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March 13, 2009

The Honorable John Spratt
Chairman, Committee on the Budget
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Pursuant to the provisions of clause 4(f) of House Rule X of the Rules of the House of Representatives for the 111th Congress and Section 301(d) of the Congressional Budget Act of 1974, as amended, I am transmitting the Views and Estimates, including Additional and Minority Views, of the Committee on Science and Technology for FY2010. In addition, I am transmitting recommendations to comply with Sec. 321 Oversight of Government Performance as required in the FY2009 Budget Resolution.

Sincerely,

BART GORDON
Chairman

Enclosure

cc: The Honorable Ralph Hall, Ranking Member, Committee on Science and Technology

VIEWS AND ESTIMATES
COMMITTEE ON SCIENCE AND TECHNOLOGY
FISCAL YEAR 2010

The President released a summary of the FY10 budget request on February 26, 2009. The Committee is very pleased that the budget summary recognizes the benefits that science and technology and research and development investments have for our country's economic competitiveness, energy security, job growth, and environmental health. The Committee notes that many of the priorities proposed in the budget summary are consistent with those outlined in two of the Committee's major authorizing bills signed into law during the 110th Congress – the America COMPETES Act (PL 110-69) and the Energy Independence and Security Act of 2007 (PL 110-140). In addition, many of the priorities in the budget summary build upon the science and technology funding that was provided in the American Recovery and Reinvestment Act (PL 111-5). The Committee looks forward to reviewing the detailed budget request later this spring. The following are the Committee's views on key priorities in the budget summary related to programs within the Science and Technology Committee jurisdiction.

National Aeronautics and Space Administration (NASA)
The budget provides $18.7 billion for NASA in FY10. The FY09 omnibus appropriations bill provided $17.8 billion and the Recovery Act provided $1 billion. The budget summary is generally consistent with the priorities of the NASA Authorization Act of 2008 (PL 110-422), including support for Earth science and climate change monitoring; human and robotic space exploration; completion of the International Space Station; aeronautics research to transform the air traffic control system and support more efficient aircraft; and retirement of the Space Shuttle in 2010, with the possibility of one additional flight. However, further details will be needed to better assess the Administration's specific budget priorities for NASA.

The Committee believes that NASA should continue to engage in the most cutting-edge research and serve as inspiration for the next generation of scientists and engineers. To do this, NASA will need the resources to fulfill each of its diverse missions - space exploration, science, aeronautics research and development, and education. The Committee plans to move a multi-year NASA reauthorization this year to further direct and balance the agency's programs.

National Science Foundation (NSF)
The budget provides $7 billion for NSF in FY10. The omnibus provided $6.5 billion and the Recovery Act provided $3 billion for the agency. The budget increases support for high-risk, high-reward research; early-career researchers through the Graduate Research Fellowship and Faculty Early Career Development programs; partnerships between two-year colleges and the private sector to train science and engineering technicians; and climate change research and education.

The Committee notes that since its creation in 1950, NSF has been tasked with strengthening science, technology, engineering and mathematics (STEM) education at

all levels. NSF's education programs are unique in their peer review processes, their linkage to higher education, and their resulting capacity to develop new and improved educational materials and assessments, create better teacher training techniques, and move promising ideas from research to educational practice. In particular, the Committee supports robust funding for the Robert Noyce Teacher Scholarship Program, which is helping to recruit and train the next generation of K-12 STEM teachers by providing scholarships for students to earn a degree in a STEM field while learning content-oriented pedagogy and following a streamlined path toward teacher certification. NSF is also uniquely positioned to help broaden participation in STEM fields at all levels, in particular through institutional capacity building grants and grants that integrate research and education.

Department of Energy (DOE)
The budget provides $26.3 billion overall for the Department of Energy in FY10, and notes that the budget request will support:

- Significant increases in funding for basic research and world-leading scientific user facilities to support transformational discoveries and accelerate solutions to our Nation's most pressing problems – including the development of clean energy;
- The transition to a low-carbon economy through increased support of the development and deployment of clean energy technologies such as solar, biomass, geothermal, wind, and low-carbon emission coal power;
- Smart grid technologies and other investments to modernize and enhance the electric transmission infrastructure to improve energy efficiency and reliability; and
- Early commercial deployment of innovative, clean energy technologies through loan guarantees.

