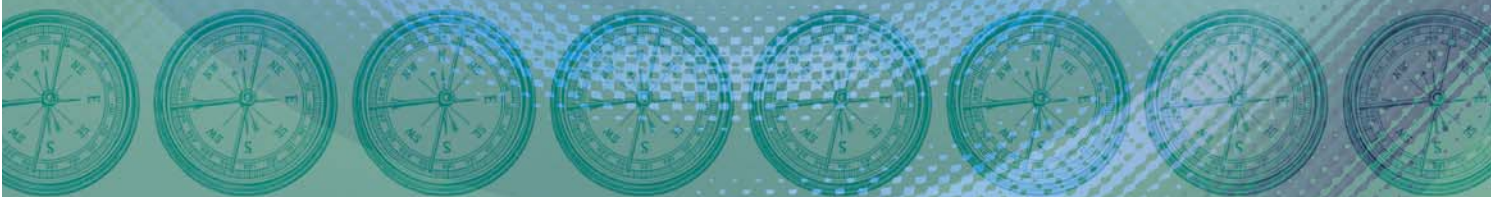


ROADMAP TO FLORIDA'S FUTURE

2007–2012 Strategic Plan for Economic Development

Diversifying Florida's Economy

PRIORITY RECOMMENDATIONS



ROADMAP TO FLORIDA'S FUTURE

2007–2012 Strategic Plan for Economic Development

Priority Recommendations Table of Contents

	Page
INTRODUCTION	
Diversifying Florida's Economy	1
PRIORITY RECOMMENDATIONS	
Build World-Class Talent	5
Ensure Business Climate Competitiveness	11
Promote Sustainable Development to Ensure Florida's Superior Quality of Life	17
Invest in Florida's Innovation Economy	23
Establish Florida as a Pre-eminent Global Hub	31
Accelerate Florida's Economic Diversification	37

*Please see Volume 2 for the **APPENDICES** of the 2007-2012 Strategic Plan for Economic Development.*

ROADMAP TO FLORIDA'S FUTURE

2007–2012 Strategic Plan for Economic Development

Diversifying Florida's Economy

The Roadmap to Florida's Future

Section 288.905(2), Florida Statutes, mandates that the Enterprise Florida Board develop the statewide strategic plan for economic development, Roadmap to Florida's Future, and provide it to the Governor and Legislative leaders.

Vision

Florida is a global leader in knowledge-based jobs, leading-edge technology, and competitive enterprises in the 21st Century.

Goals

Globally competitive businesses
Well-paying jobs for Floridians
High quality of life throughout Florida

2004-2009 Roadmap to Florida's Future Progress Report

The first *Roadmap* was created in 2004 with broad grassroots and stakeholder input from around the state. It highlighted eight key priorities for diversifying Florida's economy for global competitiveness.

- Ensure Florida's leadership in global commerce
- Establish Florida as a leading state for innovation, entrepreneurship and venture capital
- Raise the bar for excellence in education and workforce
- Ensure the competitiveness of Florida's business climate
- Implement an integrated economic stimulus strategy for rural areas of critical economic concern
- Retain and strengthen sectors threatened by external trends
- Establish a comprehensive smart growth policy for sustainable economic development, diversification and quality of life
- Invest in economic development

To gauge the success in achieving these strategic priorities, Enterprise Florida:

- Assessed the quantitative and qualitative progress Florida has made in implementing the priorities (**Appendix A**)

While each of the priorities has been successfully carried out, there is still work to do in establishing the state as a cutting-edge performer in the global, knowledge-based economy.

- Analyzed the level of Florida's competitiveness as demonstrated by key comparative benchmarks (**Appendix B**)

Although Florida remains one of the fastest-growing U.S. states by virtually any measure, a few key trends can be discerned from the most recently available data:

- Florida is making progress towards its stated goal of diversifying its economy (by raising the quality of economic growth and achieving a more favorable distribution of economic activity in the state).
- Although Florida's high-tech sector is gaining market share nationally and in many ways continues to outperform the competition, the state continues to exhibit some serious competitive weaknesses in indicators related to the knowledge economy and the workforce it requires.
- Florida's international commerce continues to simultaneously exhibit two very different trends: the state's international trade is going from strength to strength, while Florida is falling further behind other U.S. states in attracting foreign direct investment.

