

8 December 2017

The Honorable Mitch McConnell
230 U.S. Capitol Building (Senate)
Washington, D.C. 20510

The Honorable Chuck Schumer
419 Hart Senate Office Building
Washington, D.C. 20515

The Honorable Paul Ryan
232 U.S. Capitol Building (House)
Washington, D.C. 20510

The Honorable Nancy Pelosi
204 U.S. Capitol Building (House)
Washington, D.C. 20515

Dear Speaker Ryan and Leaders McConnell, Schumer, and Pelosi:

On behalf of the American Geophysical Union and its 60,000 Earth and space scientist members, we thank you for your work crafting the fiscal year (FY) 2018 appropriations bills. As you finish the FY2018 appropriations process, we urge you to recognize that investing in geoscience research is essential to the well-being and prosperity of the United States. We urge you to:

- **Reach a bipartisan budget agreement** that raises the spending caps and maintains parity between defense and non-defense discretionary spending, so that our national scientific enterprise is not in competition with our national defense;
- **Prioritize our nation's scientific enterprise** by robustly investing in our federal science agencies; and,
- **Complete the FY2018 appropriations** process rather than allowing uncertainty and delay to hinder our nation's scientific enterprise.

Strong and predictable investment in America's scientific enterprise remains one of the surest ways to encourage economic growth, increase the safety and security of our nation and its communities, and advance our understanding of the world around us.

Provide Parity for Defense and Non-Defense Spending

We ask you to commit to scientific research and safeguard our global competitiveness by crafting a budget agreement that raises the spending caps for defense and non-defense discretionary programs. Scientific research has long been the backbone of our nation's success. From the creation of innovations that enable us to be a global economic powerhouse, to the

development of tools that keep communities safe from natural disasters, to the knowledge that gives us access to critical minerals necessary for national security, science agencies and the research they support improve our nation's security, economy, and well-being.

Approximately one-third of our GDP is affected by weather and the environment, and therefore many sectors of our economy rely on NOAA data. High-quality continuous data, like that provided by the GOES-16 satellite, helps emergency managers and communities prepare for extreme weather events, like Hurricane Harvey, reducing property damage and lives lost. Before, during and after the event, the USGS stream gages and storm-tide sensors gathered critical information on precipitation and streamflow to help predict coastal change and to measure the extent of the flooding. As communities begin to rebuild from events like Hurricane Harvey, our federal science agencies are providing the science that will help with recovery efforts and with preparing for the next storm.

NASA's Earth science division is another example of how our federal science agencies help combat pressing issues affecting our nation. Specifically, their missions help us quantify drought in the West, respond to flooding in the South, observe land-use changes in the East, and track agricultural water use in the Midwest. These observations, and many others like them, are integral to protecting our infrastructure, food supply, and public health and safety. Additionally, NASA's heliophysics division is providing us with the science needed to understand and forecast the threat of space weather to our nation's electric grid, satellites, and aviation industry. Important work like this and other valuable missions require strong federal funding to ensure that communities across the country are able to tackle the issues of today and into the future.

Congress demonstrated its commitment to the success of our nation's scientific enterprise through past bipartisan and bicameral efforts, such as the Bipartisan Budget Act of 2015 that raised the Budget Control Act (BCA) caps for fiscal years 2016 and 2017. This agreement resulted in sustained federal investments in scientific research across disciplines and allowed for our nation to continue to profit from the benefits of scientific discovery. We ask that you once again recognize that a budget agreement ensuring parity between defense and non-defense discretionary spending is essential to a strong scientific enterprise and a strong nation.

Prioritize Science Funding

Every day, science provides a return on our nation's investment – whether it be forecasting extreme weather events and providing critical time for communities to prepare, or providing resources that lead to the next technological advancement. As the Innovation Imperative— a call to action led by nine large U.S. corporations and endorsed by over 500 leading industry, higher education, science, and engineering organizations from across the 50 states – noted, **our nation's federal science agencies need “steady and sustained real growth in funding of at least four percent”** for the United States to retain its leadership in innovation and remain economically prosperous.¹ Without this level of growth, our federal science agencies will be unable to maintain cutting-edge research in all fields, train enough future scientists to fulfill national needs, and provide better weather forecasts.

We understand the challenges Congress faces in addressing all our nation's priorities within tight budget constraints. However, we urge you to avoid cuts to our federal science agencies, including the Department of Energy, NASA, NSF, NOAA, and USGS. Without sustained

¹ <https://www.amacad.org/pdfs/InnovationAmericanImperativeCalltoAction.pdf>

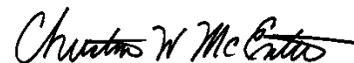
funding at robust levels now, we cannot continue to expect the benefits of scientific discovery in the future.

Complete FY2018 Appropriations

For our science agencies to be able to contribute benefits to our local communities take not only funding, but also planning. Without continuous, long-term funding, agencies are unable to award new grants, plan new missions, or budget appropriately. According to the Government Accountability Office (GAO), budget uncertainty creates inefficiencies and wastes agency time and resources. That's why it's vital that Congress completes the FY2018 spending bills and gives our science agencies the assurance that they can move forward to protect our property, lives, and economy.

Thank you for your consideration. We are happy to answer any questions you might have, and we stand ready to work with you to ensure a bright future for our scientific enterprise and, by extension, our nation.

Sincerely,



Christine McEntee
Executive Director/CEO
American Geophysical Union

CC: The Honorable Diane Black
The Honorable John Yarmuth
The Honorable Rodney Frelinghuysen
The Honorable Nita Lowey
The Honorable Mike Enzi
The Honorable Bernie Sanders
The Honorable Thad Cochran
The Honorable Patrick Leahy