phone service to rural American communities, will enable LightSquared to serve consumers who today have no such communications access.

The partnership represents a major step to fulfilling the promise of the FCC's National Broadband Plan. As stated in the National Broadband Plan, "[b]roadband can and must serve as a foundation for long-term economic growth, on-going investment and enduring job creation. " This partnership will demonstrate the reality of this goal as it is expected to provide benefits to consumers, businesses, healthcare, tribal organizations, public safety and other government users located in or travelling to rural communities and who are seeking access to the latest generation of mobile services.

LightSquared's business model will revolutionize the industry by providing the opportunity for a diverse group of customers, including retailers; wireline and wireless communication service providers; cable operators; device manufacturers; web players; content providers; and many others, offering them the opportunity to sell to their customers wireless broadband services on the LightSquared network. Through its wholesale-only business model, those without their own wireless network or who have limited geographic coverage or spectrum will be able to develop and sell their own devices, applications, and services using LightSquared's open 4G network – at a competitive cost and without retail competition from LightSquared. Because it is a completely open network, partners can develop their own devices, applications, and services that use the LightSquared network.

Because of this business model, LightSquared is not just bringing one competitor to the marketplace – it is enabling dozens of competitors to bring broadband wireless to American consumers.

Like all spectrum holders, LightSquared has an obligation to operate properly within its band, and LightSquared takes that responsibility very seriously. LightSquared has been working collaboratively with the FCC, NTIA, federal spectrum holders and the GPS community since 2003 to ensure that the technologies can co-exist and has engineered its network to meet or exceed every FCC requirement. A Technical Working Group has been formed, co-chaired by Jeff Carlisle of LightSquared and Charlie Trimble, founder of Trimble Navigation and Chairman of the US GPS Industry Council. This Technical Working Group is submitting monthly reports to the FCC detailing its progress, with a final report to be submitted by June 15. We will launch operations in our band only when this process is completed to the satisfaction of the FCC, in consultation with NTIA and federal users.

For further information about LightSquared, please go to www.LightSquared.com.

Sincerely,

_____/s/____

Jeffrey Carlisle

Executive Vice President, Regulatory Affairs & Public Policy



Statement of Bruce J. Stedman, Executive Director of the Marine Fish Conservation Network
For the Record of the House Subcommittee for Commerce, Justice, Science, and Related
Agencies of the House Appropriations Committee Regarding the FY 2012 Budget
For the National Oceanic and Atmospheric Administration

March 11, 2011

On behalf of the nearly 200 member groups nationally who are dedicated to conserving marine fish and achieving sustainable fisheries, the Marine Fish Conservation Network (Network, or MFCN) submits the following testimony for the record on the Fiscal Year (FY) 2012 budget for National Marine Fisheries Service (NMFS) within the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce. For FY 2012, the Network is asking the Subcommittee to increase funding for core fisheries conservation and management programs \$21.2 million above the President's FY 2012 request in the following program areas:

NETWORK RECOMMENDATIONS FOR CORE FISHERIES PROGRAMS, FY 2012

NOAA/NMFS Fisheries Research and Management	FY 2010 Enacted	President's FY 2012 Request	MFCN FY 2012 Request
	Million \$	Million \$	Million \$
Expand Annual Stock Assessments	50.9	67.1	67.1
Fisheries Statistics/MRIP	21.0	24.4	24.4
Fishery Observers	41.0	39.1	50.0
Fisheries Cooperative Research	17.5	7.2	17.5
Survey and Monitoring Projects	23.7	24.2	24.2

Information provided by these core programs reduces scientific and management uncertainty and enables fishery managers to make informed decisions when setting annual catch limits (ACLs), a new requirement for all U.S. fisheries in 2011 to provide a transparent accounting mechanism for measuring compliance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requirements to prevent overfishing and rebuild overfished stocks.¹

The Network supports the President's requested increase of \$16.2 million above the FY 2010 funding level to expand annual stock assessments as well as the \$3.4 million increase for Fisheries Statistics to expand recreational fishery monitoring activities – both are critical to successful ACL implementation in U.S. fisheries in 2011 and beyond. However, the Network also seeks additional funding of \$9.0 million above FY 2010 for Fishery Observers and seeks level funding for Cooperative Research at the FY 2010 level of \$17.5 million, for the reasons

¹ Senate Report 109-229 on S. 2012 (April 4, 2006), p. 21.

provided below. Investments in these interrelated activities provide the basis for informed decision-making in the ACL-setting process. That information is not only essential for stewardship of the nation's fisheries resources, but for sustaining businesses and communities whose livelihoods depend on healthy fisheries.

In recent years, additional resources have been appropriated to begin implementing the reforms of the Magnuson-Stevens Reauthorization Act of 2006 (MSRA) aimed at ending overfishing. As a result, significant progress is being made in putting the nation's fisheries on a more sustainable footing. Regional fishery management councils are on track to implement a system of ACLs and accountability measures for all fisheries in 2011, the MSRA's deadline. Maintaining adequate investments in data collection, catch monitoring and stock assessments will be critical to the ultimate success of ACLs in ending overfishing and realizing the full potential of our nation's fisheries.

The Network recognizes the need for fiscal prudence in these times, but failure to maintain adequate public investments in the responsible management of the nation's fisheries has resulted in depleted fisheries and enormous losses of potential yield, revenues, and jobs in coastal economies.² Therefore, we respectfully request increases in the following NMFS Fisheries Management and Research programs for activities supporting baseline data collection, fishery monitoring and stock assessment science which provide the basis for sustainable management and informed decision-making in the catch-setting process:

Expand Annual Stock Assessments

MFCN Request: \$67.1 million

The requirement of the MSRA for Annual Catch Limits (ACLs) in all U.S. fisheries by 2011 increases the need for timely, reliable fisheries data and stock assessments. Quantitative stock assessments provide the scientific basis for setting numerical catch limits that prevent overfishing and optimize yield. Absent significant new funding for stock assessment development, many fishery ACLs will have to be specified without assessments or using assessments that are infrequently updated. Without a current knowledge base, fishery scientists and managers will have to exercise greater caution to account for higher uncertainty and risk. Investments in stock assessments reduce uncertainty and enable managers to increase fishing opportunities safely.

The President's FY 2012 budget requests a significant increase of \$16.2 million over the FY 2010 funding level of \$50.9 million to expand annual stock assessments. Increased investments in stock assessment science are needed to meet the near-term needs of ACL implementation and to achieve the long-term goal of developing stock assessments for all 230 major stocks in the Fish Stock Sustainability Index (FSSI), which serves as a yardstick of NMFS's progress in

² For instance, see: Somma (2003), Pew Oceans Commission (2003), Sumaila and Suatoni, (2005), Dyck and Sumaila (2010).

preventing overfishing and rebuilding overfished stocks.³ As of 2010, 132 of the FSSI stocks had adequate assessments. Additional increases in funding will be required in future years to achieve the goal of providing adequate assessments for all major stocks. The President's FY 2012 request of \$67.1 million for expanded stock assessment development will provide critically needed resources to assess priority stocks in the ACL implementation process, including additional resources in the Southeast Region to establish assessment benchmarks for post-spill management of the Gulf of Mexico fisheries.

Because the information provided by stock assessments is so vital to the MSA's near-term requirements and long-term goals for sustainable management of U.S. fisheries, the President's requested increase of \$16.2 million to expand annual stock assessments should receive the highest priority for funding at the level of \$67.1 million in FY 2012.

Fisheries Statistics

MFCN Request: \$24.4 million

The President's FY 12 budget requests \$24.4 million for the Fisheries Statistics line, an increase of \$3.4 million over the FY 10 enacted level. The increase is intended for the Marine Recreational Information Program (MRIP), the new and improved national data collection program for recreational saltwater fisheries that is intended to address the shortcomings identified in a review of existing recreational fisheries data collection programs by the National Research Council (NRC 2006).⁴ In response to this NRC review and new requirements in the reauthorized Magnuson-Stevens Act of 2006,⁵ NMFS has launched a number of initiatives to implement improved recreational fisheries survey methods and is also completing the implementation of a new saltwater angler registry. Additional funding will be necessary to improve the precision and timeliness of recreational catch statistics for use in fishery management. Current survey programs collect recreational fishery data in 2-month intervals but more frequent monthly reporting of catch data may be desirable in some fisheries to manage recreational ACLs on a more real-time basis. Additional funding will help make that possible.

The MRIP was funded at a level of approximately \$9 million in FY 2010, through the Fisheries Statistics and the Fisheries Research and Management budget lines. NMFS has indicated that approximately \$20 million is needed to fully implement the program, and the Fisheries Statistics line has been identified as the appropriate place for additional funding for MRIP. The President's FY 2012 budget requests a funding level of \$24.4 million for Fisheries Statistics, reflecting an increase of \$3.4 million over the FY 2010 funding level to increase the MRIP budget from \$9.0 million to \$12.0 million.

As an incremental step toward full implementation of the Marine Recreational Information Program that will provide additional resources for ACL implementation in recreational saltwater

³ The 230 FSSI stocks represent less than half of the stocks reported to Congress annually but comprise a large (>90%) share of the total annual U.S. catch.

⁴ National Research Council (2006). *Review of Recreational Fisheries Survey Methods*.

⁵ MSA 16 U.S.C. § 1881(g).

fisheries, the President's requested funding level of \$24.4 million for Fisheries Statistics is strongly recommended in FY 2012.

Fishery Observers and Training

MFCN Request: \$50 million

At-sea observers are the most reliable source of information about fishery catch, bycatch and at-sea discards, and they are a central pillar of the national fishery bycatch strategy.^{6,7} Observers also monitor the incidental entanglement and mortality of protected marine mammals, seabirds and sea turtles. The President's FY 2012 budget requests \$39.1 million to the national fishery observer program, a cut of nearly \$2 million from the enacted FY 2010 level. Current funding supports at-sea observer programs in 40 broadly defined fisheries nationwide, only 23 of which are considered by NMFS to have adequate levels of observer coverage. The agency's goal for observer coverage is approximately 85 fisheries, based on a 2004 national bycatch report.⁸ In light of the inadequate observer coverage in a majority of U.S. fisheries, the President's FY 2012 request for fishery observers would mean a significant loss in the already limited capability of the program to deploy observers where needed.

In 2003, NMFS estimated that the observer program required at least \$100 million above the FY 2003 funding level to meet its goals for coverage via the national observer program.⁹ Since then, mandates for ACLs and increased numbers of limited access privilege programs (also known as "catch shares") have increased the demand for information provided by at-sea observers. The recent restructuring of the North Pacific groundfish observer program (NPGOP) will also require additional federal support to supply start-up funding in the initial phase of the program until industry fees have been collected in sufficient amounts to cover the remaining program costs. Increases in funding for the NMFS observer program are vital to the success in achieving the MSA's multiple objectives for reducing bycatch, preventing overfishing and ensuring accountability. These increases will also create jobs for an expanded professional observer corps.

To achieve adequate observer coverage in all high-priority fisheries and provide reliable estimates of catch and bycatch for management purposes in the ACL-setting process, the Network recommends an appropriation of at least \$50.0 million (\$9.0 million above the FY 2010 enacted level) for fishery observers and observer training in FY 12.

⁶ NOAA/NMFS, *Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs*, NOAA Technical Memorandum NMFS-F/SPO-66, October 2004. 108 p.

⁷ National Standard 9 (NS9) of the MSA requires fishery managers to minimize bycatch and to minimize the mortality of bycatch that cannot be avoided (16 U.S.C. 1851(9)). Section 303 of the MSA requires Fishery Management Plans to establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery, and to include measures consistent with NS9 to minimize bycatch (16 U.S.C. §§ 1853(11)).

⁸ See NOAA FY 10 Budget Request (Blue Book), Exhibit 13, p. 245. The full list of fisheries prioritized for observer coverage in 2004 can be found in: U.S. Dep. of Commerce/NOAA/NMFS, *Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs*, NOAA Technical Memorandum NMFS-F/SPO-66, October 2004. 108 p.

⁹ U.S. Department of Commerce/NOAA/NMFS (2003), NOAA's National Marine Fisheries Service Requirements for Improved and Integrated Conservation of Fisheries, Protected Resources and Habitat. 57 pp.

Cooperative Research**MFCN 2012 Request: \$17.5 million**

The Omnibus Appropriations Act of 2010 funded Cooperative Research at NOAA's requested FY 2010 level of \$17.5 million to expand a regionally based competitive grants program that funds partnerships between fishermen and scientists to advance the science and management of the nation's fisheries. Grants awarded to qualifying projects leverage the expertise fishermen to support the acquisition of fishery data, improve our understanding of fish populations, and test innovative fishing gear designs and other technologies which can increase fishery performance, reduce operational costs, enhance safety at sea and save fishing jobs in coastal communities.¹⁰ Cooperative research partnerships can increase the confidence of fishermen in data used in decision-making and create employment opportunities in fishing communities. The President's FY 2012 request would cut \$10.3 million from the FY 2010 enacted funding level for Cooperative Research. The Network recommends that funding for this budget line should, at the least, be maintained at the enacted FY 2010 level.

Substantial new opportunities for cooperative research remain untapped, and therefore the Network recommends an appropriation of \$17.5 million for Cooperative Research in FY 2012.

Survey and Monitoring**MFCN Request: \$24.2 million**

The Omnibus Appropriations Act of 2010 funded this program at NOAA's requested FY 2010 level of \$23.7 million, and the President's FY 2012 budget requests \$24.2 million. This budget line supports the collection of fishery-independent resource survey data as well as fishery catch data needed for developing and updating stock assessments in some of the nation's most iconic and important fisheries, including red snapper, bluefin tuna, bluefish, striped bass, and Alaska pollock.

The President's FY 2012 request would maintain essential resource survey and monitoring programs that support the management of highly valued fisheries, therefore an appropriation of \$24.2 million for Survey and Monitoring is recommended for FY 2012.

Thank you for considering our request,



Bruce Stedman, Executive Director
Marine Fish Conservation Network

¹⁰ For program details, go to: <http://www.st.nmfs.noaa.gov/st4/NationalCooperativeResearchCoordination.html>.

SUBJECT: "OWT"

TESTIMONY OF RICHARD NEWTON HILL, JR., FORMER PRESIDENT/OWNER OF HILL EQUIPMENT CORP., 2416
DELAWARE AV., KENNER, LOUISIANA

CURRENT ADDRESS: 1960 EMMITSBURG RD., GETTYSBURG, PA. 17325

U.S. HOUSE OF REPRESENTATIVES SUB COMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED
AGENCIES

REGARDING THE AGENCY NASA

THE ALLEGED ATENOTED SABOTAGE OF THE SPACE SHUTTLE DISCOVERY AND THE SABOTAGE OF
THE SPACE SHUTTLE COLUMBIA

MATTERS VITAL TO OUR NATIONAL DEFENSE!

