

WHY INVESTMENT IN RESEARCH & DEVELOPMENT MATTERS



Investing in a wide range of R&D projects can lead to significant job growth. For example:

- For every \$1 million invested in our national research infrastructure, approximately 20.1 American jobs will be created or retained in one year. (*Information Technology and Innovation Foundation*)
- For every \$1 million spent on infrastructure, such as transportation, energy, water systems and schools, roughly 18 new jobs would be created. (*University of Massachusetts-Amherst's Political Economy Research Institute*)
- For every \$1 million invested in new public transit projects, some 31.4 jobs are created. (*US Department of Transportation*)
- For every \$1 million invested in broadband infrastructure, 19.5 jobs are created in the telecommunications, computer, and IT sectors with multiplier effects throughout the economy. (*Communications Workers of America*)
- For every \$1 million spent on clean-energy investments, 16.7 jobs would be created. (*Center for American Progress*)
- For every \$1 million in spending on fossil fuels, by contrast, 5.3 would be created. (*Center for American Progress*)
- Each bioscience job is estimated to result in 5.7 additional jobs. Wages of biotech workers are higher than average private industry counterparts. (*Battelle and BIO "Growing the Nation's Bioscience Sector: State Bioscience Initiatives 2006"*)

R&D: GROWING ECONOMIES OF THE UNITED STATES AND ILLINOIS

- Economists estimate that up to half of U.S. economic growth over the past five decades is due to advances in technology. (*American Association for the Advancement of Science*)
- R&D accounted for 5 percent of real GDP growth between 1959 and 2004, and 7 percent between 1995 and 2004. This ramp-up in R&D's contribution helps explain the pick-up in economic growth and productivity since 1995. (*NSF*)
- Information, communication and technology (ICT) and biotechnology-related industries account for two-thirds of the business sector's R&D contribution to GDP growth between 1995 and 2004. (*NSF*)
- Illinois ranked 3rd by tech industry employment in consumer electronics sector (1,500 total jobs), and ranked 4th in three manufacturing sectors: electronic components (12,300 total jobs), measuring and control instruments (11,700 total jobs), and communications equipment (8,700 total jobs). (*TechAmerica Cyberstates 2009*)
- The Illinois biotech cluster includes over 1,400 establishments and 49,000 employees, and is supported by Illinois' federal labs as well as the state's top-notch research universities. (*IL Department of Commerce and Economic Opportunity*)