The Committee is pleased that the budget supports these areas, including increased funding for the DOE Office of Science (in addition to the $4.8 billion provided in the omnibus and $1.6 billion provided in the Recovery Act) to: improve our understanding of climate science; continue the U.S. commitment to international science and energy experiments; and support graduate fellowships that will train students in critical energy fields. In addition, the Committee supports the Administration's goal of accelerating research, development, demonstration, and commercialization of clean energy technologies and the Administration's call for increased investment in carbon capture and storage (CCS) technologies (in addition to the $3.4 billion provided in the Recovery Act and additional funds provided in the omnibus for coal and CCS).

The Committee also agrees with the budget increase for "promising but exploratory and high-risk research proposals that could fundamentally improve our understanding of climate, revolutionize fields of science, and lead to radically new technologies." Along these lines, the Committee strongly supports aggressive implementation of the Advanced Research Projects Agency for Energy (ARPA-E) at DOE. As recommended by the National Academies and authorized in COMPETES, ARPA-E will be tasked with high-risk, high-reward energy technology development, especially research that is too cross-cutting or multi-disciplinary to fit into the current DOE stovepipes. ARPA-E will bring together the best and the brightest from all sectors - national labs, academia, and the private sector - give them resources and autonomy, and get bureaucracy out of their

way. The omnibus and the Recovery Act provided a total of $415 million for ARPA-E. The National Academies recommended that the program grow to $1+ billion annually.

National Institute of Standards and Technology (NIST)
The budget supports investment in our country's economic competitiveness by promoting innovation in U.S. manufacturing and advancing science, standards, and technology at the Department of Commerce. Given that, as the budget summary notes, manufacturing employment has hit a 60-year low, the Committee is pleased that the budget supports small- and medium-sized businesses through $125 million for the Manufacturing Extension Partnership (MEP) and $70 million for the Technology Innovation Program (TIP) in FY10. Both of these programs were consistently reduced or zeroed-out by the previous Administration despite both programs' strong record of creating jobs and providing a large return on investment.

The Committee also supports FY10 funding for NIST research and facilities at the levels authorized in COMPETES.

National Oceanic and Atmospheric Administration (NOAA)
The budget prioritizes prediction and monitoring of weather and climate at NOAA, providing $1.3 billion to fund the development and acquisition of weather satellites and climate sensors. The omnibus provided $966 million and the Recovery Act provided $600 million for these activities. The Committee is encouraged that funds are provided to restore several climate sensors; expand the computing capacity NOAA needs to maintain the continuity of climate data records; and develop more refined models to project climate change impacts at a more refined scale.

In addition, the Committee is pleased that the budget summary notes the importance of funding to "advance climate and ocean research, including efforts to understand and monitor ocean acidification."

Department of Transportation
The budget notes that the Administration plans to work with Congress to reform surface transportation programs to make investments in a more sustainable future. The Committee supports this goal and plans to move legislation this year to restructure and refocus surface transportation research and development programs to better address congestion, maximize energy efficiency, and reduce environmental impacts.

The budget provides $800 million for the Federal Aviation Administration (FAA) to support the Next Generation Air Traffic Control System (Next Gen), a long-term effort to improve the efficiency, safety, and capacity of the air traffic control system. The Committee strongly supports Next Gen, including both the FAA and NASA research and development components of the program. The Committee's position on the FAA component of Next Gen is included in HR 915, the FAA Reauthorization Act of 2009.

Department of Homeland Security (DHS)
The budget provides $355 million to enhance cybersecurity technology research and development and make private and public sector cyber-infrastructure more resilient and secure. The Committee has long been at the forefront of addressing cybersecurity issues, which only grow in importance as more and more of our infrastructure and economy are dependent on computers and the Internet. The Committee looks forward to reviewing further details of the Administration's plans in this area.

The Committee also plans to move legislation this year to ensure that DHS aligns its research priorities with the most critical threats and homeland security needs and ensures that the technology developed meets reliable testing and evaluation standards as well as the needs of end-users. The Committee expects to include in these efforts research on technologies such as unmanned aerial vehicles and tunnel detection to improve border security.