In the mid to late nineteen seventies (1970's), I was in NASA, MICHOUD in New Orleans, Louisiana.
Equipment similar to that which I sold to NASA, while I was president and owner of Hill Equipment
Corporation, 2416 Delaware Av., Kenner, Louisiana, was used I allege to sabotage the Space Shuttle
Columbia (See www.sabotagecolumbia.info 2nd OPEN LETTER TO STRATCOM and AMENDMENT TO 2nd OPEN
LETTER TO STRATCOM).

The Saboteurs arranged for me to be thrown in prison 16 times for total of 5 years on bogus
misdemeanor charges in Imperial Polk County in the State Of Florida, including, but not limited to, being
locked up in Chattahoochee medium security State Prison without being tried or convicted of any crimes,
where attempts were made to have me beaten or drugged (poisoned) to death. This was done to get me
out of the way so that the Saboteurs and Accomplices could work without interference from me. This
caused me to lose my family, businesses of over 25 years and three (3) million dollars in assets that I had
accumulated. These contrived and bogus assaults by Florida Law Enforcement Officials continued until I
wound up so broke and ruined I was sleeping in alleyways in "Polcat County", Florida. The remaining
description of the alleged sabotage of the Space Shuttle Columbia can be obtained from my website
www.sabotagecolumbia.info by downloading my 2010 "OWT" to the U.S. SENATE SUBCOMMITTEE ON
COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES, my 2nd OPEN LETTER TO STRATCOM, and my
amendment to the 2nd OPEN LETTER TO STRATCOM, all of which are available from this site and reported to
the U.S. Senate last year. I will cite one quotation from my testimony of 2010 : "To ignore this allegation or
"sweep it under the carpet" invites continuing and similar acts not only in the space industry, but
throughout American Business and Politics, until We, the People of the United States and the free world are
beaten to a pulp with corruption and incompetency! You, Ladies and Gentlemen, are after all – The
Subcommittee on "COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES"! Are you not? If this is not
stopped and exposed here, then where else short of revolution do the People of the United States and the
free world have to turn? John Fitzgerald Kennedy stated long ago that: "If we make peaceful revolution
impossible, we make violent revolution inevitable". We now have the alleged attempt to sabotage the
Space Shuttle Discovery!"

I am now 70 years old, am living on \$1,375.00 per month social security. I lost my businesses
which I had spent my lifetime building up, by being thrown into Florida State Prison, time after time on
bogus charges, without being tried or convicted of any crime with the exception of one bogus conviction for
child abuse (see www.sabotagecolumbia.info). The strategy of organized crime is to block my every move

while having me die from old age or an arranged "accident" while they keep me pinned down. Now that I have managed to stay out of the grasp of organized crime and have petitioned the U.S. Senate they now have gone after Adam Daniel Hill, born in my marriage to Marie Hill and alleged to be the son of Imperial Polk County Deputy Sheriff Sergeant Harold Piper. I filed my "OWT" with the U.S. Senate on April 1, 2010. On August 8, 2010, Adam was arrested on the bogus charge of Domestic Violence against his mother, Marie Hill, signed only by Lakeland Police Officer Quackenbush and not Marie Hill. Adam Hill has now been in jail since November 23, 2010 on a canopy of bogus charges, Florida 10th Judicial Circuit Case No. CF008255A stemming from the first bogus charge!

I allege the true purpose behind these bogus charges against Adam is an attempt to lure me back to Florida where I would be murdered to cover up a host of crimes including the assassination of President John F. Kennedy. Failing that I fear Adam Daniel Hill will be murdered in such a manner that it will appear to be an accident and this is the true purpose behind this bogus Domestic Violence Charge allegation. Adam Daniel Hill is alleged to be the son of Imperial Polk County Sgt. Deputy Sheriff Harold Piper. Adam Hill's murder is being planned to "GET RID OF THE EVIDENCE"! Adam Hill has now been in jail since November 23, 2010 on a canopy of bogus charges stemming from the first bogus charge!

The only opportunity that I can see for me to overcome this predicament, is to publish my story and books vetted in court, Congress of the United States, or through news media! As this involves our nation's and the free world's security, I pray that you will take note of what I state; and arrange to hear my testimony before I am too old to be coherent or am murdered!! The website - www.sabotagecolumbia.info is completely accessible and still having more content added to it. I will now address the attempted sabotage of the Space Shuttle Discovery

SPACE SHUTTLE DISCOVERY'S MAIN TANK – CALL IT WHAT IT WAS – SABOTAGE!

THE MAIN TANK WAS A CRIME SCENE; IT SHOULD HAVE BEEN SHIPPED BACK TO NEW ORLEANS AS EVIDENCE FOR THE PROSECUTION OF THE SABOTUERS AND FOR FURTHER INVESTIGATION!

TO USE THIS TANK IN THE DISCOVERY'S LAUNCH WAS "DESTRUCTION OF EVIDENCE"

When provided with the Method, Means and Motive of a crime the prosecuting authorities are obligated by law to arrest and prosecute the criminals for what they are – COLD BLOODED MURDERING TRAITORS TO THIS COUNTRY AND TO THE PEOPLE THAT ELECTED THEM!

ALLEGATIONS

METHOD: The same organized crime groups involved in the assassination of President John F. Kennedy, Robert Kennedy, the sabotage of the Space Shuttle Columbia, the assassination of her crew, my 16 bogus arrests and incarcerations in Florida, Adam Daniel Hill's current incarceration in Polk County in an attempt to either draw me back to Florida or failing that murder him to "get rid of the evidence" and a host of other crimes, contractors at NASA, MICHOUD, New Orleans, Louisiana, by use of bribery and blackmail and general corruption perform these acts of treason and sabotage. (See www.sabotagecolumbia.info and www.sabotagecolumbia.com)

Means: contractors provide 94 off specification defective stringers (re-enforcement ribs) necessary to keep the main tank from blowing up during launch (see <http://www.space.com/10608-space-shuttle-discovery-launch-date.html>). These were only found because the launch was delayed by a hydrogen leak upon filling the tank.

MOTIVES: There are a multitude of motives, business, military and political:

1. BUSINESS MOTIVE: To drive the final nail into the coffin of the Space Shuttle Program and enhance the Orion Space Capsule now being made at the same NASA Michoud, New Orleans, Louisiana Facility (see http://www.space-travel.com/reports/Lockheed_Martin_Ships_Out_First_Orion_Spacecraft_999.html).
2. MILITARY MOTIVES: To make sure the Russian Buran type Space Shuttle has no competition in the race to Mars. The Buran type Shuttle is presently equipped with 4 large turbo-jet engines enabling to take off and land under its' own power. (see http://www.k26.com/buran/Info/A_Comparison/Visual_Comparison_/visual_comparison.html)
3. By substituting rocket engines for the turbo-jet engines the Russians already have a space craft capable of landing and taking off from the Moon or Mars superior to the Orion! The Russian President now admits that Russia needs to develop its' own space program to go to Mars. (see http://www.spacedaily.com/reports/Medvedev_Calls_For_Russian_Space_Exploration_Program_999.html)

CLEARLY STATED –

THE FIRST COUNTRY TO PUT A LASER CANNON IN ORBIT OR ON THE SURFACE OF MARS WILL RULE MARS.

THE FIRST COUNTRY TO PUT A BATTERY OF LASER CANNONS ON MARS WILL RULE THE EARTH!

LASER CANNONS ALREADY EXIST AND CAN SHOOT CLEAR ACROSS THE UNIVERSE!

POLITICAL MOTIVES AND ALLEGATIONS: Edwin Edwards, the former Governor of the State Of Louisiana and successor to Louisiana Governor John J. McKeithen who participated in the Kennedy Assassinations, has currently been released from prison and serving the remainder of his sentence on probation at his daughter's house in Denham Springs, Louisiana. Edwards is a participant in the cover up of the Kennedy Assassinations, the sabotage of the Space Shuttle Columbia and the assassination of her crew in this protracted warfare!

The original launch date for the Space Shuttle Discovery was November 5, 2010. If the launch had occurred on this date, Edwards would have had the perfect alibi again of being in prison during this planned sabotage as well as for the sabotage of the Space Shuttle Columbia!

BACKGROUND INFORMATION

From 1981 to 1984 I lived with Benita Peccochenino Hoffmann; currently residing at **REDACTED** **REDACTED**; whose daughter, Donna Hoffmann Edwards is married to the nephew of then Governor Edwin Edwards. In 1981 Benita invited me to Shreveport to meet her children and their husbands over the weekend which I did. After meeting them, she asked me to stay over to Monday and

meet Marion Edwards, brother of then Governor Edwin Edwards. I was preparing to move my business headquarters to Dallas, Texas and had no interest in Louisiana Politics. I declined the offer while questioning her as to why Governor Edwin Edwards brother and not the governor himself? She replied: "Edwin Edwards and his son Stephen are not smart enough to run the family businesses so they have agreed to take a "fall" while Marion and his son, her son-in-law, Joey Edwards ran the family businesses"! Benita's deceased father, an Italian immigrant, had been the head of the Mafia in Cairo, Illinois and the Edwards's family business is the selling of drugs such as cocaine, etc.!

This is "Protracted Warfare"! Benita had been sent to me by the Louisiana Mafias with the consent of her in-law, Governor Edwin Edwards to gain control of my business in preparation of the sabotage of the Space Shuttle Columbia. By the time the sabotage occurred records would have been forged laying the blame of the sabotage on me!

Excerpt from my 2010 U.S. Senate OWT,

SABOTAGE OF THE SPACE SHUTTLE COLUMBIA IS MATTER VITAL TO OUR NATIONAL DEFENSE!

here are two (2) sources of foam shedding-

1. NASA's first space shuttle launch was November 12, 1981. This coincides directly to the time that Environmental Protection Agency came out with guidelines forcing manufacturers of urethane to cease using procedures they had been using to make urethane and forced them to come up with alternative formulas.

This was disastrous for many years in private sector, as new formulations would not hold up in heat, sunlight, etc. Voluminous Space Shuttle foam shedding was product of this EPA ruling and lack of a protective outer coating of paint on the foam. This in turn was used to deem the Space Shuttles as "UNSAFE" and scheduled for retirement without replacement vehicle available. This 1st area of foam shedding was "diversion" to cover up the 2nd source of foam shedding which was sabotage! Elimination of protective coating of paint over the foam in later flights has aggravated this situation.

2. The 2nd source of foam shedding, which caused total of 12 foam strikes emanating from left bipod was sabotage! By foreign objects being placed under the foam or foam integrity was somehow tampered with at NASA Michoud, New Orleans, using personnel elevators in the foam spray silo. All recorded foam strikes, including, but not limited to, ones on Challenger and Atlantis, are from foam coming from left bipod area. Personnel elevators in the foam application silos are offset to the left, therefore, Saboteurs or Accomplices could have worked without fear of being observed. These left offset platforms are the "Smoking Guns!" There is no reason for these platforms to be offset except for concealment to commit sabotage. There is no record of foam strikes from right bipod area. All incidents, with exception of two, occurred on the Columbia. (Not mentioned in the original Senate OWT is the name of the Vice President Of Sales at Champion Hoist : Jerald C. Kirkman, approximate age today is 81, current address **REDACTED**

REDACTED Mr. Kirkman is the person who informed me of the NASA MICHOUUD order and accompanied me to NASA MICHOUUD to introduce me to the personnel necessary to secure the order which had already been laid out by Kirkman with the platform offset to the right!!).

CAIB report states there was no evidence of sabotage. Yet, CAIB report cannot explain strikes of foam from left bipod only, and the reason for Columbia receiving 10 of the 12 hits on the Shuttles! External fuel tanks are expendable and burn up upon reentry after use. The external fuel tanks are dedicated at time of manufacture to particular shuttle. For internal NASA reasons sometimes a different shuttle is assigned after the manufacture of the external main tank. A records search may prove that these two exceptions were originally intended for the Columbia. If the records search proves this to be correct there is no question this was sabotage and was planned before the Space Program was even started, as a form of "Protracted Warfare" by the Russians and Chinese. This is the prime motive behind the assassination of President John Fitzgerald Kennedy by Russia, the PLA, communist bloc countries and their "Organized Crime" cohorts. Communists have rightfully concluded if they control space, they will control the world. (see 2nd open letter to STRATCOM and its' amendment at www.sabotagecolumbia.info).

THE MOTIVES FOR THE SABOTAGE OF THE SPACE SHUTTLE COLUMBIA!

Destruction of the Columbia and loss of her crew was the reason that President George W. Bush gave for scheduling Shuttles for retirement during his presidency! Prior to the alleged sabotage of the Columbia, NASA had planned to deploy Space Shuttles until 2022! Because of President George W. Bush's original order, Shuttles are being retired after mission STS-133.

After this mission the U.S. will be totally reliant on Russian Soyuz Space capsule and Russian Rocket Delivery System to reach the "Strategic Focal Ground" of the I.S.S. President Obama has already purchased 24 passages on future Russian Launches to the Space Station for U. S. Astronauts and Congress is approving purchase of one Soyuz Space Capsule.

This arrangement was to continue until private industry had finished developing now non-existent and unnecessary Space Shuttle. The now defunct Orion was scheduled to be ready in 2014. The International Space Station originally planned life expectancy was just to 2015! When one realizes sabotage was at work, it doesn't take much imagination to realize that we will be permanently dependant on the Russians to travel to the I.S.S. and then Mars!

I, Richard Newton Hill, Jr., with explicit reservation of rights, having clean hands, declare in good faith to be of age of majority, one capable of making above affidavit according with said above. Further, I certify under penalty of perjury under the laws of the United States of America that the foregoing affidavit is true and correct, 28 USC § 1746(1), to best of my knowledge, except as to matters stated to be on information and belief, and as to those, believe those to be true; acknowledged and executed this Eleventh Day of March, A.D. Two-thousand Eleven.



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**Official Written Testimony for programs under the National Oceanic and Atmospheric
Administration (NOAA) for Fiscal Year 2012**

**Submitted To
Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations
United States House of Representatives
Washington, DC**

**Submitted By
National Estuarine Research Reserve Association
Rebecca K. Roth, Executive Director
March 11, 2011**

The National Estuarine Research Reserve Association (NERRA) is a not-for-profit scientific and educational organization dedicated to the protection, understanding, and science-based management of our nation's estuaries and coasts. Our members are the 28 reserves that make up the National Estuarine Research Reserve System (NERRS). Established in 1987, NERRA facilitates its members' mission to protect our nation's estuaries and to promote conservation-based research, education, and stewardship through the reserves. For Fiscal Year 2012, NERRA strongly recommends the following reserve system programs and funding levels within the National Oceanic and Atmospheric Administration (NOAA):

NERRS Operations	\$28 million
NERRS Land Conservation and Facilities (PAC)	\$7 million

In 28 beautiful coastal locations around our country, 22 states and Puerto Rico have protected in perpetuity over 1.3 million acres of land for education, long-term research, science-based stewardship, recreation and sustainability of the coastal economy. The states have been entrusted to operate and manage NOAA's program as created by Congress in the Coastal Zone Management Act (CZMA) nearly 40 years ago. What sets this program apart from other place-based federal programs, like the National Marine Sanctuaries or National Wildlife Refuges for example, is that the reserves manage a federal partnership program, implemented locally by states or universities.