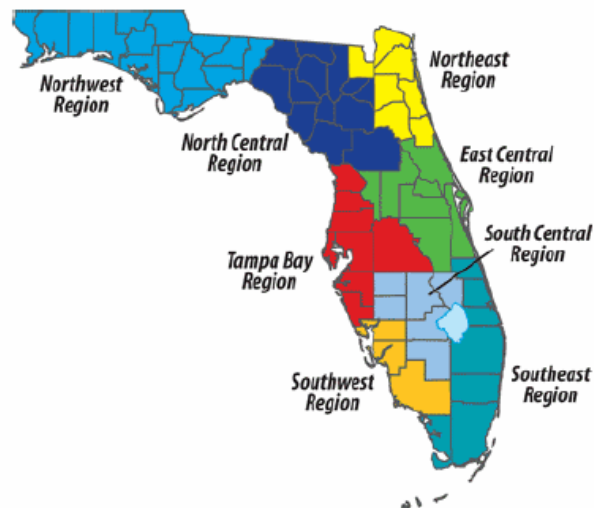
Creating the 2007-2012 Roadmap to Florida's Future

Soliciting Broad Grassroots and Expert Input

Enterprise Florida turned to its many committed state, regional, and local partners and stakeholders for input into the development of the new *Roadmap*. To ensure broad grassroots and expert participation in the strategic planning process, four key activities were implemented.

- Enterprise Florida created the 21st Century Economic Development Task Force as an ad hoc Enterprise Florida Board committee to help identify long-term strategic issues for Florida's continued competitiveness. The Task Force's priority recommendations were issued in January 2006 (**Appendix C**).
- Eight regional forums were hosted by Enterprise Florida's local and regional economic development partners from around the state (**Appendix D**). These forums included participation from more than 1,000 stakeholders from diverse constituencies, including businesses, state and local government leaders, economic development practitioners, workforce providers, education officials, transportation experts, cultural arts advocates, rural development representatives, and diverse business sectors, including, but not limited to, information technology, life sciences, military/defense, tourism, agriculture, marine, space, and aerospace.

Strategic Planning Regions



- Enterprise Florida held issue-oriented focus groups of its Board and Stakeholders Council in January and August 2006 (**Appendix E**).

- Enterprise Florida conducted a hard-copy and on-line survey of strategic planning stakeholders to assess the relevance of past strategic planning priorities as well as to solicit input on new priorities (**Appendix F**).

Establishing Guiding Principles

Enterprise Florida adopted two guiding principles for the new *Roadmap*:

- *Partnerships: Broadening of economic development with stronger linkages:* Economic development is dynamic. To enhance Florida's competitiveness, linkages between education, workforce, infrastructure, cultural foundations, and diverse engines of economic development must be seamless.
- *The importance of regionalism:* Florida should celebrate statewide unity as well as regional diversity without the inefficiencies of local fragmentation through a unified regional approach. Florida's regions are defined in various ways, according to legacy and function. As Florida looks ahead, an effort should be made to align the various definitions of regions for maximum coordination and effectiveness.

Developing the Strategic Priorities

The guiding principles drove the creation of six strategic planning priorities.

2007-2012 Strategic Priorities

Build World-Class Talent
Ensure Business Climate Competitiveness
Promote Sustainable Development to Ensure Florida's Superior Quality of Life
Invest in Florida's Innovation Economy
Establish Florida as a Pre-eminent Global Hub
Accelerate Florida's Economic Diversification

These priorities will guide Florida toward its goal of economic diversification by:

- Focusing on quality of economic growth with value-added job growth, innovation, and globalization;
- Ensuring strength in multiple industry clusters and world markets for economic immunity to business cycles and off-shoring trends; and
- Integrating education, workforce, infrastructure, business climate, quality of life, sustained development, innovation, and global competitiveness as key elements of Florida's economy.

The successful diversification of Florida's economy will help ensure Florida's destiny to be the global leader of the 21st Century, the goal of this 2007-2012 Strategic Plan for Economic Development.