Environmental Protection Agency (EPA)
The budget provides $3.9 billion for research, regulation, and enforcement at EPA, a significant increase compared to previous years. In recent years, the Committee has noted the need for increased funding for research and development at EPA to ensure that regulations are scientifically sound and cost effective. The EPA Science Advisory Board has also recommended increased budgets for the Office of Research and Development since 2005. The Committee is encouraged by the proposed increase and would expect that this budget level will allow for funding of initiatives such as the assessment of the health and safety of nanotechnology products, developing clean-up standards for methamphetamine contamination, and assessment of the impacts of climate change on society and ecosystems.

Small Business Innovation Research
The budget summary does not specifically reference the Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) programs. However, the Committee believes these programs are another important tool to promote economic growth, job creation, innovation, and the commercialization of new technologies into the marketplace. The Committee plans to move legislation similar to HR 5819 from the 110th Congress to increase investment in these programs and refocus that investment to better meet the needs of small businesses in emerging industries.

Department of State and International Programs
The budget provides additional funding for key programs that advance U.S. foreign policy goals, including funding for energy initiatives and programs addressing global climate change. The Committee recognizes the need for better coordination of international science and technology efforts to better leverage both the expertise and resources throughout the world to address global challenges (such as energy and climate change, among others) and the diplomatic benefit of international science and technology activities. The Committee plans to move legislation on this issue and looks forward to seeing a more detailed budget request to support these activities.

SEC. 321 OVERSIGHT OF GOVERNMENT PERFORMANCE

Under Sec. 321 of S. Con Res. 70 (the FY2009 Budget Resolution), committees were directed to review programs within their jurisdictions to root out waste, fraud, and abuse in program spending.

In the 110th Congress, the Science and Technology Committee reestablished the Subcommittee on Investigations and Oversight to help identify instances of waste, fraud, and abuse that could create savings for the Federal taxpayer.

During the past two years, the Committee has run a very aggressive, wide-ranging oversight operation. House Rule X sets the Committee's jurisdiction, but the legislative jurisdiction assigned to the Committee is narrower than the oversight jurisdiction. Rule X also assigns the Committee special oversight responsibility for "reviewing and studying, on a continuing basis, all laws, programs, and Government activities dealing with or involving non-military research and development." The Committee appreciates the special function entrusted to it and will continue to tackle troubled programs and search for waste, fraud, and abuse in non-military research and development programs regardless of where it may be found.

In the last Congress, the Committee collectively authored almost 250 oversight letters and held 80 oversight hearings. The Committee is committed to building on this record in the 111th Congress. The Committee also routinely works with GAO and the Inspectors General of our agencies to maintain detailed awareness of the work of those offices. Currently, the Committee has 30 accepted requests for work pending with GAO and more will be developed over the coming months.

Government waste and contractor abuses were an important focus of the work of the Committee during the 110th, and this area will gain renewed attention in the 111th. In the 110th, work by the Committee led to Appropriations reductions of $17.8 million with another $1.5 million in Federal property identified for reclaiming from a contractor. The Committee also identified a program that had misspent hundreds of millions of dollars during a computer acquisition; that program has since been significantly restructured. Finally, the Committee has been working with GAO and other Committees to instill rigor and transparency into the proposed acquisition of new radiation portal detection monitors; that work has kept between $2 billion and $3 billion from being committed to acquiring immature and unproven technologies.

The Committee has also kept pressure on NOAA to rein in contractor costs and improve performance in the acquisition of next generation weather and climate satellites, which have experienced a multi-billion dollar cost overrun. It is hard to calculate the savings that come from the Committee's work in this area, but it is likely that without this oversight, the cost overruns would be even higher.

In the 111th Congress, the Committee will expand its work on identifying contractor abuses and cost savings by undertaking a wide-ranging review of contracts let by our

agencies in the past few years. The Committee will be looking for specific instances of abuse and lessons on how to better manage contract competitions and awards so that taxpayers know their money is being well spent.

A more detailed description of the Committee's planned oversight activities can be found in the Committee Oversight Plan: http://democrats.science.house.gov/Media/File/111th%20Oversight%20Plan.pdf.