The reserves have a tremendous positive impact on our economy including work to maintain clean water, keep the seafood and fishing industry viable, and provide communities with practical help and science-based information to address coastal hazards and maintain the area's tourism. Estuaries, where rivers meet the sea, provide nursery ground for many species of

marine life, including more than 75% of the commercial seafood catch. The work at each reserve goes beyond its property boundaries and creates a number of environmental and economic benefits for the communities and regions where they exist. For example, the Mission-Aransas National Estuarine Research Reserve is based in Port Aransas, Texas—an area that generates over \$2.8 billion a year from tourism. In South Carolina, a state that has two reserves, economic impact from healthy natural resources supports one-third of the state's GDP, generating \$30 billion and sustaining 236,000 jobs annually. In the broader scheme, the National Ocean Economics Program found that the 22 coastal States that have reserves employed 40 million people in coastal-related jobs and contributed more than \$2.57 trillion to the national GDP in 2007 (June, 2009).

About the National Estuarine Research Reserve System

Since 1974, beginning with the designation of the South Slough National Estuarine Research Reserve in Oregon, the coastal states and the federal government have collaborated to create a unique network of estuarine areas protected for long-term research and education. The NERRS added its 28th reserve on Lake Superior, Wisconsin in October 2010.

Pursuant to the CZMA, each reserve is chosen because it is a representative estuarine ecosystem able to contribute to the biogeographical and typological balance of the NERRS and because the area within the reserve is protected in perpetuity and is available for suitable public purposes such as education and interpretive use. The reserves are a network of protected areas established for long-term research, education, training, and stewardship.

The NERRS's priorities are developed through a collaborative approach between the states and NOAA to address both national and local concerns. The reserves have a mandate pursuant to Section 315 of the CZMA to support the coastal states through research and education as the states address today's most pressing coastal issues such as impacts from changes in sea and lake levels and increased nutrient loading. The reserves conduct research, monitoring, restoration, education, and training designed to improve our understanding and management of coasts and estuaries. The reserves are public places that have significant local, regional, and national benefits because the lands are publicly owned and function as living laboratories and classrooms that are used by scientists, decision makers, educators, and people of all ages. They are located in pristine coastal areas that serve as "sentinel sites," places where early indicators of environmental change are scientifically measured to provide up-to-date information to local officials and the public to support environmental decision-making.

National Estuarine Research Reserve System (NERRS) Operations

NERRA requests that program operations be funded at a level of \$28 million, an amount \$4.5 million above fiscal year 2010 enacted levels. This funding will be shared by the 28 programs to enable the NERRS to provide science-based practical help to coastal communities and the public to attain clean water, insure resilient coastlines, and create economically and environmentally sound communities. Achievement of these goals will have an enormous economic impact to our National, State, and local economies. This was most recently evidenced in the Deep Water Horizon Oil Spill of 2010, a coastal area that is home to five reserves. We know that the billion dollar tourism and seafood industries depend upon on clean water and during the Deep Water

Horizon Oil Spill crisis the communities and industries along the gulf coast relied on disaster support efforts supplied by some of the five Gulf Coast National Estuarine Research Reserves.

Each reserve receives operation funds from NOAA that are matched by the states and that are used to leverage significantly more private and local investments. While NERRS have made countless contributions to their local communities and the economy, the following are stories from three reserves that demonstrate the breadth of the program's impact.

Jacques Cousteau, New Jersey

Barneget Bay and the Mullica River-Great Bay system are extraordinary economic and natural resources for New Jersey. They create more than \$4 billion dollars in economic benefits annually, and provide many environmental benefits including a vital nursery area for fish and shellfish, a natural storm buffer that protects communities from storm damage, and a sediment filter for runoff from land thereby maintaining wetlands, marshes and water quality. Coastal training programs at the reserve help communities protect these resources with science-based information and strategies to improve stormwater management, reduce erosion, and mitigate risks associated with coastal hazards. This information was key in a recent \$10 million dollar investment to retool parts of the Bay's stormwater retention system.

Chesapeake Bay, Virginia

In Chesapeake Bay, over 3,000 local seventh grade students have had a hands-on approach to learning for the past five years. The educational programs give them a deeper understanding of the Bay while connecting field trips to work they are doing in the classroom throughout the year. As with all the reserves, Chesapeake Bay uses research and good science (such as monitoring protocols, infrastructure, and local vertical control networks) to play a key role in responding to large-scale storms, droughts, sea level rise and salt intrusion.

Weeks Bay, Alabama

Water Quality Monitoring, as part of the NERRS national System-wide Monitoring Program (SWMP), provides very important continuous monitoring data to researchers. This data was used extensively by the State of Alabama to document the impacts of the Deep Water Horizon Oil Spill. The non-profit Land Acquisition for Conservation has utilized federal funds to help acquire 820 acres of coastal wetlands. This acquisition is known locally as the Meadows and was the largest land acquisition in the 25-year history of the Weeks Bay National Estuarine Research Reserve.

NERRS Land Conservation and Facilities (PAC)

NERRA requests \$7 million for land conservation and facilities to maintain, upgrade, and construct reserve facilities and acquire priority lands. This competitive funding program is matched by state funds and has resulted in not only the preservation of critical coastal lands as described above, but also in the increase of construction jobs. For example in Texas, the construction of the Mission-Aransas Headquarters has provided a job for approximately 536

people to date. A recent assessment of construction and acquisition priorities at the reserves shows that the NERRS have needs for more than \$60 million for Fiscal Years 2011 through 2015.

NERRA greatly appreciates the support the Subcommittee has provided in the past. This support has been critical to sustain and increase the economic viability of the coast and estuary-based industries. We urge you to give every consideration to these requests as you move forward in the FY 2012 appropriations process. If we can provide any additional information, please contact me at (202) 236-4819 or roth@nerra.org, or NERRA President Rebecca Ellin, manager of the North Carolina National Estuarine Research Reserve, at (252) 838-0880 or rebecca.ellin@ncdenr.gov.



National Legal Aid & Defender Association

TESTIMONY OF DONALD M. SAUNDERS
VICE PRESIDENT FOR CIVIL LEGAL SERVICES

EQUAL JUSTICE.
OF THE PEOPLE.
FOR THE PEOPLE.

On Behalf of

THE NATIONAL LEGAL AID & DEFENDER ASSOCIATION

Before the

HOUSE COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

March 11, 2011

This testimony is submitted by Donald M. Saunders, Vice President, Civil Legal Services for the National Legal Aid & Defender Association (NLADA), in support of the Legal Services Corporation's Budget Request for FY 2012. The Legal Services Corporation (LSC) is seeking an appropriation of \$516,550,000 for FY 2012.

NLADA, founded in 1911 and this year celebrating its Centennial Year, is the oldest and largest national, non-profit membership organization devoting all of its resources to advocating for equal access to justice for all people. Throughout its history NLADA has championed effective legal assistance for people who cannot afford counsel, served as a collective voice for both civil legal services and public defense services throughout the nation, and provided a wide range of services and benefits to individual and organizational members. Among NLADA's 700 program members are most of LSC's 136 grantee organizations. NLADA's Civil Division members elect representatives to NLADA's Civil Policy Group that addresses national issues faced by the legal services community and sets NLADA policy with respect to those issues. I am proud to submit this testimony on behalf of NLADA's Civil Policy Group, NLADA's civil members, and the legal services community as a whole.

In the Preamble to the Constitution, our forefathers stated clearly and forcefully the purpose of the government they were creating:

We, the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense...

and so on. It is noteworthy that “establish justice” comes before and is the basis of “domestic tranquility” and that both come before “provide for the common defense.” The sequence and priority are not accidental, and we need to bear them constantly in mind.

The provision of civil legal assistance is an integral part of the nation’s justice system. With no established civil right to counsel, access to counsel for low-income Americans in civil cases relies almost exclusively on the public-private partnership supported by funding from LSC. As of today, LSC is funded under the FY 2011 Continuing Resolution that provides \$420 million to support LSC, the same level of funding that was provided in FY 2010. Of that amount \$394,400,000 goes to support the basic field grantees that provide civil legal assistance to financially eligible Americans in every jurisdiction throughout the United States. Of the \$516,550,000 that LSC seeks for FY 2012¹, \$484,900,000 would go to support basic field grantees.² The legal services network that comprises these basic field programs was established with the passage of the LSC Act in 1974 and has become the bedrock source of civil legal assistance for low-income Americans—upholding the national promise of equal access to justice, providing solutions to critical legal problems, and helping to promote opportunities for dignity and self-sufficiency.

The legal services delivery system that is funded in part by LSC is fundamentally sound and works extraordinarily well for those clients that it does have resources to serve. One hundred and thirty-six LSC basic field grantees provide civil legal services in almost a million cases each year, providing direct legal assistance to about 2.3 million eligible low-income people, and providing legal information, pro bono referrals, and a variety of other legal services to another 5 million. LSC grantees provide legal services to victims of domestic violence in need of protection from their abusers and help with custody for their children, elderly clients and young families facing foreclosure, often as a result of predatory lending practices, veterans returning from Iraq and Afghanistan seeking benefits for service-related injuries, children with severe medical issues and serious educational concerns, low-income consumers facing bankruptcy, homeless individuals and families seeking assistance to meet their needs for basic

¹ When adjusted for inflation, LSC estimates that in FY 2010 it would have needed an appropriation of \$574 million to match the \$400 million appropriation that it received from Congress in FY 1995. That number is \$154 million above the current funding level of \$420 million and \$57,450,000 above the LSC budget request for FY 2012.

² In his budget request President Obama is seeking \$450 million for LSC for FY 2012. Of that amount, \$420,150,000 would be used to support grants for basic field programs.

shelter, disabled individuals seeking access to benefits, and services in a host of the other legal problems that face low-income clients every day.

Nevertheless, LSC has been woefully underfunded for most of its history and faces a severe funding crisis today. In 2009, LSC updated a study which found that LSC funded programs were forced, because of inadequate resources, to turn away more than 50 per cent of the eligible applicants who actually sought legal assistance, and that fewer than 20 per cent of the legal needs of the low income population are actually met. LSC funds, which provide the foundation upon which the legal aid system is based, are distributed throughout the country in proportion to the 2000 census data on individuals living below the Federal Poverty line, an amount that is currently equal to less than \$10 per poor person. While LSC is the largest single source of legal services funding, a variety of non-LSC sources make up the majority of legal services funding on a national level. However, these non-LSC resources are not distributed equally among the states, and there are enormous disparities in legal aid resources that are available in different parts of the country. In some areas, LSC funding provides the essential foundation to leverage and raise other resources. In other areas, where it is difficult to raise substantial amounts of non-LSC funds, LSC grantees are almost wholly dependent on LSC funds for their continued existence. In 2009, total dollars per poor person per state ranged from a low of \$12.40 to a high of over \$109. The average was about \$39 per poor person. The lowest funded states are in the South and Rocky Mountains, and the highest funded are in the Northeast, Mid-Atlantic, Midwest, and the West.

Today, the civil legal services system faces a perfect storm, with poverty rates rising dramatically at the same time as the legal aid community faces major decreases in non-LSC funding. Plummeting interest rates have sent funding spiraling down for the Interest in Lawyers Trust Account (IOLTA) programs which, for much of the last three decades, have provided a significant portion of civil legal services funding in most states. Programs face threats to funding from severely restricted state budgets, decreases in foundation funding and private donations, and proposals in Congress to make significant cuts in LSC funding for the balance of FY 2011. With the drastic rise in poverty rates as a result of the nation's recent economic problems³, requests for help with evictions and foreclosures, veterans' benefits, unemployment compensation, bankruptcy, and food stamps, among other issues, have increased dramatically at most LSC-funded programs. At the same time, funding from many sources has declined or is in jeopardy. Confronted by this uncertain funding outlook, many LSC grantees have been forced to lay off attorneys and other staff, impose furloughs and benefits cuts, and institute

³ The US Census Bureau estimates that between 2007 and 2009 the number of people eligible for LSC services has risen from 50,876,000 to 56,840,000.

hiring and salary freezes, all of which severely limit the programs' ability to meet the ever-increasing legal needs of swelling numbers of low-income people. Expanded LSC funding is more critical than ever as the legal needs of the growing low-income population increase and non-LSC resources contract.

Private attorneys who volunteer their services on behalf of clients of LSC-funded services are key partners in the effort to expand access to justice, but cannot take the place of LSC-funded legal aid programs. Pro bono efforts are provided through a wide variety of organizational structures, and range from limited advice and brief service provided in a one-time clinic setting to extended representation in major litigation or transactional work for an individual or group client that goes on for many months or even years. State and local bar associations have been actively involved in efforts to increase pro bono services by their members, and many law firms have prioritized pro bono and encouraged their partners and associates to participate in the firms' pro bono programs. Innovative efforts, such as tax deductions for pro bono work, are being tried to encourage private attorneys to devote more of their time and resources to pro bono. But the common denominator is that LSC funding provides the structure and underpinnings upon which all of these pro bono efforts operate. LSC requires its grantees to expend 12.5 per cent of their grants on activities that seek to enhance the involvement of private attorneys in the delivery of legal services. Pro bono and volunteer projects are crucial to the work of many LSC-funded programs, and approximately 100,000 of LSC grantee cases are done each year by private attorneys. However, these pro bono efforts are dependent on LSC grantees for recruitment, referrals, co-counseling, and the administrative structure on which the private bar programs depend. Pro bono resources are hard to come by in many parts of the country, especially in rural areas where there are few lawyers other than judges and prosecutors. Many private lawyers do not have the skills and expertise to deal with the difficult issues faced every day by many members of the low-income community. Thus, while private attorneys play a vital and expanding role in the delivery of legal services, they cannot do so without the basic field programs, funded by LSC, to provide the foundation on which they operate.

In addition to basic field funding, the LSC budget request seeks additional resources for the Technology Initiative Grants (TIG) program. Since its inception in 2000, TIG has awarded over 450 grants, totaling more than \$36 million to support innovative technology projects that improve services to clients, enhance efficiency at LSC-funded grantees and increase client access to legal information. By promoting the increased use of technology at a national level, LSC encourages state and local projects and partnerships, including initiatives that partner with state courts, which can be replicated by other programs and creates a network of coordinated national technology resources that can be used by legal services providers across the country to

reduce the cost of delivering legal representation and maintain the quality of justice low-income Americans receive.

The LSC budget request also seeks \$1 million to continue the pilot Loan Repayment Assistance Program (LRAP) that LSC began in 2005 to help determine the extent to which repayment assistance for law school education debts would help LSC grantees recruit and retain high quality attorneys. Civil legal aid attorneys are the lowest paid members of the entire legal profession, earning less than public defenders and other public interest lawyers and far less than private lawyers. Coupled with high law school debt, these low salaries make it difficult for young lawyers to remain in legal aid jobs, and often the availability of loan repayment programs makes the difference for those who wish to make legal assistance a career. Although we support the efforts that Congress has made to develop other loan repayment and loan forgiveness options through the Department of Education, LSC's LRAP remains an important part of the effort to recruit and retain legal services attorneys who wish to serve our low-income population.

