Innovation
Trends in High Technology Employment

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Q: What were the most interesting and important trends in Arizona innovation that occurred in the previous decade? What is the significance of these trends and what insights can we apply to the new decade?

A: The long downward trend in high-technology industries in Arizona continued over the last decade. Historically, Arizona was one of the nation’s high-tech centers, with employment in high-tech industries as a share of total employment or on a per capita basis well above the national averages. Now, however, Arizona’s high-tech concentration is barely greater than the national average. For example, high-tech employment per capita in 2007 (the last year of complete data) was only 5 percent higher than the U.S. average.

Arizona’s high-technology base always was narrow, concentrated in semiconductor and other electronic manufacturing, and aerospace manufacturing. Per capita employment in the manufacturing of navigational, measuring, and control instruments also was above average. Arizona still has a solid concentration in these activities, though not as strong as in the past. No progress has been made in broadening the high-tech base.

In an era where information, innovation, and technological advances drive economic growth, Arizona is falling behind. A number of new technologies show promise for the future, but Arizona has virtually no presence in developing these technologies. Per capita employment in research and development, a key component of the high-technology base, is particularly low in Arizona at just 37 percent of the U.S. average.