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List of Signatures

1. Rep. Bart Gordon
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3. Rep. Lincoln Davis
4. Rep. Charlie Wilson
5. Rep. Brian Baird
6. Rep. Lynn Woolsey
7. Rep. Steve Rothman
8. Rep. Gary Peters
9. Rep. Daniel Lipinski
10. Rep. Paul Tonko
11. Rep. Kathy Dahlkemper
12. Rep. Brad Miller
13. Rep. Jerry Costello
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15. Rep. Marcia Fudge
16. Rep. Gabrielle Giffords
17. Rep. Parker Griffith
18. Rep. Harry Mitchell
19. Rep. Russ Carnahan
20. Rep. Ben Chandler
21. Rep. Eddie Bernice Johnson
22. Rep. Alan Grayson

Minority Views and Estimates
Committee on Science and Technology
Fiscal Year 2010 (FY10)

It is important that we continue to make appropriate investments in science and technology research, development, and math and science education in order for the United States to remain a world leader in competitiveness and innovation. While Committee Republicans agree with the Majority that the Administration's budget summary "recognizes the benefits that science and technology and research and development investments have for our country's economic competitiveness, energy security, job growth and environmental health," we are also mindful that in the current economic environment, the nation faces numerous and difficult budgetary decisions that will require our careful consideration, diligent oversight, and appropriate action.

We are pleased that the budget summary continues to build on the American Competitiveness Initiative and the America COMPETES Act (COMPETES) (P.L. 110-69) by keeping America on track to double the funding for physical sciences and engineering at the National Science Foundation (NSF), the National Institute of Standards and Technology (NIST), and the Office of Science at the Department of Energy (DOE), but have some concerns that the Administration may be accelerating this funding beyond authorized levels. While we were disappointed that the House Leadership and Appropriators did not adequately fund these agencies in the FY08 Omnibus (P.L. 110-161), we are skeptical about the unprecedented amounts currently being appropriated and the rate at which this is occurring, with no oversight. The Administration considers the $5 billion "investment in key science programs" included in the American Recovery and Reinvestment Act (Stimulus) (P.L. 111-5) to be a "significant down payment" toward doubling the funding for NSF, NIST, and the DOE Office of Science, in addition to the full-year amounts requested in the FY09 Omnibus. There are only 6 months left in FY09.

The Administration's budget summary offers only the overall budget request amounts for each agency and provides a brief narrative on Administration policies, which gives some limited guidance for NSF and NASA. Unfortunately, we do not have top line budget numbers for the National Oceanic and Atmospheric Administration (NOAA), NIST, DOE Office of Science and a number of other Science and Technology Committee jurisdictional areas such as the Department of Transportation research and development, the Office of Science and Technology Policy, the U.S. Fire Administration, and interagency programs such as the National Nanotechnology Initiative (NNI), the Networking Information Research and Development program (NITRD), or the Earthquake Hazards Reduction program.

Along with the Majority, we look forward to receiving a more detailed budget request.

National Aeronautics and Space Administration (NASA)
The Committee has sought to enable NASA to succeed as a multi-mission agency in carrying out the goals expressed in the NASA Authorization Act of 2008 (P.L. 110-422). In general, Committee Republicans concur with the Majority that the budget seems consistent with the priorities of the NASA Authorization Act of 2008, including retirement of the Space Shuttle following completion of the International Space Station and one additional flight to deliver the Alpha Magnetic Spectrometer. We applaud the Administration's reaffirmation of NASA's initiatives to return humans to the Moon by 2020 as part of a robust space exploration program, while also stimulating the private-sector to develop and demonstrate commercial crew and cargo delivery services to the International Space Station.

We are encouraged that the Administration's budget provides $18.7 billion for NASA in FY10. However, additional details are needed to adequately evaluate the Administration's goals and intent. For example, it is unclear whether the "new space flight systems for carrying American crews and supplies to space" is the Constellation System already under development. With Constellation, NASA is in the midst of a once-in-a-generation development of a new human launch system. This is the largest launch vehicle development since the beginning of the Space Shuttle program, with the added requirement of being capable of safely returning humans to the Moon. We are concerned that the flat funding profile in the Administration's out year projections may be unrealistic for such a large scale development effort without jeopardizing NASA's ability to successfully accomplish its portfolio of missions.

We also endorse the Administration's commitment to modernize our nation's air traffic control network by allocating $800 million to the Next Generation Air Transportation System. This multi-agency program, led by the FAA and NASA, requires a high level of research, development, and validation to ensure mission success. A robust, safe and efficient air transportation system, capable of handling three-times current traffic levels, is fundamental to promoting economic growth as well as maintaining our quality of life.

