Committee on Science, Space, and Technology

February 17, 2011 Hearing on the FY 2012 R&D Budget Request

Opening Statement By

Ranking Member Eddie Bernice Johnson

Thank you, Chairman Hall, for holding this hearing and welcome, Dr. Holdren, to the Committee as we take our first look at the President's FY 2013 R-and-D budget proposals.

Investments in research and development and STEM education are critical to fostering innovation and maintaining our nation's competitive edge. But these are also fiscally challenging times. In looking through the President's R-and-D and STEM education budget, it is noticeable to me that the agencies are trying hard to be more efficient and achieve the most they can with modest increases and in many cases, having to absorb cuts.

Many of these cuts represent difficult choices and some of us are going to have some disagreements over those choices, but I commend the President for setting priorities and following through in his R-and-D budget request.

It is imperative to our future that we continue to prioritize investments that will advance our knowledge, create new industries and jobs, give our children the grounding in science and technology they will need to succeed in a competitive world economy, and improve the quality of life of our citizens. And I believe the President's budget does just that.

Having said that, I want to talk about a few areas in which I have some questions.

First, I have concerns about some of the funding for disaster warning, prevention, and mitigation. 2011 was the costliest year ever in terms of economic losses from natural catastrophes.

In the United States alone, weather and climate related disasters in 2011 are estimated to have cost us \$55 billion. More than 1000 people lost their lives in these weather-related events and an additional 8,000 were injured.

The R-and-D we carry out to ensure that our buildings withstand these disasters and our citizens have the information they need to be safe is necessary to protect both lives and property. As 2011 showed, these things really matter.

There's one picture that sticks in my head from the 2008 Hurricane Ike in Galveston, and that's of a single white house still standing after everything else around it was destroyed. The owners of that house talked about how they had built it using the latest designs and technologies to make their house resilient.

Those technologies and engineering designs are based on R-and-D, much of it supported by our federal agencies. I am pleased that NIST's budget request for FY 2013 prioritizes this area of research. The modest increase in funding proposed by NIST will help communities recover rapidly from natural disasters with minimal loss of life, damage, and business disruption.

But we also need to maintain and continue to improve our prediction capabilities, and be able to communicate to local authorities when disasters are looming. I am pleased that NOAA's GOES-R satellite is getting a substantial increase in this budget to keep in on track for a 2015 launch.

But I have questions about the small cut to the long-troubled JPSS satellite and how that will affect the program's progress and development of the instruments.

I also worry that the proposal in the budget to close many of the small regional National Weather Service offices will hamper communication with local authorities and increase the risk for loss of life. I hope the Administration will address these concerns before they start to move on any of these plans.

Second, the NASA budget proposes some significant changes and reductions, including to Mars exploration. I have questions about how the proposed cuts to the Mars science program will affect U.S. leadership and

critical capability in landing and operating spacecraft on the surface of Mars.

I'm also worried about the perception this plan may create that the United States is an unreliable partner in international collaboration and how this might affect the potential for future collaborations. I recognize the fiscal constraints that we are in now, but in some cases international collaboration is the best way to both maintain U.S. leadership and get the most out of our investments.

Finally, let me say a few words about STEM education. In December, Dr. Holdren, you sent us an inventory of Federal investments in STEM education. It is the most comprehensive such inventory we have seen, and it has been very helpful, so thank you.

Earlier this week we received a preliminary report on a federal strategic plan for STEM education. I am also very happy to see good progress on the strategic plan that we asked for in COMPETES.

But in the meantime, this budget would propose significant cuts to the STEM education budgets of several of our science agencies. Without the detailed strategic plan to point to, I worry that these cuts lack sufficient justification.

Our science agencies contain a wealth of intellectual capital and research infrastructure that can and have inspired, attracted, and educated students and the public in STEM for generations. We need to make some tough choices, and we need to make some wise choices. Let's just make sure we can clearly justify all of those choices.

We will have some concerns and disagreements, but let me be clear. This is a good budget for research, innovation, and education under the circumstances. I look forward to working with the President and my colleagues on both sides of the aisle in the months ahead to make sure that the appropriations this Congress will eventually pass properly reflect the need to invest in our future.

Thank you Dr. Holdren for being here today and thank you for your contributions to ensuring continued U.S. leadership in science and technology.