The LSC budget request also seeks additional funding to support LSC's Management and Grants Oversight (MGO) operation. NLADA understands the importance of grants oversight, program governance, and fiscal accountability and supports LSC's efforts to improve grantees' compliance with laws and regulations and help enhance the quality of legal services provided to eligible clients.

In conclusion, I would like to thank Chairman Wolf, Ranking Member Fattah, and the members of this subcommittee for giving NLADA the opportunity to submit this testimony. NLADA supports the LSC budget request for FY 2012 which will provide additional resources that are sorely needed to help fill the enormous gap between the legal needs of low-income Americans and the resources that exist to meet those needs today. Providing civil legal aid is essential to ensuring that the least advantaged among us receive the help they need to build healthy families and live constructive, fulfilling lives. The federal investment in legal aid is an integral component of the foundation needed to meet the Constitutional goal of establishing justice. Our clients and your low-income constituents deserve no less.

**Sue Else, President of the National Network to End Domestic Violence
Testimony for the Appropriations Commerce, Justice, Science Subcommittee
United States House of Representatives
Importance of funding the Violence Against Women Act and the Victims of Crime Act cap
March 11, 2011**

Introduction

I am testifying to request a targeted investment of **\$485 million** in Violence Against Women Act (VAWA) programs administered by the Department of Justice, Office of Violence Against Women in the FY 2012 Budget (specific requests detailed below). In addition, I am testifying to request a **\$1 billion** “cap”, with \$135 million specifically designated to fund programs that address violence against women, from the Victims of Crime Act (VOCA), administered by the Office of Justice Programs, Office for Victims of Crime in the FY 2012 Budget.

Commerce, Justice, Science Appropriations Subcommittee Chairman Wolf, Ranking Member Fattah, Chairman Rogers, Ranking Member Dicks and distinguished members of the Appropriations Committee, thank you for this opportunity to submit testimony to the Committee on the importance of investing in VAWA and VOCA. I sincerely thank the Committee for its ongoing support and investment in these lifesaving programs. These investments help to bridge the gap created by an increased demand and a lack of available resources.

I am the President of the National Network to End Domestic Violence (NNEDV), the nation’s leading voice on domestic violence. We represent the 56 state and territorial domestic violence coalitions, including those in Virginia, Pennsylvania, Kentucky and Washington state, their 2,000 member domestic violence and sexual assault programs, as well as the millions of victims they serve. Our direct connection with victims and victim service providers gives us a unique understanding of their needs and the vital importance of continued federal investments.

Incidence, Prevalence, Severity and Consequences of Domestic and Sexual Violence

The crimes of domestic and sexual violence are pervasive, insidious and life-threatening. Nearly one in four women are beaten or raped by a partner during adulthood¹ and each year 2.3 million people are raped and/or physically assaulted by a current or former spouse or partner.² One in six women and one in 33 men have experienced an attempted or completed rape.³ Of course the most heinous of these crimes is murder. Every day in the United States, an average of three women are killed by a current or former intimate partner.⁴ In 2005 alone, 1,181 women were murdered by an intimate partner in the United States⁵ and approximately one-third of all female murder victims are killed by an intimate partner.⁶ In Pennsylvania, there were 72 women killed by an intimate partner in 2009. Half of these victims were from Philadelphia.⁷

The cycle of intergenerational violence is perpetuated as children are exposed to violence. Approximately 15.5 million children are exposed to domestic violence every year.⁸ One study found that men exposed to physical abuse, sexual abuse and adult domestic violence as children were almost 4 times more likely than other men to have perpetrated domestic violence as adults.⁹

In addition to the terrible cost domestic and sexual violence have on the lives of individual victims and their families, these crimes cost taxpayers and communities. In fact, the cost of intimate partner violence exceeds \$5.8 billion each year, \$4.1 billion of which is for direct medical and mental health care services.¹⁰ Research shows that intimate partner violence costs a health plan \$19.3 million each year for every 100,000 women between the ages of 18 and 64 enrolled.¹¹ The average cost per adult sexual assault is approximately \$87,000.¹² Domestic violence costs U.S. employers an estimated \$3 to \$13 billion annually.¹³ Between one-quarter

and one-half of domestic violence victims report that they lost a job, at least in part, due to domestic violence.

Despite this grim reality, we know that when a coordinated response is developed, and immediate, essential services are available, victims can escape from life-threatening violence and begin to rebuild their shattered lives. Funding these programs is fiscally sound, as they save lives, prevent future violence, keep families and communities safe and save our nation money.

Investing in the Violence Against Women Act (VAWA)

In response to the terrible crimes of domestic violence, sexual assault, dating violence and stalking, Congress authorized the Violence Against Women Act in 1994 and reauthorized it in 2000 and 2005. These programs, administered by the Departments of Justice, and Health and Human Services, have changed federal, tribal, state and local responses to domestic violence dating violence, sexual assault and stalking. VAWA creates and supports comprehensive, cost-effective responses to these pervasive and insidious crimes. VAWA has unquestionably improved the national response to domestic violence, dating violence, sexual assault and stalking. Since VAWA passed in 1994, states have passed more than 660 laws to combat these heinous crimes. Due to the overwhelming success of VAWA-funded programs, more and more victims are coming forward for help each year. More victims report domestic violence to the police: reporting rates by women have increased by 27% to 51% and reporting rates by men have increased by 37%.¹⁴ The rate of non-fatal intimate partner violence against women has decreased by 63%.¹⁵ Remarkably, the number of individuals killed by an intimate partner has decreased by 24% for women and 48% for men.¹⁶ In addition to saving and rebuilding lives, VAWA saved taxpayers \$14.8 billion in net averted social costs in its first six year's alone.¹⁷

A recently released study from Kentucky demonstrates both the lifesaving and cost-effective nature of VAWA-funded programs. The study found that orders of protection are very effective tools in reducing violence against victims and saving money in net averted costs. The study found that threats and physical abuse dropped dramatically during the six months after a survivor obtained a protective order. In fact, the number of threats of physical harm or murder decreased nearly 50%. Moderate physical abuse decreased 61% and severe physical abuse decreased nearly 50%. The study found that society saves \$30.75 for each victim who obtains a protection order. Specifically, protective orders saved Kentucky, at least \$85 million over a year.¹⁸ Because many VAWA-funded programs can help victims obtain protection orders, this study supports the continued investment in these funding streams.

While VAWA programs have made systemic changes to meet the needs of victims and saved countless lives, the demand for services continues to rise. Additionally, many parts of the country still lack basic services and traditionally underserved populations face additional barriers to accessing services. The National Domestic Violence Census found that in just one day in 2010, over 70,000 adults and children found safety in our nation's domestic violence shelters and programs. On the same day, however, over 9,000 requests for services went unmet because programs simply did not have the resources to meet the needs of victims. In Philadelphia, the problem is even more acute – in 2010, almost 6,000 requests for shelter could not be met because there were simply no beds available. In Virginia in 2009, over 2,000 families were not able to secure safety in a shelter because shelters were full.

Although a harsh economic climate does not cause domestic violence, it can exacerbate already violent relationships and leave victims with fewer options. In the current economic crisis, the demand for domestic violence services has increased precisely at the time when programs are struggling to maintain funding to meet the demand. In fact, the National Domestic Violence

Census found that in 2010, 1,441 (82%) domestic violence programs reported a rise in demand for services, while at the same time, 1,351 (77%) programs reported a decrease in funding.¹⁹ Between 2009 and 2010, domestic violence programs laid off or did not replace nearly 4,000 staff positions including counselors, advocates and children's advocates. A recent survey in Virginia asked victims, "What would you have done if the shelter had not existed?" Of the victims surveyed, 22% said they would have been homeless, 21% said they would have had to return to the abuse, and 10% believe that they would have been killed. This survey demonstrates the dire consequences of a lack of available services.

While federal funding cannot meet all the needs of victims, it leverages state, private and local dollars to provide consistent funding streams to lifesaving services. To address unmet needs and build upon its successes, VAWA should receive targeted investments in FY '12.

Specific Investments in VAWA Programs

Services, Training, Officers Prosecution (STOP) – \$205 Million Request. STOP grants are formula grants given to each state to improve the criminal justice response to domestic violence, dating violence, sexual assault, and stalking, are used to develop coordinated community responses. Many states and jurisdictions have implemented STOP-funded strategies that have lead to a direct reduction in domestic violence homicides.²⁰ Some areas, such as Richmond, VA, use STOP funds to reach the most vulnerable and underserved communities, including victims who are deaf or hard of hearing, have mobility issues, or are impacted by mental health conditions.²¹ The Puyallup Tribe of Indians in Washington state used STOP to implement sentencing guidelines for sexual assault, domestic violence, and/or stalking offenses and took the lead in revising the Puyallup Tribes' Criminal Code to include specific sexual assault, domestic violence, and/or stalking crimes and sentencing enhancements.²²

Transitional Housing Grants – \$25 Million Request. These grants give victims a safe place to begin to rebuild their shattered lives. In just one day in 2010, 5,275 adults and 8,501 children were housed in domestic violence transitional housing programs. On the same day, however, 5,686 requests for emergency shelter or transitional housing were denied due to a lack of capacity.²³ The extreme dearth of affordable housing produces a situation where many victims of domestic violence must return to their abusers because they cannot find long-term housing,²⁴ while others are forced into homelessness.²⁵ Increased investment in the Transitional Housing program will allow more states and localities to ensure that victims in rural and urban areas do not have to make these unfathomable choices.

Civil Legal Assistance for Victims (LAV) – \$50 Million Request. Research indicates that the practical nature of legal services gives victims long-term alternatives to their abusive relationships.²⁶ However, the retainers or hourly fees for private legal representation are beyond the means of most victims of domestic violence, dating violence, sexual assault and stalking. In fact, almost 70% of all victims are without legal representation.²⁷ The Civil Legal Assistance for Victims Program is the only federally funded program designed to meet the legal needs of victims. Due to the high demand for these services, the Office on Violence Against Women receives almost 300 applications per year, and only one-third of these are funded. Targeted increases to the LAV program are a sound investment in long-term solutions to violence.

Sexual Assault Victim Services Program (SASP) – \$35 Million Request. First funded in FY '08, this formula grant addresses the extreme needs of sexual assault victims by allowing states, tribes and territories to provide critically needed direct services to victims and training and technical assistance to various organizations including law enforcement, courts and social services. When advocates are present in the legal and medical proceedings following rape,

victims fare better in both the short and long-term periods, experiencing less psychological distress, physical health struggles, self-blame, guilt and depression. Rape survivors with advocates were 59% more likely to have police reports taken than survivors without advocates, whose reports were only taken 41% of the time.²⁸ Despite the positive outcomes associated with services, there continues to be a dearth of services available. In 2009, 56% of rape crisis centers were forced to reduce staff due to a lack of funds. A 2010 survey revealed that 25% of rape crisis centers have a waiting list for crisis services.²⁹ In Virginia in 2009, sexual assault service programs experienced a 22% increase in adults and children seeking services. Increased investment in SASP is essential to meet the needs of sexual assault victims.

Grants to Encourage Arrest Policies and Enforcement of Protection Orders Program (GTEAP) – \$60 Million Request (FY '10 Level Funding). GTEAP helps communities develop and sustain a seamless and comprehensive criminal justice response to domestic violence, enhancing victims' safety and holding perpetrators accountable. According to the City of Mountlake Terrace, Washington, "the funding has allowed us to retain a domestic violence prosecutor who aggressively charges and prosecutes domestic violence cases. Having a Domestic Violence prosecutor has increased our ability to hold abusers accountable, increase the number of court orders issued and reduce repeat offenders."³⁰ Sustained investment in GTEAP will allow communities to continue this lifesaving work.

Remaining VAWA programs. In order to break the cycle of violence and address the needs of children and youth, we request \$14 million for the consolidated VAWA youth and prevention programs and \$15 million for the Campus grant program. We support \$500,000 to the National Clearinghouse on Sexual Assault of American Indian Women and \$5 million to Court Training and Improvement program. Additionally, we request at least FY '10 funds for the remaining VAWA CJS programs.

Victims of Crime Act (VOCA) Fund Cap - \$1 Billion Request with \$135 Million Designated for Programs that Address Violence Against Women

The Victims of Crime Act (VOCA), passed in 1984, created the VOCA Fund as a protected and dedicated source of funding for crime victim programs. The Fund does not depend on taxpayer dollars – it is derived entirely from fines and penalties paid by federal offenders. To ensure a consistent distribution of the Fund to victim service providers each year, Congress set a cap on the Fund, saving the amount collected over the cap to ensure the stability of the Fund. Currently, the VOCA Fund has an estimated balance of over \$5 billion.

The VOCA cap supports a formula grant to states for victim assistance programs, which provide victims with support and services in the aftermath of crime. Every year, nearly 4 million victims of all types of crimes are served by more than 4,000 VOCA-funded local and state victim service agencies. Most domestic and sexual violence programs, which are at the heart of the response to victims, rely on continued VOCA funding to sustain their programs. With over 2,000 community-based domestic violence programs for victims and their children, providing emergency shelter to approximately 300,000 victims, and providing services such as counseling, legal assistance, and preventative education to millions of women, men and children annually,³¹ this funding is absolutely crucial to keeping victims and their children safe. In order to meet the growing demand for these lifesaving services, I urge the Committee to release \$1 billion through the VOCA cap with \$135 million specifically designated for programs that combat violence against women. From the \$135 million, I request targeting \$100 million to address the current crisis caused by a lack of available shelter and transitional housing for victims of domestic and sexual violence and \$35 million to address the lack of available sexual assault services.

Conclusion

An increasingly efficient, comprehensive and lifesaving response to victims, created and sustained by VAWA and VOCA funding, has begun to make our country a safer place for families, victims and communities. We are beginning to see a reduction in homicides and the incidence of these heinous crimes. Yet as harsh economic times force shelters and rape crisis centers to close, real victims face traumatic and life-threatening situations with no support. We know that our nation is facing a difficult financial time and that there is pressure to reduce spending. Investments in these vital, cost-effective programs, however, help break the cycle of violence, reduce related social ills and will save our nation money now and in the future.

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**Statement of Kameran Onley, Director of U.S. Marine Policy
Before the Subcommittee on Commerce, Justice, Science and Related Agencies
Committee on Appropriations, United States House of Representatives
March 11, 2011**

Thank you for the opportunity to offer the recommendations of The Nature Conservancy (Conservancy) on the fiscal year 2012 budget for the National Oceanic and Atmospheric Administration (NOAA).

The devastating Gulf oil spill last year reminded us of the immense human, economic, and ecological value of healthy coastal and marine systems. As part of the response to the spill, President Obama established a comprehensive national policy for the stewardship of our ocean, coasts, and Great Lakes, to include a framework for effective marine spatial planning. NOAA's programs and products directly contribute to this national vision. By ensuring the sound management and conservation of our natural resources while supporting the functions of major industries including transportation, energy, tourism, and recreational and commercial fishing, NOAA provides a vital service to the country.