National Science Foundation (NSF)
The FY10 budget request for NSF is $7 billion. This is $1.1 billion less than what was authorized in COMPETES; however, NSF also received $3 billion in the Stimulus and is slated to receive another $6.5 billion in the FY09 Omnibus for roughly a six-month period. Committee Republicans support a robust budget request for NSF, but remain concerned that we not exceed current authorization amounts. We hope to see FY10 increases spread across all of the research fields NSF supports in the more detailed budget.

With regard to education, we agree with the Majority that NSF has an important and unique role to play in strengthening science, technology, engineering, and mathematics (STEM) education at all levels. We further agree with the Majority that the FY10 budget should provide, to the extent practical, sufficient funding for the Robert Noyce Teacher Scholarship Program in order to achieve the goals set out in COMPETES. We note that the budget summary highlights the Advanced Technological Education program (ATE) and the Graduate Research Fellowship and Faculty Early Career Development programs, all programs

that were also emphasized in COMPETES, but fails to mention the COMPETES-authorized Math and Science Partnerships program (MSP).

The budget summary makes climate change research and education a priority. We note that NSF currently funds numerous research and education programs that address climate change.

Department of Energy (DOE)

In general Committee Republicans agree with the Majority's views on the budget summary for the DOE. However a majority of us in the Minority continue to be opposed to the establishment of an Advanced Research Projects Agency for Energy (ARPA-E). Those of us in opposition maintain the view that creating a new agency to do work that is currently being done at the DOE is not a justified use of the limited funds available to the Department, and we support the Department's previous decision to not establish ARPA-E, but to engage in ARPA-E-type projects within the current DOE structure.

We also express our deep disappointment that the President's budget summary proposes to repeal the Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Research Program that was established in Section 999 of the Energy Policy Act of 2005 (P.L. 109-58). Section 999H(a) sets the funding for this program at a level of $50-million-per-year provided from Federal lease royalties, rents, and bonuses paid by oil and gas companies – not taxpayers. It should be clear that the overall program was initiated and carried out to reach energy known to exist in the areas targeted – energy that was impossible to produce without new technology – and that the required technology would be eventually paid for from the energy captured. The funds are to be directed towards research specifically targeting four areas: ultra-deepwater resources, unconventional natural gas and other petroleum resources, technology challenges of small producers, and research complementary to these areas. While we are wholly supportive of research into renewable and alternative forms of energy, we feel that domestically produced oil and natural gas will continue to play an important role in powering our country and must therefore receive support to increase our domestic supply and reduce our foreign dependence. The budget summary appears to focus solely on coal within the area of fossil energy research and development. We are pleased that research into carbon capture and storage is playing a prominent role in the budget summary, but we encourage the Budget Committee to continue to recognize the importance of oil and natural gas research and development to our country's future.

We note the President's proposal to scale back the Yucca Mountain program to "those costs necessary to answer inquiries from the Nuclear Regulatory Commission" and hope that this announcement and decision does not have a detrimental effect on building new nuclear plants in the United States, but would rather expedite research and development into reprocessing of spent nuclear fuel and the next generation of nuclear plants. Nuclear energy is just the type of clean energy technology that will reduce dependence on foreign oil that President Obama talks about in his budget blueprint.

National Institute of Standards and Technology (NIST)
The Department of Commerce's NIST supports U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology to enhance economic competitiveness and address important societal challenges. The Administration's FY10 budget summary does not include an overall agency total for NIST, but specifies a request of $70 million for the Technology Innovation Program (TIP) and $125 million for the Manufacturing Extension Partnership (MEP).

NIST's core research and facilities programs are widely recognized as well-managed, high-leverage activities supported by world-class researchers. Accordingly, Committee Republicans continue to believe these activities should receive priority in the budget, and, along with MEP and TIP, be funded in accordance with the levels authorized in COMPETES. Additionally, we intend to continue close oversight of NIST's budget and activities, and hope to work with the majority and the Administration to ensure appropriate and effective use of taxpayer dollars. Of particular interest will be NIST's recently created external construction grant program, which received a dramatic increase in the stimulus bill even though the program has not been authorized or formally reviewed and considered by the Committee.

