

November 14, 2011

The Honorable Patty Murray  
Co-Chairwoman  
Joint Committee on Deficit Reduction  
448 Russell Senate Office Building  
Washington, D.C. 20510

The Honorable Jeb Hensarling  
Co-Chairman  
Joint Committee on Deficit Reduction  
129 Cannon House Office Building  
Washington, D.C. 20515

Dear Senator Murray and Representative Hensarling:

As you consider how to address the challenges of deficit reduction and the requirements of the Budget Control Act of 2011, we write to request that you consider the importance of investments in science, technology and innovation. Information technology and computing have been critical to American economic prosperity over the last 50 years, and maintaining (and enhancing) U.S. capabilities in these fields will be critical in the nation's economic recovery, as well as in our national security and safety. Much of the innovation in this field can be traced back to federal support for the sciences.

The iPad is an excellent illustration of this phenomenon, as many of its components and function rely on technology developed through federally supported research. From the Global Positioning System that enables the location services available on the tablet, and the integrated circuits critical to computer chips, to the capacitive sensing that enables touch screens to respond to our input and the operating system underlying it all, the iPad depends on software and technologies developed from research supported by the National Science Foundation, the Defense Advanced Research Projects Agency and other federal research agencies.

We understand the desire for long-term debt reduction to promote the health of the American economy. However, a critical aspect of improving our economic outlook is encouraging economic growth by improving our technological and scientific capacity for innovation. Supporting federal science and technology research, as well as education in science, technology, engineering and mathematics (STEM) disciplines (including computing), are activities that have been repeatedly proven to support long-term economic prosperity. With other countries aggressively pursuing continued investments in science and technology research and education, now is not the time to target those areas for reductions.

This is particularly true for computing and information technology. Computing opens near-limitless opportunities for students and is driving both economic recovery and growth, and societal change. The technologies that are fundamental to our nation's economy, defense, and domestic services all depend on the field of computer science for future refinements and innovations. The field also needs well-educated people. Despite the extraordinary economic challenges facing the country, the outlook for computer science jobs remains strong. By 2018, more than 800,000 high-end computing jobs will be created in the economy, making it one of the fastest growing occupational fields, according to the Bureau of Labor Statistics. In addition, the innovations fueled by computing indirectly produce many more jobs.

We recognize there are difficult choices facing the Joint Committee. In working to improve the economic future of the country, we strongly urge you to ensure that our innovative capacity – a key component of economic growth – is not injured by the choices the Committee makes. This country needs a stronger fiscal position and a healthy climate for innovation to continue providing technical leadership, economic opportunity, and strong defense.

We would be more than willing to discuss this letter with you and/or members of your staff at your convenience. Should you wish to schedule such a meeting, have any questions, or need additional information, please contact Cameron Wilson, our Director of Public Policy, at 202-659-9711 or at [Cameron.Wilson@acm.org](mailto:Cameron.Wilson@acm.org).

Sincerely,



Eugene H. Spafford  
Chair, U.S. Public Policy Council  
Association for Computing Machinery

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The ACM U.S. Public Policy Council (USACM) serves as the focal point for ACM's interaction with U.S. government organizations, the computing community, and the U.S. public in all matters of U.S. public policy related to information technology. USACM responds to requests for information and technical expertise from U.S. government agencies and departments, seeks to influence relevant U.S. government policies on behalf of the computing community and the public, and provides information to ACM on relevant U.S. government activities.