The Conservancy urges the Committee to dispense appropriations for NOAA as requested in the President's Budget for Fiscal Year 2012. As our top priorities, the Conservancy supports the following funding levels for specific NOAA efforts:

Regional Spatial Planning and Partnerships	\$26.8 million
Coral Reefs	\$27 million
Coastal and Estuarine Land Conservation	\$25 million
Habitat Restoration	\$29.9 million
Fisheries Management	
- National Catch Share Program	\$54 million
- Expand Annual Stock Assessments	\$67.1 million
Pacific Salmon and Protected Species Conservation	\$88.8 million

NOAA and The Nature Conservancy

At more than one hundred marine sites around the world, the Conservancy has used a variety of strategies for marine and coastal conservation including habitat restoration, removal of invasive species, coastal land acquisition, private conservation of submerged lands, establishment of protected areas, management of extractive marine resources activities, and reduction of nutrient and toxic inputs to coastal systems.

Over the years, and across many of these sites, NOAA has been an invaluable partner to the Conservancy. NOAA programs that provide practical, community-oriented approaches to restoration, resource management and conservation are natural fits for the Conservancy's mission. The Coastal Services Center and National Estuarine Research Reserve programs educate hundreds of local community officials and practitioners to better ways to apply tools and science. In addition, NOAA's data, research and monitoring of coastal and marine systems

directly provide data and decision-support tools that inform the safe operations of industry, prioritize habitats for restoration, and advance science-based management decisions.

The following detailed funding recommendations highlight critical programs that support marine, estuarine, and coastal conservation and restoration.

Regional Spatial Planning and Partnerships (\$26.8 million)

- **Coastal and Marine Spatial Planning (\$6.8 million):** We need a coordinated approach and thoughtful planning that resolves conflicts, enhances our ability to most fully utilize oceans, and maintains healthy marine habitats. Coastal and Marine Spatial Planning (CMSP) is a decision-making process that creates a blueprint for ocean use and conservation by bringing together diverse oceans users; mapping ocean activities, marine species, and habitats; providing a forum to proactively make informed decisions about how to best use our shared marine resources; and creating a coordinated way to allocate marine spaces and assess tradeoffs to simultaneously achieve multiple goals. The FY2012 President's Budget proposes \$6.8 million to develop agency capability to implement CMSP, including creating maps of important areas and existing area-based management authorities, developing decision support tools, facilitating data integration, and supporting interagency coordination. The Conservancy supports funding to conduct habitat mapping and characterization in high priority areas. Without adequate information on habitat types and distributions, science-based decision-making will be severely limited. In addition, funding is needed to identify and map existing human uses, as well as to analyze potential conflicts between uses and how certain uses may impact ecological factors.
- **Regional Ocean Partnerships (\$20 million):** The FY2012 President's Budget requests \$20 million for grants to Regional Ocean Partnerships (ROPs). The proposed funding would provide support to implement priority actions identified by existing and developing ROPs, including the Northeast Regional Ocean Council, the Mid-Atlantic Regional Council on Oceans, the South Atlantic Alliance, the Gulf of Mexico Alliance, the West Coast Governors' Agreement on Ocean Health, and the Council of Great Lakes Governors. These multi-state collaborations originated to address regional priorities such as habitat conservation and restoration, energy siting, coastal resilience to severe storms, coastal water quality, and regional data and science needs. Additional funding should be provided to support state and regional engagement in the development of CMSP, including stakeholder processes and consensus building tools, analysis of data and information, and facilitation of broad public participation in the CMSP process. Up to 5% of the funding should be available to pay for administration of the ROPs so that these entities can guide regional efforts.

Coral Reef Conservation (\$27 million)

The decline of coral reefs has significant social, cultural, economic, and ecological impacts on people and communities in the United States and around the world. As the 'rainforests of the sea,' coral reefs provide services estimated to be worth as much as \$375 billion each year.

- **Coral Reef Conservation Program (\$27 million):** The Conservancy works with the NOAA Coral Reef Conservation Program under a competitively awarded, multi-year cooperative agreement to address the top threats to coral reef ecosystems: climate change, overfishing, and land-based sources of pollution. Together we work on developing place-based

strategies; developing resilient marine protected area networks; measuring the effectiveness of management efforts; and building capacity among reef managers at the global scale. NOAA has undertaken a coral reef conservation priority setting exercise in all seven of the U.S. jurisdictions with coral reef resources. The \$27 million would provide funding to support implementation of these locally-driven conservation priorities and efforts to provide for more comprehensive mapping and data compilation and analysis on cold water corals in U.S. waters.

Coastal and Estuarine Land Conservation (\$25 million)

- **Coastal and Estuarine Land Conservation Program (CELCP):** The Conservancy supports funding CELCP at \$25 million for FY 2012. To date, Congress has appropriated funds to complete over 150 conservation projects, with more in progress. These projects have taken place in 28 of the nation's 35 coastal states have already conserved over 45,000 acres of the nation's coastal treasures. Federal funding has been issued on a competitive basis and leveraged by at least an equal amount of state, local, and private investments. Over a three year period, \$230 million of vetted ranked projects were identified, yet only \$74 million in funding was available. Funding for CELCP needs to accommodate a greater percentage of the overall demand for coastal acquisition projects.

Habitat Restoration (\$29.9 million)

- **Fisheries Habitat Restoration:** This level of funding will provide \$23.9 million for the Community-based Restoration Program and \$6 million for the Open Rivers Initiative. These programs restore important natural systems that provide long-term ecological and economic benefits. In 2010, Congress provided \$167 million for NOAA habitat restoration under the American Recovery and Reinvestment Act. These funds were successful in creating hundreds of jobs -- an estimated 20.3 jobs per million dollars -- and restoring important habitats such as oyster reefs that communities rely upon for their culture and economy. The competitive call for projects under the ARRA generated over 800 requests for funding and showed a demand of \$3 billion in community-driven ecological and economically significant projects. To address this overwhelming backlog of restoration work, we ask the Committee to support this program.

Fisheries Management (\$121 million)

The provisions of the reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act (MSA) in 2007 were intended to provide a more aggressive approach to ending overfishing in the United States and address destructive fishing practices in U.S. waters. Most U.S. fisheries have traditionally been managed under an open access quota system that for decades encouraged and subsidized fleet expansion, heavy dependence and investment on particular fishing gear, and shorter fishing seasons—all contributors to overfishing and other challenges. The requirements of the MSA have aided the U.S. in making strides in addressing these challenges and strengthening fisheries management; however, improvements need to continue. For example, the Administration has recognized the need to look beyond traditional open-access management and in some regions implemented limited-entry programs. To recover fish stocks so that they provide food and jobs to struggling fishermen now and in the future, we need to move beyond limited entry and towards innovative management practices that consider *both* the impacts of fishing practices on the marine environment, as well as the needs of local

communities that depend on fishing for their livelihood. Moreover, the design of many existing limited access fisheries in the U.S. need improvements to increase environmental and economic performance.

- **National Catch Share Program (\$54 million):** By giving participating fishermen a stake in the benefits of a well-managed fishery, NMFS aims to align the incentives for resource stewardship with the natural incentive for fishermen to increase their earnings with a sustainable business model. Getting the design and implementation of these new catch share programs right is crucial to their success. For example, improved fishery monitoring is imperative to successful catch share systems and to meeting fundamental requirements of the MSA. Better monitoring leads to better science, better science leads to better management, and better management leads to better, and more consistent, economic outcomes for fishing communities. Monitoring, combined with clear environmental goals and provisions for access for communities to adjacent fishing grounds, will allow catch share programs to drive the sustainable use of a public resource.
- **Expand Annual Stock Assessments (\$67.1 million):** The MSA mandates the establishment, by 2011, of annual catch limits in all fisheries to prevent overfishing. However, current lack of information and assessment capacity for many fish stocks makes this impossible, putting at risk both valuable fisheries and the livelihoods of fishing communities across the U.S. Incomplete scientific information for many fish stocks resulting from lack of adequate stocks assessments forces fishery managers to resort to setting annual catch limits in an overly conservative manner, thus limiting fishing opportunity. Adequate stock assessments are essential for the sound management of fisheries and the sustainability of fishing resources.

Pacific Salmon and Protected Species Conservation (\$88.8 million)

- **Pacific Coastal Salmon Recovery Fund (\$65 million):** The Pacific Coast Salmon Recovery Fund (PCSRF) has funded hundreds of successful, on-the-ground salmon conservation efforts. PCSRF projects are matched at a 3:1 ratio (federal/non federal) and have resulted in significant progress in protecting and restoring salmon across their range.
- **Species Recovery Grants (\$23.8 million):** Through this program, NMFS provides grants to states to support conservation actions that contribute to recovery or have direct conservation benefits for listed species, recently de-listed species, and candidate species that reside within that state. We support the President Budget's request for \$23.8 million.

Thank you for this opportunity to share with the Committee the Conservancy's priorities in NOAA's FY2012 budget. We would be pleased to provide the Committee with additional information on any of the Conservancy's activities described here or elsewhere. Please contact me, Kameran Onley (703-841-4229, konley@tnc.org) if you have questions on which we might be of assistance.

Sincerely,



Kameran Onley
Director, U.S. Marine Policy



Northwest Indian Fisheries Commission

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**WRITTEN TESTIMONY OF BILLY FRANK, JR., CHAIRMAN
 THE NORTHWEST INDIAN FISHERIES COMMISSION
 SUBMITTED TO THE HOUSE COMMERCE, JUSTICE, SCIENCE AND RELATED
 AGENCIES APPROPRIATIONS SUBCOMMITTEE
 ON THE FY-2012 BUDGET FOR NOAA
 THE DEPARTMENT OF COMMERCE
 March 11, 2011**

Thank you for the opportunity to provide written testimony on the Department of Commerce FY-2012 appropriations. My name is Billy Frank, and I am the Chairman of the Northwest Indian Fisheries Commission (NWIFC). The NWIFC is comprised of the twenty tribes party to the *United States vs. Washington*¹ (*U.S. vs. Washington*), and we support funding for NOAA - National Marine Fisheries Service (NMFS) and the National Ocean Service (NOS) budgets. We are pleased that the budgets for these services continue to be given the serious attention they deserve by the Administration and hope that Congress will agree.

In particular, we appreciate a number of the new National Ocean Policy initiatives that support key federal, state and tribal partnerships. The creation of the National Ocean Council and its Governance Advisory Coordinating Committee represents the increased focus on oceans. This Governance Advisory Coordinating Committee includes three, at-large tribal representatives including one from the Washington Coastal Treaty Tribes represented by the NWIFC. In addition to our requests below, we urge the Subcommittee to continue to support the work of the National Ocean Council and its Governance Advisory Coordinating Committee.

SUMMARY OF FY-2012 APPROPRIATIONS REQUEST

NWIFC Specific Funding Requests:

- ❑ **\$110 Million for the Pacific Coastal Salmon Recovery Fund** (NOAA/National Marine Fisheries Service)
- ❑ **\$20 Million for the Regional Ocean Partnership Grants Program** (NOAA/National Ocean Service)
- ❑ **\$3.0 million for the Pacific Salmon Treaty Chinook Annex** (NOAA/National Marine Fisheries Service)
- ❑ **\$16 Million for the Mitchell Act Hatchery Program** (NOAA/National Marine Fisheries Service)

The NWIFC also supports the budget priorities and funding requests of the Affiliated Tribes of Northwest Indians and the National Congress of American Indians

¹ *United States vs. Washington*, Boldt Decision (1974) reaffirmed Western Washington Tribes' treaty fishing rights.

Justification of Requests:**\$110 Million for the Pacific Coastal Salmon Recovery Fund**

The Pacific Coastal Salmon Recovery Fund (PCSRF) is a multi-state, multi-tribe program established by Congress in FY-2000 with a primary goal to help recover wild salmon throughout the Pacific Northwest and Alaska. The PCSRF seeks to aid the conservation, restoration and sustainability of Pacific salmon and their habitats by financially supporting and leveraging local and regional efforts. Recognizing the need for flexibility among tribes and the states to respond to salmon recovery priorities in their watersheds, Congress initially provided funds for salmon habitat restoration, salmon stock enhancement, salmon research, and implementation of the 1999 Pacific Salmon Treaty Agreement between the U.S. and Canada. PCSRF is making a significant contribution to the recovery of wild salmon throughout the region.

The tribes' overall goal in the PCSRF program is to "restore wild salmon populations. The key tribal objective is to protect and restore important habitat that promotes the recovery of ESA listed species and other salmon populations in Puget Sound and along the Washington Coast that are essential for western Washington tribes to exercise their treaty-reserved fishing rights consistent with *U.S. vs. Washington* and *Hoh vs. Baldrige*². These funds will also support policy and technical capacities within tribal resource management departments to plan, implement, and monitor recovery activities.

It is for these reasons that the tribes strongly support the Pacific Coastal Salmon Recovery budget justification which reads, in part, "*... for necessary expenses associated with the restoration of Pacific salmon populations,...provided that of the funds provided herein the Secretary of Commerce may issue grants to the States of Washington, Oregon, Idaho, Nevada, California, and Alaska, and Federally-recognized tribes of the Columbia River and Pacific Coast (including Alaska) for projects necessary for conservation of salmon and steelhead populations that are listed as threatened or endangered, or identified by a State as at-risk to be so-listed, for maintaining populations necessary for exercise of tribal treaty fishing rights or native subsistence fishing, or for conservation of Pacific coastal salmon and steelhead habitat, based on guidelines to be developed by the Secretary of Commerce.*"

The tribes have used these funds to support the scientific salmon recovery approach that makes this program so unique and important. Related to this scientific approach has been the tribal leadership and effort which has developed and implemented the ESA-listed Puget Sound Chinook Recovery Plan recently approved by NOAA.

Unfortunately, the PCSRF monies have decreased over the past few years from the FY-2002 amount of \$110 million. Restoration of this line item in FY-2012 to the \$110 million level will support the original intent of Congress and enable the federal government to fulfill its obligations to salmon recovery and the treaty fishing rights of the tribes.

² *Hoh vs. Baldrige* - A federal court ruling that required fisheries management on a river-by-river basis.

\$20 Million for the Regional Ocean Partnership Grants Program

The Hoh Tribe, Makah Tribe, Quileute Tribe, and the Quinault Indian Nation have deep connections to the marine resources off the coast of Washington. They have pioneered cooperative partnerships with the state of Washington and the federal government in an effort to advance the management practices in the coastal waters. However, to have an effective partnership, the tribes and their partners need additional funding.

