Congress of the United States

House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

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March 3, 2017

The Honorable Diane Black Chairman Committee on the Budget U.S. House of Representatives B-234 Longworth House Office Building Washington, DC 20515

The Honorable John Yarmuth Ranking Member Committee on the Budget U.S. House of Representatives 134 Cannon House Office Building Washington, DC 20515

Chairman Black and Ranking Member Yarmuth:

Please find enclosed the Minority Views and Estimates of the Committee on Science, Space, and Technology on the FY 2018 Budget Request. Thank you for your consideration.

Sincerely,

Eddie Bernice Johnson

Ranking Member

Committee on Science, Space, and Technology

Minority Views and Estimates of the Democratic Caucus of the Committee on Science, Space, and Technology on the FY 2018 Budget Request for Submission to the Budget Committee

We have been asked to provide our views on the President's Fiscal Year 2018 budget request, even though the President's budget request has not yet been delivered to Congress. Consequently, we will focus on the importance of committing to robust and sustained investments in R&D, innovation, and education as part of any Budget Resolution prepared by Congress. We will not attempt to engage in a detailed discussion of recommended funding levels for specific programs.

Although the details on the President's "budget blueprint" i.e., proposed budget, are few and far between, what we know so far from the information that has come out is quite concerning. One thing that we do know is that non-defense discretionary spending will be slashed. The President's proposal to increase defense spending by \$54 billion and cut non-defense discretionary spending by the same amount, while exempting a number of non-R&D accounts, will inevitably force cuts that will be detrimental to our R&D, education, and innovation programs. Given the criticality of these programs to our future economy and quality of life, shortchanging these accounts is shortsighted and reckless.

In addition, we must invest in emerging areas of science and technology now to ensure that the United States remains preeminent in new and exciting fields. One such example is the field of artificial intelligence (AI). AI systems will profoundly affect a growing set of decision-based activities in commerce, society, and government. There are other equally exciting areas of research that are emerging, and it is vitally important that the Budget Resolution provide resources for the investments needed to make scientific advances and to promote U.S. leadership in these areas.

We urge the Budget Committee, as it works to craft its Budget Resolution, at a minimum to maintain in constant dollars and hopefully increase the levels of federal investment in our nation's scientific, innovation, and education enterprise. This requires investing in our research agencies, NASA, NOAA, NSF, EPA, DOE,

and others that help enhance America's economic strength, address our national priorities, advance knowledge, and inspire our youth.

Below are a few key priorities that we wanted to highlight. We hope they will be supported in the Budget Resolution presented to the House of Representatives.

Clean Energy Technologies

There have been rumors of cuts being proposed in the President's FY 2018 budget request to the Department of Energy's (DOE) programs that fund clean energy technologies. DOE funds a wide range of research, development, demonstration and commercial application activities. Given the President's promises to revitalize American infrastructure, we believe strong investments across DOE's energy R&D activities should be a top priority. The Loan Programs Office is just one example of DOE investments that have launched new energy industries and bridged the gap between laboratory innovations and market-ready technologies. Without transforming our energy sources or reducing our reliance on fossil fuels, we will not be able to address the imminent challenge of climate change. Our research investments across nuclear, fossil, and renewable energy, as well as energy efficiency, have resulted in major environmental benefits and considerable economic growth. We should also continue to invest in innovation programs such as ARPA-E. ARPA-E has exceeded every expectation for creating innovative new energy technologies and spurring private sector follow-on investment. We strongly oppose any cuts to the DOE Office of Science and the vital research stewarded by this office. The DOE national laboratories will only be the crown jewel of the American research enterprise if we continue to provide their world class scientists and national user facilities the support and funding they need.

Strong Environmental Protection Agency

Though we are not getting into the details of specific agency programs, due to the rhetoric and rumors surrounding the Environmental Protection Agency (EPA) budget, we want to stress the importance of preserving a strong EPA, an agency committed to protecting public health and the environment.

Although significant progress has been made in the past 40 years, we must now build upon this legacy and ensure that we continue to improve our environmental quality while fostering a strong economy. In the U.S., a healthy environment and

strong economy are not mutually exclusive. Stricter pollution limits help push the envelope of scientific innovation and create new technologies. And, as it has been proven many times over, improved worker productivity, increased agricultural yields, reductions in mortality and illness, and other economic and public health benefits far outweigh the costs of compliance.

The efforts by some to undermine how the EPA, and other federal agencies use science ultimately threaten our economy, public health and the environment, and even public confidence in our government. This is especially true when such efforts rely on biased, incomplete, and misleading information—"alternative facts" if you will—in an attempt to advance a provably false narrative against the EPA. EPA is not just a regulatory agency. EPA leads the nation's environmental science, research, education, and assessment efforts. These investments have been critical to protecting the environment as well as the public's health since the 1970s. We must not lose sight of the contribution that science activities at EPA have provided to the public for decades. The environment does not just get better by itself; it requires all of us working together to protect every American's right to clean air and water and a healthier environment. Cuts to EPA's budget and staffing would be ill-advised and shortsighted.

Climate Change Research

Each month the scientific evidence on climate change grows and it is confirming what the majority of climate scientists have been saying for some time. The Earth is warming, and Americans everywhere are dealing with the consequences of this new climate reality. Our coastal communities are watching the sea inch closer to their doorsteps. Families in the Southwest are facing increasingly severe drought and wildfire conditions. Extreme weather events such as heavy precipitation are becoming more frequent across the nation. This may be the defining scientific and policy challenge facing humanity, and we have a responsibility to the nation and the world to lead.

We must invest in the scientific research at NASA, NOAA, and our other agencies that will increase our understanding of the problem and provide for solutions.

National Science Foundation

With respect to the National Science Foundation, there have been efforts in recent years to significantly cut funding in some areas of research in order to increase funding for other, preferred research areas. These efforts have not been based on any consensus recommendations from the scientific community, on the number of high-quality research proposals in each field, or on any "crystal ball" that reveals which fields of science or which grants will yield the greatest benefits to science or to the nation over the long term. The efforts instead were based on ideological preferences and unsupported "hunches" by politicians with no science training or expertise, or true understanding of how science works.

The National Science Foundation's mission is to support cutting-edge fundamental research across all fields of science and engineering, advancing knowledge and creating the scientific foundation that fuels every sector of our economy. Without this foundation, our industries will be less competitive and we will lack the evidence necessary for smart policy making in health, energy, the environment, and every other area of national interest. As policymakers, if we were to arbitrarily choose winners and losers in basic research rather than letting our nation's best scientific minds determine the most pressing and potentially transformative scientific challenges, we would only be undermining scientific progress and undercutting our nation's competiveness and the resolution of important national concerns. Instead, we urge the Budget Committee to support robust funding for the NSF across all of its discipline areas.

Civil Space and Aeronautics

The National Aeronautics and Space Administration (NASA) has long been recognized as the world leader in aeronautics and space research and development. We support robust funding that will allow NASA to maintain a balanced and healthy portfolio of programs in aeronautics, Earth and space science, technology development, and human spaceflight and exploration, as well as allowing investments in the infrastructure that will be required if NASA is to carry out the tasks our nation has given it.

It is also imperative that funding for the next generation of NOAA's weather satellites be maintained, to ensure that those satellite programs remain on track for successful development and launch.

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