National Oceanic and Atmospheric Administration (NOAA)
Committee Republicans agree with the Majority regarding support for the FY10 funding request of $1.3 billion for satellite and instrument acquisitions at NOAA. However, we believe this request is a substantial increase compared to previous years, requiring much greater oversight by the Committee of NOAA's plan to use them.

Department of Transportation (DOT)
The budget summary does not include information on research and development activities at DOT (most DOT R&D is funded through mandatory spending), but does note that the Administration intends to work with Congress to reform transportation programs as we near expiration of the 2005 Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Committee Republicans welcome this commitment to reform, and look forward to working with the Majority, the Administration, and the Transportation and Infrastructure Committee to produce a responsible bill that strengthens Federally-funded transportation R&D programs.

Department of Homeland Security (DHS)
The Administration's budget summary does not include information on science and technology activities at DHS, except to note that $355 million is requested for cybersecurity activities that include research and development. Committee Republicans are pleased to see cybersecurity highlighted as a key priority in the budget and look forward to reviewing further details on DHS programs in this area. We also look forward to reviewing budget details for major programs within our jurisdiction—the DHS Science and Technology Directorate, Domestic Nuclear Detection Office (DNDO), and firefighter grants programs—which together total over $2 billion. We also welcome the Majority's commitment to pursue legislation to better align DHS research priorities to address the most critical threats and departmental needs.

Environmental Protection Agency (EPA)

Committee Republicans share the Majority's view that investments in research and development will be beneficial in the form of greater cost-efficiency of environmental protection programs. However, we believe that any increase in funding levels should be done with thoughtful consideration. The $3.9 billion FY10 budget request for research, regulation and enforcement is almost an 18 percent increase over the FY09 request. Although we are aware that funding level requirements for research and development go through cycles, this budget request increase, by nearly one-fifth, may be out of proportion to what is needed; therefore, the minority would encourage increased oversight of EPA's research and development agenda.

Ralph M. Hall

Lamar Smith

Roscoe Bartlett

Vernon J. Ehlers

Frank D. Lucas

Judy Biggert

W. Todd Akin

Randy Neugebauer

Bob Inglis

Michael T. McCaul

Mario Diaz-Balart

Brian P. Bilbray

Adrian Smith

Paul Broun

Pete Olson

Congressman Grayson
Additional Views and Estimates

National Oceanic and Atmospheric Administration (NOAA)

The United States is extremely vulnerable to hurricanes, while our coastal areas are becoming more and more heavily populated. A National Academies Study found that half of the U.S. populations live within 50 miles of coastline. The devastation and impact of recent hurricanes have demonstrated the urgent need for an improved understanding of hurricanes and the ways in which we can better prepare to minimize loss of life and destruction of property. Billions of dollars are lost in hurricane-related events and will most likely escalate in the coming years. While billions of tax dollars are spent on rescue and relief efforts after a hurricane strikes, the federal government invests relatively little in the science and engineering research that could greatly minimize these costs and save lives.

More funding is needed to improve our ability to predict hurricanes and their intensity, and on mitigating the devastating affects on coastal populations and infrastructure. Research is needed to more quickly and accurately predict hurricane intensification, size, and location of landfall. Evacuations carry their own expenses and risks and we need to be certain they are necessary before state and local emergency managers issue these orders.

Modeling and understanding storm surges, rainfall, and flooding from hurricanes are of a great importance. In my opinion, improving hurricane storm observation technology can be done through GPS technology, unmanned aerial vehicles, mobile radars, high performance computing, satellites, etc. I encourage the Budget Committee to increase funding for the National Oceanic and Atmospheric Administration (NOAA) to ensure we have the best tools and can move weather forecasting technologies and models forward.

I am encouraged to see that some of these technologies received increases in the Recovery Act. The Science Committee continues to closely monitor the procurement, development and acquisition of the weather satellites to ensure new satellite systems such as the Geostationary Operational Environmental Satellite-R series (GOES-R) are on-track. Therefore, I also recommend the Budget Committee provide sufficient funds to National Aeronautics and Space Administration (NASA) for development of these new satellite tools and support a more effective transition of satellite technologies developed by NASA that have proven beneficial for improved weather forecasting to be integrated into NOAA's operational suite of tools.

