



STATE UNIVERSITY SYSTEM OF FLORIDA
Board of Governors

January 2010



Building Florida's Knowledge Economy

VISION

To create a new Florida economy based on knowledge and innovation.

FLORIDA'S ECONOMY TODAY

Florida's economy is built upon the three-legged stool of agriculture, tourism, and growth. While those sectors have helped to build the state that we know, it is obvious that we need to do more to create the future that we desire. While they are and will remain vital to Florida's economy, the existing three-legged stool needs a fourth leg that creates a more stable economic foundation and the capacity to thrive in the coming decades.

The *St. Petersburg Times* ran a July 17, 2009, article written by John Hall, executive director of the nonprofit Florida Center for Fiscal and Economic Policy in Tallahassee, which conducts independent research on state fiscal and economic issues. In its first examination of key economic indicators, the Florida Center for Fiscal and Economic Policy found that per-person income growth in Florida has fallen to 45th in the country. The income gap between the most affluent Floridians and those on the middle and bottom rungs of the economic ladder is among the biggest in the United States – and is widening. Then there's this double whammy: Florida suffers one of the nation's highest unemployment rates, and even for individuals who are employed almost half of the jobs pay wages too low for many families to get by.

In addition:

- The state ranks 47th in the rate of growth in gross state product – the value of goods and services produced.
- The number of people in poverty is up.
- About one in 10 residents receive food stamps.
- Foreclosures have quadrupled over the past three years.

WHAT IS THE KNOWLEDGE AND INNOVATION ECONOMY?

The heart of the knowledge and innovation economy is built on the high-technology, high-wage jobs needed in the fields of science, technology, engineering and mathematics (or "STEM"); however, the areas of medicine, finance, insurance, professional services, health care and education are also vital to this new economy.



The global driver of economic prosperity centers around the knowledge, innovation, and talent that is produced by strong public universities from this point forward. Even in a knowledge and innovation economy we cannot rely on random acts of greatness if Florida is to build an economy that provides the kind of jobs that lead to a robust quality of life. We must ensure that the entire system of public universities is strong and vibrant. There is global competition in this era of knowledge and innovation, competition that has created urgency to establishing our state as a major player on the world stage.

Building this new economy requires new talent, so we must increase the percentage of Floridians who have baccalaureate and advanced degrees in these areas. The average income is \$46,277 for people with a bachelor's degree and \$61,014 for those with an advanced degree.

WHAT ARE THE BENEFITS OF THE KNOWLEDGE AND INNOVATION ECONOMY?

In addition to better jobs with higher average annual salaries, economies built on knowledge and innovation are more stable. Following are a few examples.

Fifty years ago, North Carolina was facing an economic crisis because the agricultural base of their economy was diminishing sharply. Instead of hoping and waiting for an economic turnaround, the state's leaders decided that they should remake their economy. They decided to build their economic future on their universities through intentional investments and strategic alignments that placed North Carolina at the forefront of the knowledge economy.

The May 26, 2009, edition of the *Wall Street Journal* contains an example of this sector's stability. The paper compares the fate of two Michigan cities, Ann Arbor and Warren. In Warren, factory buildings and warehouses built on the riches of the Big Three automakers bear signs saying they are "priced to sell." Meanwhile just 50 miles away in Ann Arbor, home to the University of Michigan, a highly educated population has created a burgeoning economy, and a street-corner conversation can develop into a company and create jobs.

The University of Washington is largely the reason why "Seattle has become the home of world-dominating technology companies and leading biomedical firms..." as quoted in the August 3, 2009, edition of the *Chronicle of Higher Education*.

And here in Florida, there are many examples demonstrating how investment in the state's public universities yields economic benefits. Silicon Valley-based SRI International is one of the world's leading independent research and technology development organizations. SRI International dedicated a new building in St. Petersburg on December 18, 2009. The University of South Florida is a major part of the foundation that attracted SRI to the St. Petersburg area. Additionally, Draper Laboratory has established the Draper Bioengineering Center at USF directly resulting from the research conducted at the institution.

Companies that have licensed University of Florida technologies contribute a half-billion dollars a year and 2,000 jobs to the state's economy (reported to Board of Governors in 2006). The University of



Florida College of Medicine and Shands HealthCare together have been estimated to have a \$2.5 billion impact on the economy of the state.