Priority Recommendations

Priority: Build World-Class Talent

Why This Priority Matters to Florida's Economic Development

Talent has emerged as the top economic development issue for a knowledge-based economy. Because a highly-skilled workforce is key to the successful creation, recruitment, retention, and expansion of businesses, education has become the fundamental driver of a state's economic success. Skilled, educated talent is the key to productivity improvements, higher wages, and innovation.¹ The linkage between education at all levels and the diversification of Florida's economy has never been as critical and world-class talent has never mattered more than it does today. In today's economy, education is part of economic development.

Business Case

There are three main components to Florida's integrated education/workforce development system: Pre-K-12 Education, Workforce Education, and Universities.

Pre-K-12 Education

In recent years, four key initiatives have been implemented to promote student performance while preparing the state's youth for postsecondary and professional opportunities:

- The A+ Plan for Education – In 1999, the state passed comprehensive school reform that demanded school and student accountability while rewarding superior performance.
- Pre-Kindergarten – In 2005, the state implemented a Voluntary Pre-Kindergarten program for the state's four-year-olds.
- The "Four-Point Plan" – In 2005, the Department of Education challenged schools to better prepare students for the workforce by combining academic rigor with real-world career relevance, providing career advising tools to help guide students into the workforce, and ensuring that academic programs meet business needs.

- The A++ Plan for Education – In 2006, the state enacted a plan to increase the rigor and relevance of Florida's educational program for middle and high schools to better prepare students for post-secondary education and the workforce. The plan requires students to select major and minor subjects, as in college, and requires high school students to take a fourth year of math.

Florida has become a national leader in education reform that is clearly benefiting many students.² For example,

- According to the 2005 National Assessment of Educational Progress, Florida again surpassed the national average in fourth-grade reading and, for the first time, bettered the national average in fourth-grade mathematics.
- Since 1999, the number of "A" schools has increased by more than 500 percent, with 1,255 schools earning an "A" in 2005.
- Florida's high school graduation rate increased to 71.9 percent in 2005, up from 60.2 percent in 1999.³

Despite these successes, the Pre-K-12 system faces some challenges such as high school graduation rates that, while improved, still significantly lag the rest of the nation and low math and science performance in middle and high schools.⁴

Workforce Education

Florida's workforce education programs are critical to the development of a high-wage, high-skilled workforce because many of the fastest growing jobs are in occupations that do not require a baccalaureate degree but do require postsecondary education.⁵ To address this need, key elements of the state's workforce development strategy include career academies, the SUCCEED, Florida! Grant Program, workforce education cluster centers, and the EmployFlorida Marketplace.

- *Career Academies* – Designed to meet business market needs, career academies in Florida's high schools interject real-life career opportunities into the high school experience while maintaining the rigor of course work. Students are often able to earn high school credit, college credit, and professional industry certification all at the same time. Found to increase academic performance, increase graduation rates, and successfully prepare students for the workforce, more than one-half of the state's school districts operate career academies that provide integrated academic and vocational training to high school students.⁶ Two career academy models that have proven successful in Florida are:
 - The Community High Okaloosa Institute for Career Education (CHOICE) Institutes Program in Okaloosa County, which has been declared a model for career education by the U.S. Department of Labor and is being replicated across Florida. So far, four institutes have been created: Creative Arts Institute, Aerospace Institute, Information Technology Institute, and Construction Technology Institute.
 - The Gulf Power Academy at the West Florida High School of Advanced Technology, which is an award-winning program that provides students with a foundation for a variety of careers in the electric utility and construction trades industries. The Academy has been named the nation's premier model for Small Learning Communities and has achieved a "Distinguished" rating from national evaluators, making the Academy the model in the U.S. that other groups will use for replication.