The four tribes, the state of Washington and NOAA's National Ocean Service, through the Marine Sanctuary Program, have formed the Intergovernmental Policy Council (IPC), which is intended to strengthen management partnerships through coordination and focus of work efforts. Through this partnership, the entities hope to maximize resource protection and management, while respecting existing jurisdictional and management authorities. In addition to this partnership with the Marine Sanctuary Program, the four tribes have proposed a mechanism by which they can effectively engage with the West Coast Governors' Agreement for Ocean Health to create a regional ocean planning group for the west coast that is representative of the states and sovereign tribal governments with an interest in the ocean.

The four coastal tribes and the state also wish to engage in an ocean monitoring and research initiative to support and transition into an ecosystem-based fisheries management plan for the Washington coast. This tribal-state effort would be in collaboration with NOAA and consistent with regional priorities identified by a regional planning body. Effective management of the ocean ecosystem and its associated resources requires the development of baseline information against which changes can be measured. This initiative will expand on and complement existing physical and biological databases to enhance ecosystem-based management capabilities. In turn, this will support ongoing efforts by the state and tribes to become more actively engaged in the management of offshore fishery resources.

For the tribes to participate in this regional ocean planning body, and for the tribes and state to conduct an ocean monitoring and research initiative off the Washington coast, they will need funding to support this effort. The Regional Ocean Partnership Grants program, within the National Ocean Service Coastal Management account, would be an ideal program to support tribal participation with the West Coast Governors' Agreement to address ocean governance and coastal/marine spatial planning issues.

The economic value associated with effective marine resource protection is huge. Not only are marine areas crucial for our natural resources and those that use them - they are bridges of commerce between nations and continents. Healthy oceans are essential if we value stable climates that will sustain our economies and our lives. Tribes must be partners in the efforts to research, clean up and restore the environment in order to deal with identified problems.

\$ 3.0 Million for the Pacific Salmon Treaty 2008 Chinook Annex

Adult salmon returning to most western Washington streams migrate through U.S. and Canadian waters and are harvested by fisherman from both countries. For years, there were no restrictions on the interception of returning salmon by fishermen of neighboring countries.

In 1985, after two decades of discussions, the Pacific Salmon Treaty (PST) was created through the cooperative efforts of tribal, state, U.S. and Canadian governments, and sport and commercial fishing interests. The Pacific Salmon Commission (PSC) was created by the United States and Canada to implement the treaty, which was updated in 1999, and most recently in 2008.

The 2008 update of the treaty gave additional protection to weak runs of Chinook salmon returning to Puget Sound rivers. The update provides compensation to Alaskan fishermen for lost fishing opportunities, while also funding habitat restoration in the Puget Sound region.

The PSC establishes fishery regimes, develops management recommendations, assesses each country's performance and compliance with the treaty, and is the countries' forum to reach agreement on mutual fisheries issues. As co-managers of the fishery resources in western Washington, tribal participation in implementing the PST is critical to achieve the goals of the treaty to protect, share and restore salmon resources.

We support the FY-2012 NOAA Fisheries budget which includes \$3.0 to implement the 2008 Pacific Salmon Treaty Chinook Annex. Specifically, the funds would be used for Coded-Wire-Tag (CWT) Program Improvements (\$1.5 million) and Puget Sound Critical Stocks Augmentation (\$1.5 million).

\$16 Million for the Mitchell Act Hatchery Program

Salmon produced by the Mitchell Act hatcheries on the lower Columbia River are critically important in that they provide significant harvest opportunities for both Indian and non-Indian fisheries off the coast of Washington. This hatchery production is intended to mitigate for the lost production caused by the hydropower dam system on the Columbia River. This hatchery production is also important in that it dampens the impact of Canadian fisheries under the terms of the PST Chinook Annex on Puget Sound and coastal stocks. This funding provides for the operations of this important hatchery program and is required to mitigate for the federal hydropower system on the Columbia River.

BACKGROUND

When our tribal ancestors signed treaties, ceding millions of acres of land to the United States government, they reserved fishing, hunting and gathering rights in all traditional areas. These constitutionally-protected treaties, the federal trust responsibility and extensive case law, including the *U.S. vs. Washington* decision (1974), all consistently support the role of tribes as natural resource managers, both on and off reservation. In Washington State, these provisions have developed into a successful co-management process between the federal, state and tribal governments. These arrangements have helped us deal with many problems, but still require additional support to meet the many new challenges like air and water pollution and climate change.

We are facing many environmental and natural resource management challenges in the Pacific Northwest, caused by human population expansion and urban sprawl, increased pollution problems ranging from storm water runoff to de-oxygenated or “dead” areas in the Hood Canal, parts of Puget Sound and in the Pacific Ocean. The pathway to the future is clear to us. The federal, state and tribal governments must strengthen our common bond and move forward with the determination and vigor it will take to preserve our heritage. Together, we must focus on the needs of our children, with an eye on the lessons of the past.

OUR MESSAGE

We generally support the Administration's FY-2012 budget with the changes noted above. The tribes strive to implement their co-management authority and responsibility through cooperative and collaborative relationships with the state and local communities. The work the tribes do benefits all the citizens of the state of Washington, the region and the nation. But the increasing challenges I have described and the growing demand for our participation in natural resource/environmental management requires increased investments of time, energy and funding.

We are sensitive to the budget challenges that Congress faces. Still, we urge you to increase the allocation and appropriations that can support priority ecosystem management initiatives. For the sake of sustainable health, economies and the natural heritage of this resource, it is critically important for Congress and the federal government to do even more to coordinate their efforts with state and tribal governments.

As frequently attributed to Chief Seattle (Sealth), tribes believe all things are connected. That is why we believe only through a holistic ecosystem management approach can we find success in achieving a healthy environment and robust natural resources.

CONCLUSION

Clearly, western Washington tribes are leaders in protecting and sustaining our natural resources. The tribes possess the legal authority, technical and policy expertise, and effectively manage programs to confront the challenges that face our region and nation.

The tribes are strategically located in each of the major watersheds, and no other group of people is more knowledgeable about the natural resources. No one else so deeply depends on the resources for their cultural, spiritual and economic survival. Tribes seize every opportunity to coordinate with other governments and non-governmental entities, to avoid duplication, maximize positive impacts, and emphasize the application of ecosystem management. We continue to participate in resource recovery and habitat restoration on an equal level with the state of Washington and the federal government because we understand the great value of such cooperation.

We ask that Congress help us in our efforts to protect and restore our great natural heritage and support our funding requests. Thank you.

Testimony of Elizabeth Rogan
 CEO
 The Optical Society (OSA)
 House Commerce, Justice, and Science Subcommittee
 House Appropriations Committee
 March 11, 2011

My name is Elizabeth Rogan, CEO of OSA. I appreciate the opportunity to comment on the proposed Fiscal Year (FY) 2012 budgets for the National Science Foundation (NSF) and National Institute of Standards and Technology (NIST), both of which are vital to our nation's scientists and engineers.

OSA unites more than 106,000 professionals from 134 countries and brings together the global optics community through our programs and initiatives. Optics is an enabling technology that makes possible everything from medical imaging and solar energy to computers and LEDS in cell phones. Since 1916, OSA has promoted the science of light and the advanced technologies made possible by optics and photonics. OSA also provides educational resources to scientists, engineers, and business leaders who work in the field.

Mr. Chairman, long term investments by the federal government in research and development are critical to advancing innovation and ensuring our country's economic prosperity. Research can take many years to come to fruition, requiring sustained efforts and funding. Consider the example of the laser, which celebrated its 50th anniversary in 2010. Using federal funding, Theodore Maiman developed the first ruby red laser at Hughes Research Labs in 1960. At the time of its creation, the laser had few known applications. Today, the laser touches virtually all aspects of daily life from DVD players to fiber optics that provide high-speed Internet to precision tools and life-enhancing medical technology. In short, the federal funding used to create the laser was a modest investment made a half century ago that is still creating thousands of jobs and providing billions of dollars in economic activity today.

National Science Foundation

OSA strongly supports the Obama Administration's request for a 13 percent increase in funding for NSF in Fiscal Year 2012. Increased funding will be used for clean-energy research, advanced manufacturing, and health care, three areas vital to job and economic growth.

The NSF recently celebrated its 60th anniversary. Since the 1950s, it has been the only federal agency that funds basic research across all fields of science and engineering and STEM education. NSF has been and continues to be a strong supporter of optics. For instance,

NSF supported research at the University of Arizona that allows the projection of a three-dimensional, moving image without the need for special eye wear. The technology has the potential to be used in telemedicine, 3-D maps, and entertainment. The 3-D images can also be recorded in one location and transmitted to another location in near real time.

Through funding by NSF, researchers have found ways to use magnetic resonance to capture rays of visible light and route them around objects, rendering these objects invisible to the human eyes. The practical applications could potentially be useful in the military by making objects invisible to radar or the ability to conceal people or objects.

NSF-funded Purdue University scientists developed a method that allows researchers to look at motion inside living tissue. It could one day provide a way to detect the effects of new drugs on cancerous tumors.

These are just a few examples of the optics-related work being done at NSF that provides society with substantial benefits.

National Institute of Standards and Technology

OSA strongly supports the Obama Administration's budget request of \$1 billion for NIST in FY 2012. As a non-regulatory agency of the U.S. Department of Commerce, NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards and technology in ways that enhance economic security and improve our quality of life. The benefits from NIST research are used in innumerable products and services of our everyday lives from ATMs to mammograms and semiconductors.

NIST maintains the world's most advanced facilities for the measurement of optical and photonic products. The research being done on optics at NIST has and will continue to affect every aspect of our lives. Most of the standards used to specify the properties of optical fiber were developed through a partnership between U.S. industry and NIST. NIST measurement services underpin the safety and effectiveness of approximately 10 million medical procedures that use radioactive materials—from prostate and breast cancer treatment to diagnostic imaging.

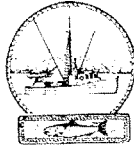
Researchers at NIST are currently working on standards for energy efficient technologies. According to the Department of Energy, lighting accounts for 12 percent of electricity consumed in the U.S. Using LEDs has the potential to cut that amount in half. However, the light from LEDs is different from other lighting technologies, such as incandescent. Current lighting standards and measurements don't apply to LED light sources; LED manufacturers don't have a reliable way to determine the color performance of their products. NIST is working on developing a color quality measurement to be used in LEDs.

The increased funding proposed in the President's FY 2012 budget will enable NIST to continue to play a critical role in enhancing and ensuring the competitiveness of U.S. manufacturers and industry. For instance, funding will be used to ensure a secure and robust cyber infrastructure, develop interoperability standards for emerging technologies, and strengthen measurement services in support of industry needs.

OSA applauds Congress for recognizing the importance of R&D through passage of the bipartisan America COMPETES Act. COMPETES provided an ambitious agenda for doubling the budgets of NIST and NSF. Now is the time to fulfill this pledge and provide the necessary funding.

We recognize this is an exceptionally challenging fiscal climate, with the compelling need to reduce the federal deficit. At the same time history has proven time and time again that investments in R&D ultimately pay for themselves many times over. These investments are key factors in restoring our nations' long-term fiscal strength and national prosperity.

Once again, thank you for the opportunity to share our views.



Susan Dazey
Executive Director
Washington Trollers Assoc.



Nancy Fitzpatrick
Executive Director
Oregon Salmon Commission



David Goldenberg
Chief Executive Officer
California Salmon Council

March 11, 2011

TO: U.S HOUSE OF REPRESENTATIVES COMMITTEE ON APPROPRIATIONS

HAROLD ROGERS, KY, Chairman NORM DICKS, WA, Ranking Member

TO: APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE SCIENCE AND
RELATED AGENCIES

FRANK WOLF, Chairman CHAKA FATTAH, Ranking Member

RE: Support for President's FY2012 Budget Item: Genetic Stock Identification, \$2 Million,
National Marine Fisheries Service, Protected Species Research and Management

The undersigned organizations ask that the U.S. House of Representatives Committee on Appropriations support the \$2 million request for *Genetic Stock Identification (GSI): Genetic Tools and Stock Indicators* as submitted in the President's FY2012 Budget. This funding is critical for continuing a coast wide collaborative research project begun in 2007 with the objective of improving our understanding of distribution patterns of West Coast ocean salmon stocks, increasing jobs, income, and harvest opportunities for coastal fleets, and protecting weak and ESA listed salmon.

Commercial Chinook salmon seasons on the West Coast have been cut by more than 70% since 2006. Fishermen have lost millions of dollars in fishing revenue and coastal communities have experienced hundreds of job losses. The problem became so acute that the West Coast Governors and Department of Commerce declared a "salmon disaster" in 2007 that cost the American taxpayers more than \$225 million in compensation to fishermen and coastal communities.

The *West Coast Salmon Genetic Stock Identification Project (WCS-GSI)* was designed to address this problem by using modern genetic tools to track distribution and migration of West Coast salmon stocks and support real time management of the fishery. Because salmon are relatively short-lived, highly migratory, and respond rapidly to changing ocean conditions, data that is

unrefined across space and time generates significant uncertainty for managing the fishery. Genetic samples can help resolve this, as data collected from fishing vessels can be quickly analyzed and produce an understanding of stock distribution that is real time. This information coupled with coded wire tags and fishery models can help develop a more sophisticated way to manage fisheries and help avoid large time and area closures to manage the fishery.

The Fisheries Research Plan of the Magnuson Stevens Act requires “collection and dissemination, in a timely manner, of complete and accurate information concerning fishing activities, catch, effort, stock assessments, and other research” as well as “a role for commercial fishermen in such research, including involvement in field testing” (Sec. 404(b)). The commercial fishermen and researchers collaborating on the WCS-GSI program have collected real time catch and effort data over the last four years, analyzed results, and are working to include this information in management decisions. Over the last four years, 300 fishermen have been paid more than \$2,000,000 to collect biological, oceanographic, and fisheries data. During recent limited salmon seasons, these payments have been crucial for keeping the fleet on the water while producing vital science information as well as valuable seafood products. With continued data collection efforts, the WCS-GSI program will generate real time information that represents the “best available science” while improving economic opportunities and sustaining Chinook salmon stocks.

Although the WCS-GSI project is producing valuable results, there is no sustained source of funding for this project—funds have been cobbled together from grants, state dollars, one time earmarks, and disaster assistance. The results to date are compelling and demonstrate the benefits of this program.

- Create jobs: In 2010 alone, over 180 salmon fishermen from 15 counties in Oregon, California, and Washington collected more than 10,000 biological samples and fishery and oceanographic data. Application of results to reduce area closures has the potential to maintain and produce hundreds of new jobs and generate millions of dollars in coastal county income.
- Improve fisheries management: By using real time information and improved predictive models, this project will allow commercial salmon fishermen to access healthy stocks while protecting weak stocks. The tri-state partnership supports a coast-wide integrated approach to salmon science and management that provides economic benefits to the fishing industry, and is a model for future collaborative fisheries research.
- Utilize funds with minimal administrative overhead: In 2010, less than 5% of project funds were spent on administrative overhead. Existing infrastructure and support from the commercial salmon industry allowed 95% of the funds to be leveraged towards data collection and research by fishermen and scientists.
- Support integrated science and management: By making ecological, economic, and environmental information available in real time to inform management decisions, GSI data contributes to our knowledge of wild and hatchery stock distributions, migration patterns, and fishermen behavior.