In 2003, the University of Central Florida received \$10 million to establish a Center of Excellence in Photonics. As a result of that investment, UCF has attracted another \$42.9 million in research awards and private capital to the state of Florida. The Center of Excellence in Photonics has also created six new companies and more than 60 high paying jobs as of the 2008 reporting period.

Imagine a network of statewide collaborative efforts among universities, corporations, and the federal government resulting in commercializable innovations. Consider also the impact of having 11 highly productive incubators transforming Florida's economy in all regions of the state.

WHAT ARE THE EXPECTED OUTCOMES?

OUTCOMES by 2015:

- 1) Increased annual degree production by 25,000
- 2) 2,500 new faculty bringing in an additional \$500 million annually in research funding
- 3) Increased annual patent awards by 100
- 4) Medical breakthroughs that improve the longevity and quality of life
- 5) Improvements in graduation rates and retention rates
- 6) Increased annual new business start-ups by 10
- 7) Increased annual licensing revenue by \$20 million

OUTCOMES by 2030:

- 1) Increased annual degree production by 50,000
- 2) Increased annual research funding by \$1.5+ billion
- 3) Medical breakthroughs that improve the longevity and quality of life
- 4) Improvements in graduation rates and retention rates
- 5) Increased annual patent awards by 250
- 6) Established companies attracted to the state
- 7) Increased annual new business start-ups by 20
- 8) Increased annual licensing revenue by \$50



HOW CAN WE BUILD AN ECONOMY BASED ON KNOWLEDGE AND INNOVATION?

- 1) Focus each university on fulfilling its distinctive mission (research, degree production, solving Florida's problems, or some combination).
- 2) Create a strategic research agenda built on the strengths of each university.
- 3) Focus half of the new funding on targeted degrees, such as Science, Technology, Engineering, and Math programs.
- 4) Focus half of the new funding on developing a pool of graduates with degrees needed for regional and statewide development (business, nursing, computing, construction, architecture, education, etc.) and create a pool of degreed citizens with creative and analytical thinking skills.
- 5) Funding can be used for workload increases, capital construction (to build labs, classes and office space).
- 6) Florida would become a magnet for top level students, researchers, and industry needing an educated populace.

INVESTMENT NEEDED

Double the investment of recurring state dollars in Florida's 11 Public Universities in order to transform the economy.

- 1) Maintain a strong accountability system to ensure focused investment and demonstrate return on that investment to taxpayers and their elected representatives.
- 2) Make a \$1.75 billion investment of recurring state funds in public universities over five years.
- 3) Coupled with tuition differential increases, this would approximately double the current general revenue/lottery budget.
- 4) Focus at least half of new revenue in specific STEM degree programs.
- 5) Allow new funding to be used for operations and for capital construction.
- 6) Fund State Matching Grant Programs.

WHY THE URGENCY?

Delay or inadequate investment in our public universities makes it more difficult to take control of Florida's economy so that it is more relevant for today's world. States and countries around the globe now understand that leaders of the new world marketplace will be those who commit to building an economy based on knowledge and innovation. They are progressively pursuing strategies and funding for those strategies in order to put into place the infrastructure that is needed. Those who lag in their efforts or move timidly toward the new economy will find themselves behind the world leaders.



QUESTIONS & ANSWERS:

1) How will the State University System be accountable for this investment?

- The Board of Governors will work with each university to set its share of responsibility for the system-wide outcomes.
- The Board of Governors, through the annual report and university work plans, will be accountable to the Legislature, Governor, and the people of Florida for these outcomes.
- Continue making improvements in quality, effectiveness, and efficiency at the public universities.

2) Why not put all the funding toward research activities?

- We need to increase the percentage of Florida's population with baccalaureate, master's and graduate degrees to advance as a society, both economically and culturally.
- We must continue to build on the non-science components of our society to maintain and improve the overall quality of life for Floridians.

3) Why not exclusively fund STEM: Science, Technology, Engineering and Mathematics?

- Florida also needs teachers, nurses, accountants and MBA's.
- Liberal arts graduates are essential in an advanced society.
- The New Florida economy will generate as many, if not more, jobs employing graduates in business, law, social sciences, and other non-STEM fields.

4) How will funding be distributed to the 11 institutions?

- The Board of Governors will work closely with university leadership to develop a distribution method based on the unique mission and capacity of each of the 11 SUS institutions.