



Technology Investments to Spur Economic Growth *Technology Highlights in the 2011 Budget*

The President believes that we must harness the power and potential of technology, data and innovation to transform the nation's economy and improve the lives of everyday Americans. The 2011 Budget targets strategic investments in technology to spur innovation in the public and private sectors; and does so in a manner that changes the way Washington works. Highlights aligned with the President's *Strategy for American Innovation* include programs that:

Invest in the building blocks of American innovation

Make the R&E tax credit permanent: The 2011 Budget's proposed permanent extension of the research and experimentation (R&E) tax credit will spur private investment in research and development (R&D) by providing certainty that the credit will be available for the duration of the R&D investment.

Promote the commercialization of promising technologies: The Budget proposes \$12 million in the National Science Foundation (NSF) for a new Innovation Ecosystem in which universities partner with other institutions to increase the impact of the most promising innovations through commercialization, industry alliances, and start-up formation. It proposes an additional \$10 million in National Institute of Standards and Technology (NIST) programs to foster innovation in manufacturing. The Budget also provides an additional \$10 million from the 2010 enacted level, for the Technology Innovation Program to accelerate development of advanced technologies by funding high-risk, high-reward research in areas of national need.

Expand access to broadband: During 2011, the Department of Commerce's National Telecommunications and Information Administration (NTIA) and the U.S. Department of Agriculture (USDA) will focus on administering the \$7.2 billion program to expand broadband deployment, as well as programs to improve broadband adoption and data collection, which were funded by the Recovery Act. In addition, the Budget expands access to broadband services by offering \$418 million in USDA loans and grants to move rural communities into the modern information economy. The Federal Communications Commission (FCC) is preparing a National Broadband Plan that will include longer-term policies to expand broadband access and adoption. The Administration, in part through the National Science and Technology Council's Technology Committee, will coordinate efforts upon the plan's release.

Unleash a mobile broadband revolution: The Budget directs NTIA and the FCC to collaborate in the development of a plan to make available significant spectrum suitable for both mobile and fixed wireless broadband use over the next ten years. The plan will focus on making spectrum available for exclusive use by commercial broadband providers or technologies, or for dynamic, shared access by commercial and government users, on both a licensed and unlicensed basis. The Budget provides funding to enable NTIA to increase its research capabilities in spectrum sharing techniques.

Modernize the air traffic control system: The Budget provides \$1.14 billion, more than a 30-percent increase from 2010, for the innovative Next Generation Air Transportation System (NextGen), the Federal Aviation Administration's long-term effort to improve the efficiency, safety, and capacity of the aviation system. It will help move from a national ground-based radar surveillance system to a more accurate one that is satellite-based; aid in the development of more efficient routes through the airspace; and fund improvements in aviation weather information. It also funds research in the National Aeronautics and Space Administration (NASA) to spur innovative approaches that will expedite the advancement of NextGen and reduce the environmental impacts of aviation.

Improve public safety communications: The Budget dedicates funds in the FCC and Department of Homeland Security (DHS) budgets totaling \$2.5 million to establish an Emergency Response Interoperability Center (ERIC) to ensure the operability and interoperability of public safety wireless broadband communications capabilities.

Spur productive entrepreneurship and promote efficiency

Promote opportunities for American exporters in new markets: The Budget provides \$534 million, a 20-percent increase, to the Department of Commerce's International Trade Administration (ITA). As part of the National Export Initiative, a broader Federal strategy to increase American exports, ITA will strengthen its efforts to promote

exports from small businesses, help enforce free trade agreements with other nations, fight to eliminate barriers to sales of U.S. products, and improve the competitiveness of U.S. firms.

Help entrepreneurs and small businesses build new and vibrant enterprises that lead to new jobs and economic growth: One of the lingering difficulties of the recession is that it is difficult for many small businesses to access the capital they need to operate, grow, and create new jobs. The Budget provides \$165 million in subsidy costs to support \$17.5 billion in Small Business Administration 7(a) loan guarantees that will help small businesses operate and expand. It also proposes to increase the maximum 7(a) loan size from \$2 million to \$5 million. It provides incentives for the private sector to invest by extending an additional year of the 50 percent deduction of qualifying investments. It provides a one-year extension for small businesses to immediately write off up to \$250,000 of qualified investment. It proposes to permanently eliminate small business capital gains for investors who hold their investments for five years.

Enhance regional economic competitiveness: Competitive, high-performing regional economies are the building blocks for national growth, and we must step up efforts to cultivate regional economic clusters across the country. The Budget provides at least \$75 million in regional planning and matching grants within EDA to support the creation of regional innovation clusters that leverage regions' competitive strengths to boost job creation and economic growth. The Budget also expands SBA's Emerging Leaders (formerly E200) initiative to \$3 million to support business development in distressed communities and provides \$11 million to enhance small business participation in clusters by awarding competitive grants to promote greater coordination of resources, such as business counseling and mentor-protégé partnerships.

Facilitate public sector innovation: The Budget proposes \$35 million in the General Services Administration (GSA) for an Electronic Government (E-Gov) Fund to support interagency electronic government initiatives with special attention to the Open Government Initiative.

Catalyze breakthroughs for national priorities

Support transformational clean energy research: The 2011 Budget builds upon substantial clean energy R&D investments in the Recovery Act and 2010 appropriations to forge a comprehensive approach to transforming energy supply and slowing global climate change. R&D funding will support renewable energy and energy efficiency technologies such as advanced batteries, solid-state lighting, solar, biomass, geothermal, and wind power. The 2011 Budget supports research and development of advanced coal-fueled power systems and carbon capture and storage technologies as well as nuclear energy R&D. The Budget also proposes \$170 million for bioenergy research in USDA and \$300 million for the Advanced Research Projects Agency-Energy within the Department of Energy (DOE) to support transformational discoveries and accelerate the development of clean energy.

Build standards and measurements for emerging technologies: Standards and measurements can improve the societal benefits from emerging technologies by allowing for interoperability, promoting efficiencies, and enabling better manufacturing methods. The 2011 Budget of \$585 million for the National Institute of Standards and Technology (NIST)'s Scientific and Technical Research and Services (STRS), an increase of \$70 million over the 2010 enacted level, supports NIST standards and measurements work on health IT, smart grid, green manufacturing and construction, advanced solar energy technology, biologic drugs, nanomaterials and advanced manufacturing to provide strong foundations for these emerging U.S. industries.

Expand the use and furthering the development of health information technology: The Medicare and Medicaid incentive programs for physicians and hospitals who are meaningful users of certified electronic health records will begin in FY 2011. The 2011 Budget provides \$78 million to the Office of the National Coordinator for Health Information Technology to support data standards, policies and tools to support the private and secure exchange of health information across the Internet, with special emphasis on consumer engagement and data privacy.

Invest in 21st Century schools and learning: The 2011 Budget makes a strong commitment to technology that transforms how educators teach and how students learn. The President strongly believes that technology, when used creatively and effectively, can transform education and training in the same way that it has transformed the private sector. It makes a broad array of Department of Education programs, including the \$500 million "Investing in Innovation" Fund, eligible for technology-related investments, encouraging the infusion of educational technology across a broad range of programs in order to improve teaching and learning, and build the capacity at the State and local level to support better uses of technology for efficient and effective transfer of knowledge.