



NEWS RELEASE

FOR IMMEDIATE RELEASE

Media Contact: Denise D. Resnik or Stephanie Jarnagan, (602) 956-8834

NEW REPORTS FIND PUBLIC INVESTMENT IN RESEARCH BOOSTS PRODUCTIVITY, WEALTH

Science Foundation Arizona Can Play Key Role

PHOENIX (July 16, 2007) – Two recently released reports reveal a strong need for public investment in research and development (R&D) in order for Arizona to create a sustainable and competitive economic advantage. The recent decision by Gov. Janet Napolitano and the Arizona Legislature to appropriate \$100 million through the Department of Commerce and its Commerce and Economic Development Commission for investment in the nonprofit Science Foundation Arizona (SFAz) over the next four years will help ensure Arizona creates the competitive infrastructure necessary to attract and retain R&D facilities and top researchers.

The first report, “R&D Investments Drive State Economies: A Guide for Arizona,” was produced by The Washington Advisory Group, a strategic consultant to leaders of companies, universities, governments and non-profit organizations engaged in research and development or higher education. It is supported by a newly released technical report by economic researchers at Arizona State University and the University of Arizona titled, “A Strategic Assessment of the Economic Benefits of Investments in Research in Arizona.”

Both reports present a strong case for Arizona to embrace a knowledge-based economy with public support for research that has the potential to leverage significant federal and private investments to the state, in order to create high-paying jobs.

“Arizona remains one of the fastest-growing states in the country with a below-average unemployment rate but it falls behind other states – Arizona’s competitors in economic development – in productivity and salaries,” said Dr. Bruce Guile, managing

director of The Washington Advisory Group. “To catch up with, or even keep up with, competitors in the global economic race, Arizona needs to target investments in science and technology and establish benchmarking processes for tracking performance, much like Science Foundation Arizona is doing today.”

The ASU/UA report also finds that an organization such as SFAz, a nonprofit founded in 2006 to invest in science, engineering and medical research, can play a key role in the state’s economic future.

“The technical report demonstrates that when investments are made in R&D, they enhance an area’s overall productivity, which builds wealth for all,” says Dennis Hoffman, Ph.D., professor of economics at the W. P. Carey School of Business at Arizona State University and one of the report’s authors. “We found that salaries are higher in areas with strong research universities, and that significant industry clusters can be created with an appropriate R&D infrastructure to support them.”

Main points from the technical report – a collaborative effort between ASU’s L. William Seidman Research Institute in the W. P. Carey School of Business and UA’s Economic & Business Research Center in the Eller College of Management – include:

- A conservative estimate of the induced returns within Arizona for an annual, hypothetical public investment of \$10 million could be as high as an additional \$76 million per year. That would be possible even when only a portion of the expected social benefits is included in the calculations.
- The literature indicates that increased research investments lead to higher earnings per job. Using evidence of research expenditures at local universities and the economic performance of 938 urban areas across the past 35 years, the authors of the technical report discovered that the average real wage in urban areas with even modest research university activity (in excess of \$5 million in 2004) was nearly \$3,300 higher than the average of all urban areas, adjusted for cost of living.
- Arizona is among our nation’s leaders in job and population growth, but lags the nation in output per worker (6.1 percent below the national average) – a rough estimate of productivity – and wages per job (7.5 percent below the national average). According to The American Association for the Advancement of Science (2003, the latest year available), Arizona lags the national averages in total R&D per capita and as a percent of Gross State Product.
- Per-capita personal income in Arizona has declined from about 5 percent below U.S. averages in the 1970s to around 14 percent below the U.S. average today.

- Arizona’s rapid population growth increases demand for historically low-wage service employment that requires few advanced skills. The workforce, especially younger workers, has education and skill sets that lag the nation.
- Innovation and research in advanced countries are the driving forces of growth in inflation-adjusted, per-person gross domestic product. Two studies of productivity growth in the U.S. economy concluded that technological change and innovation accounted for the largest share of U.S. productivity gains during the 1990s.

“Both reports provide a thorough review of the literature concerning the relationship between investments in R&D and the associated long-term economic benefits,” said William C. Harris, president and CEO of SFAz. “The examples found in the reports demonstrate that the states committed to R&D investments are positioning themselves as leaders of a 21st century rooted in discovery and innovation. And in time, they will reap the benefits of a knowledge-based economy.”

To download PDF versions of both reports, visit www.sfaz.org/indicators.html. Both reports were funded by the Stardust Foundation.

About Science Foundation Arizona

Science Foundation Arizona (SFAz) is a 501(c)(3) nonprofit organization initiated in 2006 by the Greater Phoenix Leadership Inc., Southern Arizona Leadership Council and the Flagstaff Forty. Its goal is to build and strengthen scientific, engineering and medical research programs and infrastructure in areas of greatest strategic value to Arizona’s competitiveness in the global economy. SFAz is investing in partnerships between nonprofit research institutions and industry; other science, engineering and math programs; and in the education pipeline to help Arizona create a knowledge-driven economy. For more information, visit www.sfaz.org.

###