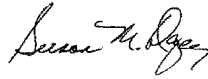
- Support critical partnerships: The research effort is collaborative and involves the following organizations: the California Department of Fish and Game, University of California, Santa Cruz, Washington Department of Fish and Wildlife, Northwest Indian Fisheries Commission, Oregon State University, Oregon Department of Fish and Wildlife, Oregon Sea Grant, Community Seafood Initiative, National Marine Fisheries Service Northwest and Southwest Fisheries Science Centers, Washington Trollers Association, Oregon Salmon Commission, and California Salmon Council.

The following organizations are working collaboratively to improve salmon management to protect commercial, sport and public interests. These funds would have a direct impact on jobs along the Pacific Coast, enhance other federal and state investments in salmon, protect weak salmon stocks, and provide communities with access to healthy foods, thriving businesses and growing tourism. For these reasons, we ask for your support of the President's budget request of \$2 million to fund the GSI program.

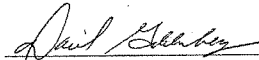
Sincerely,



Nancy Fitzpatrick
Oregon Salmon Commission



Susan Dazey
Washington Trollers Association



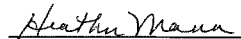
David Goldenberg
California Salmon Council



Mike Stiller
Santa Cruz Commercial Fishermen's Association



Gil Sylvia
Oregon State University



Heather Mann, Director
Seafood Consumer Center

cc:

Ken Calvert, CA
Sam Farr, CA
Mike Honda, CA
Barbara Lee, CA
Jerry Lewis, CA
Lucille Roybal-Allard, CA
Adam Schiff, CA
Michael K. Simpson, ID



Statement of Lee R. Crockett, Director of Federal Fisheries Policy, Pew Environment Group
for the Record of the House Committee on Appropriations Hearing of the Subcommittee on
Commerce, Justice, Science, and Related Agencies
Regarding the FY 2012 Budget
For the National Oceanic and Atmospheric Administration

March 11, 2011

The Pew Environment Group (PEG) appreciates the opportunity to provide testimony on the National Oceanic and Atmospheric Administration (NOAA) FY 2012 budget request. Specifically, we would like to comment on the fisheries data collection and analysis request of the National Marine Fisheries Service (NMFS). In order to meet critical new fisheries management requirements, PEG supports the President's FY 2012 budget request of \$346.3 million for data collection and analysis. We are concerned that the current request does not represent the long-term investment level needed to maintain sustainable fisheries in the future and would like to discuss this further with the committee. However, given current fiscal constraints we are prepared to support the proposed funding levels.

In 2006, Congress reauthorized and amended the Magnuson-Stevens Fishery Conservation and Management Act to finally put an end to overfishing, i.e., taking fish from the ocean faster than they can reproduce. To achieve that objective, Congress required federal fishery managers to establish for all U.S. ocean fisheries science-based annual catch limits (ACLs) that do not allow overfishing. As these ACLs are developed, it is imperative that Congress appropriate the funding necessary to continue providing and improving the scientific information managers need to guide decisions that will sustain our fisheries. ACLs must be based on science, not politics, to ending overfishing and rebuild depleted fisheries.

Improvements in data collection and analysis will enable managers to better achieve the goal of the 2006 amendments: ending overfishing. PEG supports the President's FY 2012 request of \$346.3 million for the following core data collection and monitoring programs, an increase of \$1.4 million over FY 2010 enacted funding levels. This funding request is broken down into specific budget categories below.

Fisheries Research and Management Programs: total of \$184.3 million as requested, a \$6.5 million decrease from the FY 2010 enacted level. Fisheries research and management programs provide accurate and timely information and analysis of the biology and population status of managed fish as well as the socioeconomics of the fisheries that depend on those populations.

Such information is critical for the development of management measures to ensure that they end overfishing, and we have concerns regarding the reduction from FY 2010 levels. Because of their vital role, Fisheries Research and Management Programs should be funded at no less than the FY 2012 request of \$184.3 million.

In NOAA's FY 2012 budget request, \$11.4 million is transferred from the Fisheries Research and Management Programs line item into the National Catch Share Program line item. We believe that any increases for catch share programs should be made with new money, not transferred from existing general research programs that should be available for all fisheries. Additionally, no funds from the line item should be transferred to the National Catch Shares Program, because those funds would become permanently unavailable to fund research and management programs for the vast majority of federally managed fisheries, which are not currently in a catch share program, and may not be included in one in the future.

Expand Annual Stock Assessments: \$67.1 million as requested, an increase of \$16.2 million over the FY 2010 enacted level. Stock assessments are the basic scientific tool that scientists use to determine the health of fisheries. A stock assessment provides estimates of population size and the amount of fishing that the population can sustainably support. The President's budget request of \$67.1 million would provide greater capability to assess the 230 commercially and recreationally important fish stocks managed by the federal government. NMFS's long-term goal is to assess all major fish stocks and conduct annual baseline monitoring for all federally-managed fish species.¹ Using funds appropriated under this budget line, NMFS plans to update fish stock assessments, support the implementation of ACLs, support fishery independent surveys, expand fishery dependent sampling, and improve ACL forecasting through enhanced modeling. Increased funding for data collection and monitoring will increase certainty in determining fish population sizes and the amount of fishing these populations can sustain, thus enabling managers to increase fishing opportunities.

Cooperative Research: \$7.2 million as requested by the President, a decrease of \$10.3 million from the FY 2010 enacted level. Cooperative research programs pay fishermen, operating under the direction of federal scientists, to collect fisheries data and test new fishing gear and practices. In addition to the information collected, cooperative research programs build partnerships among scientists and fishermen. They are also an effective way to provide financial relief for struggling fishermen while creating a more transparent process and providing a cost-effective way to improve the data upon which fisheries management decisions are made. In 2003, NMFS estimated that it would need \$25.5 million for cooperative research by FY 2009.² While we have concerns about the effect of the proposed reduction on fishermen and would suggest that cooperative research should be funded at this level in the future, we support the request of \$7.2 million for FY 2012.

¹ NOAA, "NOAA's National Marine Fisheries Service Requirements for Improved and Integrated Conservation of Fisheries, Protected Resources and Habitat," January 2003.

² NMFS' 2003 five year assessment estimated the need for cooperative research to be \$22.8 million above FY 2003 levels by FY 2009, for a total of \$25.5 million.

The President's FY 2012 budget request transfers \$6 million out of the cooperative research line item and into the National Catch Share Program line item. Although NMFS asserts that the \$6 million will be used for cooperative research in catch share fisheries, there is no guarantee that it will continue to be used for cooperative research in the future. As with the Fisheries Management and Research Programs, taking funding from general cooperative research, where it would be available for all fisheries, and restricting it to only catch share fisheries, short changes the vast majority of fisheries, which are not catch share fisheries.

Survey and Monitoring Projects: \$24.2 million as requested, an increase of \$.5 million over the FY 2010 enacted level. NOAA has stated that "many fisheries lack adequate and timely monitoring of catch and fishing effort."³ Survey and monitoring projects provide critical support for implementation of the new ACL requirement. Increased funding will improve the accuracy of ACLs and will increase the percentage of stocks with assessments.⁴ Additional funding for fishery-independent surveys, monitoring, and research will improve estimates of ecosystem change, fishing mortality, and population size.

Fisheries Statistics: \$24.4 million as requested, an increase of \$3.4 million over the FY 2010 enacted level. Given the fact that there are great data collection needs in the South Atlantic, and Gulf of Mexico recreational fisheries, PEG particularly supports the increase in funding for the Marine Recreational Information Program (MRIP), a new saltwater recreational fishing data collection program that is partially included in the Fisheries Statistics line. Increased funding will improve data on recreational fishing catch (both landed and released fish) and participation. One promising new technology is electronic reporting, which could improve the timeliness and accuracy of recreational data. Additional resources could be used to develop and deploy such new systems. Higher quality data on marine recreational fishing, which contributes \$59 billion in sales impacts to the U.S. economy and supports 384,000 jobs, will allow scientists to better estimate fishing mortality and set ACLs more accurately, thus reducing the risk of overfishing.⁵ In addition, improving the timeliness of recreational data will allow managers to take action before an ACL is exceeded, leading to less restrictive management decisions and more fishing opportunities.

Observers/Training: \$39.1 million as requested, a decrease of \$1.9 million from the FY 2010 enacted level. NMFS has been required by law to establish a standardized bycatch (incidental catch of non-target ocean wildlife) reporting system since 1996. Fishery observers (trained biologists who go to sea on commercial fishing vessels) collect close to real-time commercial fishing catch and bycatch data and important information on fishing practices, gear use, where and when fishing occurs, compliance, and biological samples not available from dockside

³ NOAA, "Budget Estimates, Fiscal Year 2009, Congressional Submission," p. 166. Available at: http://www.corporateservices.noaa.gov/nbo/fy09_rollout_materials/NOAA_FY09_Final_CJ.pdf.

⁴ NOAA, "Technical Memorandum NMFS-F/SPO-56: Marine Fisheries Stock Assessment Improvement Plan: Report of the National Marine Fisheries Service National Task Force for Improving Fish Stock Assessments," October 2001. Available at: http://www.nmfs.noaa.gov/pr/sars/improvement/pdfs/marine_fisheries_saip.pdf.

⁵ NMFS. "Fisheries Economics of the United States, 2008". NOAA Tech. Memo. NMFS-F/SPO-109, p. 7. Available at: http://www.st.nmfs.noaa.gov/st5/publication/fisheries_economics_2008.html.

sampling. Observer programs are “often the best means to gather current information on fisheries status” and enable effective management, even though currently only 45 fisheries have observer programs.⁶ Funding for observer coverage will improve the quality and quantity of fisheries data, especially estimates of bycatch mortality, information that is critical to estimating populations size and sustainable fishing levels. While we have strong reservations about the proposed cut to the Observers/Training line item because of the impacts it will have on these important programs, we support the proposed FY 2012 funding request of \$39.2 million.

Conclusion

NMFS data indicates that 39 of the 190 assessed commercially and recreationally important fish stocks (about 20 percent) are subject to overfishing.⁷ It is essential to provide adequate funding to support research, data collection and assessment activities necessary to put an end to this overfishing. Congress established the legal tool to accomplish this in 2006 by requiring the implementation of science-based ACLs that end and prevent overfishing for U.S. fisheries. Now it must provide the funding to collect and analyze the information necessary to continue meeting that requirement and sustaining healthy fisheries. Providing this funding for data collection and analysis will significantly improve the federal government’s efforts to maintain viable fisheries and healthy marine ecosystems.

Sincerely,



Lee R. Crockett
Director, Federal Fisheries Policy
Pew Environment Group

⁶ NOAA, “NOAA FY 2012 President’s Budget”, Chapter 2: National Marine Fisheries Service, p. 315. Available at: http://www.corporateservices.noaa.gov/~nbo/fy12_presidents_budget/National_Marine_Fisheries_Service_FY12.pdf.

⁷ NMFS (December 2010). “2010 Status of U.S. Fisheries: Fourth Quarter Update.” Available at: www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm.



SOCIETY for INDUSTRIAL and APPLIED MATHEMATICS

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Official Written Testimony for Fiscal Year 2012

Submitted by: Dr. Lloyd Nicholas Trefethen
President, Society for Industrial and Applied Mathematics (SIAM)
&
Dr. Reinhard Laubenbacher, Vice President for Science Policy, SIAM

Submitted to the Subcommittee on Commerce, Justice and Science
Committee on Appropriations
United States House of Representatives
Washington, DC

Testimony on the Fiscal Year 2012 Appropriations for the National Science Foundation

March 11, 2011

Summary: This written testimony is submitted on behalf of the Society for Industrial and Applied Mathematics (SIAM) to ask you to continue your support of the National Science Foundation (NSF) in fiscal year (FY) 2012 by providing NSF with \$7.767 billion. In particular, we urge you to provide the request level for key applied mathematics and computational science programs in the Division of Mathematical Sciences and the Office of Cyberinfrastructure.

Written Testimony

We are submitting this written testimony for the record to the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the U.S. House of Representatives on behalf of the Society for Industrial and Applied Mathematics (SIAM).

SIAM has approximately 13,000 members, including applied and computational mathematicians, computer scientists, numerical analysts, engineers, statisticians, and mathematics educators. They work in industrial and service organizations, universities, colleges, and government agencies and laboratories all over the world. In addition, SIAM has over 400 institutional members, including colleges, universities, corporations, and research organizations.

First, we would like to emphasize how much SIAM appreciates your Committee's continued leadership on and recognition of the critical role of the National Science Foundation (NSF) and its support for mathematics, science, and engineering in enabling a strong U.S. economy, workforce, and society.



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Today, we submit this testimony to ask you to continue your support of NSF in FY 2012 and beyond. In particular, we request that you provide NSF with \$7.767 billion, the level requested for this agency in the FY 2012 budget request.

As we are reminded every day, the nation's economic strength, national security, and public health and welfare are being challenged in profound and unprecedented ways. Addressing these challenges requires that we confront fundamental scientific questions. Computational and applied mathematical sciences, the scientific disciplines that occupy SIAM members, are particularly critical to addressing U.S. competitiveness and security challenges across a broad array of fields: medicine, engineering, technology, biology, chemistry, computer science, and others. Furthermore, in the face of economic peril, federal investments in mathematics, science, and engineering create and preserve good jobs; stimulate economic activity; and help to maintain U.S. pre-eminence in innovation, upon which our economy depends.

National Science Foundation

The National Science Foundation (NSF) provides essential federal support of applied mathematics and computational science, including more than 60 percent of all federal support for basic academic research in the mathematical sciences. Of particular importance to SIAM, NSF funding supports the development of new mathematical models and computational algorithms, which are critical to making substantial advances in such fields as climate modeling, energy technologies, genomics, analysis and control of risk, and nanotechnology. In addition, new techniques developed in mathematics and computing research often have direct application in industry. Modern life as we know it, from search engines like Google to the design of modern aircraft, from financial markets to medical imaging, would not be possible without the techniques developed by mathematicians and computational scientists. NSF also supports mathematics education at all levels, ensuring that the next generation of the U.S. workforce is appropriately trained to participate in cutting-edge technological sectors and that students are attracted to careers in mathematics and computing.

Below are highlights of the main budgetary and programmatic components at NSF that support applied mathematics and computational science.

NSF Division of Mathematical Sciences

The NSF's Division of Mathematical Sciences (DMS) provides the core support for all mathematical sciences. DMS supports areas such as algebra, analysis, applied mathematics, combinatorics, computational mathematics, foundations, geometry, mathematical biology, number theory, probability, statistics, and topology. In addition, DMS supports national mathematical science research institutes; infrastructure, including workshops, conferences, and equipment; and postdoctoral, graduate, and undergraduate training opportunities.