Alan Grayson
Member of Congress

Additional Views and Estimates (FY 2010)

We agree with the priorities expressed in these views and estimates, and concur with the statements of both the Majority and the Minority regarding our pressing need to increase investments in our nation's science initiatives. American innovation and ingenuity has placed us a global leader in research and development, and if we are to remain there, our commitment to our scientists, engineers, researchers and students must not waver.

We support the Minority views that we need to ensure that ongoing basic and applied research at the National Science Foundation (NSF), the National Institute of Standards and Technology (NIST), and the Office of Science at the Department of Energy (DOE), does not suffer from any future decreases. Beyond funding these vital science agencies, we see value in contributing resources to efforts to overcome current hurdles in moving breakthrough technologies from the laboratories to the marketplace. For this reason, we support the Advanced Research Projects Agency for Energy (ARPA-E).

Bob Inglis
Member of Congress

Vernon J. Ehlers
Member of Congress

Committee on Science and Technology
U.S. House of Representatives
Additional Views

The Minority Views and Estimates for the Committee on Science and Technology incorporate many positions that I support regarding the future of the various agencies under the Committee's jurisdiction. However, I want to emphasize the need to be vigilant in our oversight of these agencies and their budgets. In these difficult times, it is incumbent upon the Committee to not let the taxpayer down. As the American people are being forced to tighten their belts and make difficult financial choices, this Committee must do the same. I worry that some of the budget increases in certain agencies, coupled with the massive outlays in the recently passed American Recovery and Reinvestment Act of 2009 are unsustainable, and in some areas are unwarranted, and goes beyond the levels authorized by this Committee. With each program, the Committee must ask the tough questions. Is this program necessary? Can we afford this program? Is this program already being done? How do we measure success or failure of the program?

Additionally, the Administration's budget seeks to make climate change a priority. As money is dispersed to this end, I believe we need to make sure that whatever conclusions that may be drawn are in fact based on sound science and that any policy initiatives should not be implemented without Congress and this Committee's active participation.

Paul Broun
Member of Congress

SENIOR DEMOCRATIC WHIP

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
CHAIRWOMAN, SUBCOMMITTEE ON WATER RESOURCES & ENVIRONMENT
SUBCOMMITTEE ON AVIATION
SUBCOMMITTEE ON RAILROADS

COMMITTEE ON SCIENCE AND TECHNOLOGY
SUBCOMMITTEE ON RESEARCH AND SCIENCE EDUCATION
SUBCOMMITTEE ON INVESTIGATION AND OVERSIGHT

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ADDITIONAL VIEWS
COMMITTEE ON SCIENCE AND TECHNOLOGY
FISCAL YEAR 2010 BUDGET

Now is the time to act boldly to produce a more diverse, well-educated workforce in science, technology, engineering, and mathematics (STEM). Federal research agencies can have a major impact on our nation's future competitiveness in these areas. Investments in research and education programs with demonstrated success represent wise stewardship of our nation's resources. Specifically, we must invest in segments of our population that are not pursuing these areas in order to foster a climate of diversity, creativity and competitiveness. We must also support policies that target gaps in the STEM workforce pipeline – such as the early-career faculty period – where we are losing precious human capital.

Below is a summary of some of these programs, along with my recommendations regarding their support. Some recommendations were made while keeping in mind an annual inflation rate of 3.8%[1].

National Science Foundation

Rather than focusing on infrastructure support, I recommend that the Foundation be given robust increases for extramural research and education activities. NSF "Broadening Participation" programs[2] are particularly effective in encouraging women and under-represented minorities to pursue STEM careers. The President suggests $7b for NSF for FY10, and the omnibus ($6.5b) and Recovery Act ($3b) will fund NSF at $10.5b. I recommend more robust funding for NSF, with a total of $10 billion for FY10.

Below are critical programs at that should receive sustained funding.

