

TASK FORCE ON AMERICAN INNOVATION

Agilent Technologies

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Alliance for Science & Technology Research in America American Astronomical Society American Chemical Society American Institute for Medical and Biological Engineering American Mathematical Society American Physical Society American Society for Engineering Education American Statistical Association Applied Materials. Inc. Association for Computing Machinery Association of American Universities Association of Public and Land-grant Universities Battelle **Business Roundtable Center for Policy on Emerging Technologies Computing Research Association Computing Technology Industry Association Council of Graduate Schools** Council of Scientific Society Presidents **Council on Competitiveness** Crav. Inc. Federation of American Societies for Experimental Biology **Geological Society of America** Google, Inc. **IBM Corporation** Infineon Technologies Innovation Advocates Intel Corporation IEEE-USA Luna Innovations, Inc. Materials Research Society National Association of Manufacturers National Center for Women & Information Technology Northrop Grumman Corp. Science Coalition Semiconductor Industry Association Semiconductor Research Corporation

Society for Industrial and Applied Mathematics

Southeastern Universities Research Association TechAmerica

Technology CEO Council

Telecommunications Industry Association

Texas Instruments Incorporated

The Honorable Patty Murray Co-Chair Joint Select Committee on Deficit Reduction U.S. Senate 448 Russell Senate Office Bldg. Washington, DC 20510 The Honorable Jeb Hensarling Co-Chair Joint Select Committee on Deficit Reduction U.S. House of Representatives 129 Cannon House Office Bldg. Washington, DC 20515

Dear Senator Murray and Representative Hensarling:

As representatives of high-tech and other industries, universities, and professional societies, we believe it is imperative that our government adopt policies to reduce the budget deficit and stabilize our national debt.

We know that you face very difficult choices. As you consider potential measures for reducing deficits, we urge you to keep our nation on an innovation path that makes it possible for our economy to grow and our citizens to prosper. Ultimately, the point of fiscal responsibility is to provide a better life for all Americans, especially future generations.

While reducing deficits is necessary for achieving long-term prosperity, it is equally necessary that we continue to prioritize spending on science and technology. For more than half a century, spending on scientific and engineering research and education has provided the foundation for innovation and economic growth.

We believe that all parts of the federal budget should be placed on the table for deficit reduction. Thus far, however, nearly all deficit reduction measures have focused on discretionary spending, which is where research funding is based. Even eliminating all discretionary spending would not solve our deficit problem. Therefore, it is particularly important that entitlement spending, as well as tax reform, be the primary focus of your deliberations. Tax reform should also encourage private investment in research and innovation.

Research and education drive innovation and productivity. Technological advances such as the laser, the Internet and its companion, the Web, GPS, and the large-scale integrated circuit all had their origins in long-term research, both basic and applied. The fact that they were largely invented in the United States was not mere coincidence. These advances were the consequence of federal policies that directly funded long-term research, provided incentives for private investment in technology development, and stressed the importance of science and engineering education. Joint Select Committee on Deficit Reduction Page 2

Such policies have helped the United States lead the world in scientific discovery and technological innovation. Our nation's prowess produced extraordinary economic growth and increased the standard of living for Americans. Indeed, economic analyses generally attribute more than half of all economic growth in the United States since the end of World War II to technological advances.

Today, however, a good part of the world is catching up with our scientific competence, and in some areas has surpassed it. Nations such as China and India are pouring resources into developing their research capacities and their human capital in STEM (science, technology, engineering, and mathematics) fields, helping them over the long term to challenge our economic as well as our military leadership. In the case of K-12 science and mathematics education, we are already distinctly second rate. If we do not remedy the deficiencies in our educational system in the coming decade we run the risk of relegating our nation's economy to the same status.

We urge you to make recommendations that, over the long run, will enable this generation to leave future generations a legacy not of excessive debt and limited prospects but of renewed technological leadership and economic opportunity.

Sincerely,

Task Force on American Innovation

CC: Members of the Joint Select Committee on Deficit Reduction