The activities supported by DMS and performed by SIAM members, such as modeling, analysis, algorithms, and simulation, provide new ways of obtaining insight into the nature of complex

Testimony for the House Appropriations Committee – Commerce, Justice, Science Subcommittee (3/11/11)–Page 2



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phenomena, such as the power grid, software for military applications, the human body, and energy efficient building systems. ***SIAM strongly urges you to provide DMS with the budget request level of \$260.4 million to enable sustained investment by NSF in critical mathematical research and related mathematical education and workforce development programs.***

In particular, investment in DMS is critical because of the foundational and cross-cutting role that mathematics and computational science play in sustaining the nation's economic competitiveness and national security, and in making substantial advances on societal challenges such as energy, the environment, and public health. NSF, with its support of a broad range of scientific areas, plays an important role in bringing U.S. expertise together in interdisciplinary initiatives that bear on these challenges. DMS has traditionally played a central role in such cross-NSF efforts, with programs supporting the interface of mathematics with a variety of other fields, such as geosciences, biology, cyber discovery, and solar energy.

SIAM supports DMS's role in enabling interdisciplinary work and draws your attention to the proposed Research at the Interface of Biological, Mathematical, and Physical Sciences and Engineering (BioMaPS) initiative, which would support research in mathematical and computational biology to expand our understanding of biological processes and inspire potentially transformative new technologies for manufacturing and energy. This effort is particularly timely in light of the challenges outlined in the 2009 National Research Council report on "A New Biology for the 21st Century." The report emphasizes the need for development of new information technologies and sciences and creation and implementation of interdisciplinary curricula, graduate training programs, and educator training in order to create a quantitative approach in biological and other sciences to tackle key challenges in food, environment, energy, and health.

NSF Office of Cyberinfrastructure

Work in applied mathematics and computational science is critical to enabling effective use of the rapid advances in information technology and cyberinfrastructure. Programs in the NSF Office of Cyberinfrastructure (OCI) focus on providing research communities access to advanced computing capabilities to convert data to knowledge and increase our understanding through computational simulation and prediction.

SIAM strongly urges you to provide OCI with the budget request level of \$236.0 million to invest in the computational resources and science needed to solve complex science and engineering problems. In addition, SIAM strongly endorses OCI's efforts to take on the role of steward for computational science across NSF, strengthening NSF support for relevant activities and driving universities to improve their research and education programs in this multidisciplinary area.

The programs in OCI that support work on software and applications for the next generation of supercomputers and other cyberinfrastructure systems are very important to enable effective use



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of advances in hardware, to facilitate applications that tackle key scientific questions, and to better understand increasingly complex software systems. SIAM strongly supports the proposed FY 2012 increase in funding for OCI software activities, particularly for the Software Institutes program, which is aimed at supporting a community of partnerships among academia, government laboratories, and industry for the development and stewardship (expansion, hardening, and maintenance) of sustainable end-to-end software systems. SIAM also supports the proposed increase in OCI data activities including data infrastructure, tools, and repositories. The explosion in data available to scientists from advances in experimental equipment, simulation techniques, and computer power is well known, and applied mathematics has an important role to play in developing the methods and tools to translate this shower of numbers into new knowledge.

SIAM also supports the new agency-wide initiative, Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21). This proposed program would develop comprehensive, integrated, sustainable, and secure cyberinfrastructure to accelerate research and capabilities in computational and data-intensive science and engineering.

Supporting the Pipeline of Mathematicians and Scientists

Investing in the education and development of young scientists and engineers is a critical role of NSF and a major step that the federal government can take to ensure the future prosperity and welfare of the U.S. Currently, the economic situation is negatively affecting the job opportunities for young mathematicians--at universities, companies, and other research organizations. It is not only the young mathematicians who are not being hired who will suffer from these cutbacks. The research community at large will suffer from the loss of ideas and energy that these graduate students, postdoctoral fellows, and early career researchers bring to the field and the country will suffer from the lost innovation.

In light of this situation, SIAM strongly supports NSF's proposed FY 2012 increases in the Graduate Research Fellowship (GRF) program and the Faculty Early Career Development (CAREER) program. The GRF program would receive \$198 million which would support 2,000 new graduate student awards. This funding would also allow NSF to increase the cost of education allowance in FY 2012 from \$10,500 to \$12,000, as mandated in the America COMPETES Reauthorization Act. The CAREER program would receive \$222 million and would support an additional 60 CAREER awards, totaling 606 new awards for FY 2012 if funded.



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Mathematics and International Science and Engineering

Science knows no borders, and nowhere is this more true than in mathematics. Mathematical research typically advances through the close collaboration of small groups of researchers, without the need for expensive equipment and using universal mathematical notation to minimize language obstacles. In addition, mathematics, as an enabling discipline for all of science and technology, and as a foundation for science education, plays a key role in addressing many of the most challenging problems that the world faces, such as infectious disease and sustainable energy generation. International scientific cooperation is not just good science, however; it can also foster understanding and goodwill between societies more broadly. Mathematical and scientific activities can aid in promoting United States international policy goals by building relationships and trust with other countries, enhancing the global image of America, and spurring global development.

SIAM believes strongly in the federal government's support of international science and technology initiatives that help advance U.S. foreign policy and security, including cooperative research programs that further scientific knowledge applicable to major societal challenges, promote development of research and education capabilities abroad, and introduce U.S. students to global issues and collaborative relationships.

FY 2011 Appropriations

Before concluding, we want to make a brief comment on the resolution of appropriations for FY 2011. The 5.2 percent cut proposed for NSF for the remainder of FY 2011 in H.R. 1 would greatly curtail research that is critical for the country's scientific enterprise and our economic future. The cut would likely mean that 10,000 fewer university researchers, including many SIAM members, would receive funding for research and education efforts. SIAM urges you to provide at least the FY 2010 level of funding for NSF in FY 2011.

Conclusion

We would like to conclude by thanking you again for your ongoing support of NSF that enables the research and education communities it supports, including thousands of SIAM members, to undertake activities that contribute to the health, security, and economic strength of the U.S. NSF needs sustained annual funding to maintain our competitive edge in science and technology, and therefore we respectfully ask that you continue robust support of these critical programs by providing \$7.767 billion for NSF for FY 2012.

We appreciate the opportunity to provide testimony to the Committee on behalf of SIAM. SIAM looks forward to providing any additional information or assistance you may ask of us during the FY 2012 appropriations process.

**Testimony of the STEM Education Coalition
to the
House Committee on Appropriations Subcommittee on Commerce, Justice, Science, and
Related Agencies**

Submitted by:
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March 11, 2011

The Science, Technology, Engineering, and Mathematics (STEM) Education Coalition represents the broadest and most unified voice in advocating for policies to improve STEM education at all levels. As an alliance of more than 500 business, professional, and education organizations, our Coalition works aggressively to raise awareness in Congress, the Administration, and other organizations about the critical role that STEM education plays in enabling the U.S. to remain the economic and technological leader of the global marketplace of the 21st century. **Our Coalition supports the Administration's Fiscal Year 2012 Budget Request of \$911.2 million for the National Science Foundation's Education and Human Resources Directorate.** We also appreciate the opportunity to offer our views on this appropriation as well as on other issues related to STEM education that fall under the Subcommittee's purview.

It is a central mission of our Coalition to inform federal policymakers on the critical role that STEM education plays in U.S. competitiveness and future economic prosperity. Our broad alliance advocates on behalf of policies to encourage and inspire more of our best and brightest students, especially those from underrepresented or disadvantaged groups, to study in STEM fields; improve the content knowledge and professional skills of the STEM educator workforce; recruit and retain highly-skilled STEM educators; improve the resources available for learning STEM subjects; and facilitate better coordination of efforts among federal agencies that provide STEM education programs.

Over the past several years, Congress has repeatedly demonstrated strong bipartisan support for increased investments to strengthen the U.S. STEM education pipeline. While we recognize the difficult choices that Congress faces in controlling the growth of federal deficits, debt, and spending, we are also concerned that some budget proposals in the House and Senate would significantly reduce funding for STEM education programs at the National Science Foundation (NSF) and would have an adverse effect on U.S. competitiveness and on the ability of American students to compete in the global technological economy of the future.

The NSF has long-served as a catalyst for STEM education reform. NSF's Education and Human Resources (EHR) Directorate seeks to advance discovery and innovation at the frontiers of STEM learning and teaching; support the testing, assessment, study and evaluation of highly innovative models and approaches to learning; foster linkages between STEM education research and practice; and serve as the intellectual nexus that unites education research and evaluation activities across the Foundation and with other federal agencies. In short, NSF's EHR programs make the rest of the Federal government's investments in STEM education programs more effective and efficient.

While NSF provides leadership in helping to develop effective tools to facilitate STEM learning, the Department of Education (DoEd) must play a leading role in scaling up and disseminating the knowledge embodied in NSF-funded educational programs into practice. It is essential that these two agencies form an effective partnership to deliver the best new educational strategies and materials to pre-K-12 educators.

The Administration has proposed a joint NSF-DoEd initiative under a new *Teacher Learning for the Future* program to prepare 100,000 STEM teachers with strong teaching skills and deep content knowledge over the next decade. Of the \$100 million proposed for this joint program, \$20 million would be managed by NSF's EHR Directorate. According to the Administration's Budget Request, the NSF portion of this funding would be drawn from the existing funding for the NSF Math and Science Partnership Program and the Robert Noyce Teacher Scholarship Programs. While we support the Administration's overall objective in devoting significant funds toward effective models for STEM teacher recruitment and retention, we urge the Administration to implement this program in a way that clearly distinguishes this new mission from the somewhat similar missions of the two existing programs from which the these new funds have been drawn.

Our Coalition also supports comprehensive efforts to coordinate, evaluate, and review all federal STEM programs on a regular basis to ensure that effective programs are scaled up and that underperforming programs are improved or eliminated. We are pleased that the Administration has begun the process of implementing Section 101 of the America COMPETES Reauthorization Act of 2010, which directed the Director of the Office of Science and Technology Policy to:

"establish a committee under the National Science and Technology Council, including the Office of Management and Budget, with the responsibility to coordinate Federal programs and activities in support of STEM education, including at the National Science Foundation, the Department of Energy, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Department of Education, and all other Federal agencies that have programs and activities in support of STEM education."

We encourage the Subcommittee to aggressively pursue its oversight role in ensuring that STEM education programs across the federal science agencies are focused on producing sound results that will contribute to student achievement.

Finally, as the Subcommittee looks to foster the improvement of educational programs at the National Science Foundation and at other federal science agencies under its jurisdiction, we would like to offer a number of broader policy recommendations related to STEM education:

- Our Coalition supports an inclusive definition of the term “STEM” education by federal programs that is not limited to math and science, but embraces each STEM discipline and its unique needs.
- Our Coalition supports efforts to expand the diversity of the STEM pipeline and workforce, including targeted initiatives to promote the inclusion of underrepresented minorities and women in STEM fields.
- Our Coalition supports a strong emphasis in learning environments on hands-on, experiential, inquiry-based and learner-centered student experiences and activities, including engineering design processes.
- Our Coalition supports incentives to promote business community engagement in STEM education activities at every level, including tax incentives for donations of equipment, training and services, and access to facilities.
- Our Coalition supports integration of STEM-focused activities in federal programs directed at learning environments outside the K-12 classroom, such as afterschool and summer community-based programs, universities and other higher education entities, community colleges, and workforce and job training programs.

We thank you for the opportunity to offer these recommendations and for your consideration.

WRITTEN TESTIMONY

SUBMITTED BY

BARBARA C. SOMSON, LEGISLATIVE DIRECTOR

on behalf of

INTERNATIONAL UNION, UNITED AUTOMOBILE, AEROSPACE & AGRICULTURAL
IMPLEMENT WORKERS OF AMERICA (UAW)
AND ITS LOCAL 2320,
NATIONAL ORGANIZATION OF LEGAL SERVICES WORKERS

to

HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES
UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 11, 2011

This testimony is submitted by the UAW and the National Organization of Legal Services Workers (NOLSW) in support of the Legal Services Corporation's Budget Request for FY 2012 in the amount of \$516,550,000.

The UAW has been a long-standing supporter of equal access to justice, and LSC is one of the most important means of providing such access to our nation's neediest citizens. The UAW supported the creation of LSC and has advocated for the program and its funding since its establishment in 1974. Moreover, UAW Local 2320, the National Organization of Legal Services Workers, represents several thousand legal aid attorneys, paralegals and support staff across the country.

LSC provides low-income Americans with access to high quality legal assistance in civil matters, currently funding 136 independent legal aid programs located in every state and territory in the United States. Nearly 95 percent of LSC's federal funding is distributed to these local programs which, in turn, provide services that address the most basic civil legal needs of our poorest and most vulnerable citizens. Approximately 70 percent of LSC clients are women, many of whom are victims of domestic violence.

Military families avail themselves of LSC-funded program services for help with issues related to housing, accessing government assistance, and other critical needs. Many persons with disabilities rely on LSC to gain the benefits and employment opportunities that allow them to live independent and productive lives.

The Great Recession and the slow economic recovery have contributed enormously to the need for significantly increased funding for LSC. The nation's rising poverty has made the eligible client base spike. The most recent data show that approximately 44 million Americans (14 percent) were living in poverty in 2009, up from 40 million (13 percent) in 2008. Today, unfortunately, well over 50 million persons are eligible for LSC-funded services, generally limited to those with incomes below 125 percent of the poverty line. The high unemployment rate and the housing foreclosure crisis have driven a high number of clients to legal aid offices for help receiving unemployment insurance benefits and with foreclosure-related issues.

The nation's economic crisis has increased demand for LSC programs' services at the same time it has dramatically reduced the programs' other sources of funding. State government budgets are in crisis and most states that have funded legal aid programs can no longer afford to do so at the level they have in the past. Funding from Interest On Lawyer Trust Accounts (ILOTA) nearly dried up as a result of the housing crisis and low interest rates. And private funding has declined as well.

LSC is currently funded under the FY 2011 Continuing Resolution at the same level of funding provided in FY 2010, \$420 million; \$394.4 million of that amount goes to support the basic field program grantees. LSC requests a total of \$516,550,000 for FY 2012, of which \$484,900,000 would go to support basic field grantees. The UAW and NOLSW

strongly support this request. When adjusted for inflation, this is less funding than LSC would need - - \$574 million - - to match the \$400 million appropriation it received from Congress in FY 1995.

Included in the request is \$1 million to continue the pilot Loan Repayment Assistance Program (LRAP) begun in 2005 to help determine the extent to which repayment assistance for law school education debts would help LSC grantees recruit and retain high quality attorneys. Civil legal aid attorneys are the very lowest paid members of the legal profession, earning less than public defenders and other public interest lawyers and far less than private lawyers in any size firm. These very low salaries are compounded by the fact that so many law school graduates have high law school debt, making it difficult for legal aid programs to attract and retain young lawyers. We believe the availability of loan repayment programs makes the difference for those who wish to make legal assistance a career.

For the foregoing reasons, the UAW and NOLSW supports the FY 2012 budget request of the Legal Services Corporation and urges the subcommittee to fund LSC at the requested level.

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