NSF Program	FY09 Appropriation	FY10 Request	EBJ Request	Note
NSF Programs Specified in America COMPETES				
Robert Noyce Scholarship Program	NS[3]	NS	$140.5m	Recommended by America COMPETES[4]
NSF: Faculty Early Career Development (CAREER) Program	NS	NS	$203.8m	Recommended by America COMPETES

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NSF Program	FY09 Appropriation	FY10 Request	EBJ Request	Note
NSF: Science, Technology, Engineering and Math Talent Expansion Program (STEP)	NS	NS	$55m	Recommended by America COMPETES
NSF: 'Partnerships for Access to Laboratory Science-- Sec 7026 of COMPETES Act	NS	NS	$5m	Recommended by America COMPETES
NSF: Hispanic-serving Institutions Undergraduate Program-- Sec 7033 of COMPETES Act	NS	NS	$5m	No specific funds authorized by COMPETES
NSF: Advanced Technology Education (ATE)	NS	NS	$64m	Recommended by America COMPETES

Other Important Broadening Participation Programs at NSF	FY09 Appropriation	FY10 Request	EBJ Request	Note
Minority Post-Docs	NS	NS	$10m	
ADVANCE Women's Program	NS	NS	$27m	25% increase from FY08 estimate
Informal Science Education (ISE)	NS	NS	$81m	25% increase from FY08 estimate
Broadening Participation in Computing (BPC)	NS	NS	$17.5m	25% increase from FY08 estimate
Graduate Research Fellowships - Women in Engineering and Computer Science	NS	NS	$10m	25% increase from FY07 actual

Department of Energy

Neither the FY09 Omnibus Appropriations Act nor the President's initial FY10 budget request contained language specifying funds for education programs at the Department of Energy Office of Science. The America COMPETES Act of 2007 did authorize funds for several vital education and research programs. Recommendations for those are listed below.

In addition, net metering and smart grid technology investments, as well as ARPA-E, will empower individuals to use energy more wisely. We must boldly move energy efficiency to a personal level with stronger incentives. Some states are excelling at this effort, and greater federal engagement is needed.

DOE Program	FY09 Appropriation	FY10 Request	EBJ Request	Note
DOE Early Career Awards for Science, Engineering, and Mathematics Researchers	NS	NS	$25m	Recommended by America COMPETES
Summer Institutes	NS	NS	$25m	Recommended by America COMPETES
Pilot Program of Grants to Specialty Schools for Science and Mathematics	NS	NS	$30m	Recommended by America COMPETES
Experiential-based Learning Opportunities	NS	NS	$7.5m	Recommended by America COMPETES
National Laboratories Centers of Excellence in Science, Technology, Engineering, and Mathematics Education	NS	NS	$5m	No specific amount authorized in COMPETES

Office of Science and Technology Policy
Funding for OSTP has been neglected so severely over the past decade that the administration's team of STEM advisors has dwindled by two thirds. OSTP must be restored to the strong, science-based, consultative body that is needed to coordinate cross-agency science programmatic activities and to liaison with the legislative branch.

Program	FY09 Appropriation	FY10 Request	EBJ Request
OSTP	$5.3m	NS	$20m

National Aeronautics and Space Administration
Engineering is the number one field in which women and minorities are most under-represented. More robust funding of NASA education activities to broaden participation will be needed to utilize our workforce potential more fully.

The total FY09 omnibus appropriation for NASA specified $169.2 million for the Education account. I recommend that NASA Education be funded at $200 million; I support retaining the overall NASA appropriation at the President's suggested $18.7 billion. One particular program, called MUREP, has a demonstrated success record for increasing diversity among NASA-related researchers.

NASA Program	FY09 Appropriation	FY10 Request	EBJ Request
NASA Education	$169m	NS	$200m
NASA Minority University Research and Education Programs (MUREP)	NS	NS	$50m

Department of Commerce – National Institute of Standards and Technology
These programs provide needed guidance to small businesses and also invest in small, start-up companies.

Program	FY09 Appropriation	FY10 Request	EBJ Request	Note
Manufacturing Extension Partnership (MEP)	$110m	$125m	$137.5m	25% increase from FY09 actual
Technology Innovation Program	$65m	$70m	$81.25m	25% increase from FY09 actual

Thank you for considering these requests. The programs mentioned above provide direct support to researchers, inventors, teachers, and students. They have demonstrated success in enhancing our STEM workforce so that it is more diverse, better educated, and more robust in the face of a "gathering storm" of international competitors.

Sincerely,

Eddie Bernice Johnson
Member of Congress

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[1] Source: http://www.usinflationcalculator.com/inflation/current-inflation-rates/
[2] A list of these programs and their funding amounts is at: http://www.nsf.gov/about/budget/fy2009/pdf/11_fy2009.pdf
[3] NS means "not specified."
[4] For references to the America COMPETES Act, funding totals were found at this source: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ069.110.pdf