- *SUCCEED, Florida! Grant Program* – Established in 2005, the program is designed to build capacity for education programs to meet the state's most critical workforce needs. In 2006, \$33.4 million in 2006-2007 SUCCEED, Florida! competitive career education grants were awarded for the purpose of supporting new and expanding programs in nursing/allied health, manufacturing, automotive technology, and teacher certification.
- *Workforce Education Cluster Centers* – The 2004-2009 Roadmap to Florida's Future recommended the establishment of regional, industry-driven workforce education cluster centers that focus on the development of workforce skills to meet the demand of industries critical to Florida's economy. Workforce Florida will award \$6.2 million in grants to Employ Florida Banner Centers for training in aviation and aerospace, life sciences, financial services, information technology, and manufacturing.
- *EmployFlorida Marketplace* -- The EmployFlorida Marketplace (www.employflorida.com) is an on-line tool to link the state's largest pool of applicants to companies in need of qualified employees. It provides fast access to a complete set of employment tools, career services, educational services, and workforce resources in one website.

Universities

Universities are engines for economic growth. Not only do they generate talent that increases the productivity and wage-levels of Florida's economy, but they conduct valuable research and development that drives the innovation economy of the state. For example:

- *Talent Generation* – Florida has been steadily increasing the number of degrees awarded, including in the math and science fields. However, the state's colleges and universities award far fewer bachelor and post-bachelor degrees than other states with an apparent gap forming between the demand for skilled workers in targeted emerging technologies and the supply of math, science, and technology program graduates from Florida universities.⁷
- *Research and Development* -- In 2005, Florida universities performed more than \$1.5 billion in sponsored research.⁸ Moreover, two schools (University of Florida and University of Central Florida) are ranked among the top 20 universities in the nation for number of U.S. patents issued in 2004.⁹

Recommended Actions

Ensure the educational foundations for tomorrow's economy

While education at all levels is key to Florida's future, several targeted initiatives have a direct linkage to Florida's global economic growth.

- ***Establish career academies throughout Florida***

Innovative ideas such as career academies that tie educational programs to industry needs should be duplicated and spread throughout the state as best practices. Models should include business-initiated academies in which a company partners with local educational and workforce development stakeholders to create a pipeline of talent into the business's industry and CHOICE institutes in which academic and certification programs are tailored to state and regional workforce needs.

- **Strengthen math and science education**

Math and science curricula should be strengthened and made engaging to students who will be competing in the Innovation Economy. Teachers must be trained and recruited for this task.

- **Strengthen foreign language skills in Florida schools**

The learning of foreign languages (especially Spanish and Mandarin Chinese) must be stressed at an early age since such skills will be vital to the successful navigation of an increasingly globalized economy.

Ensure that workforce education is industry-driven, regionally focused, and vertically integrated

The key for workforce competitiveness is the ability to provide workers with specific technical skills, particularly as technology dramatically changes skill needs for business.

- **Expand Employ Florida Banner Centers and Centers for Advanced Technology**

The training and retraining of Floridians should be accelerated to ensure the availability of workers with cutting-edge skills in targeted industries. The goal should be to retrain 200,000 such employees by 2010. To assist in this effort, the concept of workforce education centers, such as the Employ Florida Banner Centers and Centers for Advanced Technology, must be geographically expanded as a best practice and applied to additional targeted industries.

- **Organize industry summits to anticipate workforce needs**

To ensure that workforce training and education is industry-driven, annual statewide summits of the top-50 employers (public or private) should be organized by Workforce Florida to discuss industry workforce needs. Workforce and partner agencies should also meet with the top-50 employers in each region to assess industry workforce needs.

- **Enhance the EmployFlorida Marketplace**

The EmployFlorida Marketplace should be enhanced in order to more efficiently link employers and potential employees. The goal should be to double the size of the Marketplace (e.g., number of job applicants available to Florida businesses, number of businesses accessing real-time employment data, number of jobs listed on the EmployFlorida Network) within a year.

- **Develop a workforce talent recruitment and retention program**

Workforce development, economic development, and educational organizations should partner to develop an “Attract to Florida Campaign” that enables Florida to retain its skilled workers and graduates as well as recruit to fill workforce gaps.

Invest in universities as the foundation for Florida’s intellectual infrastructure

A key way to drive productivity, and thus prosperity, in the Innovation Economy of today and tomorrow is to invest in our institutions of higher learning.

- **Invest in university research programs**

The state should invest more heavily in world-class research programs to support research, foster economic development, and accelerate Florida’s Innovation Economy. The World-Class Scholars Program and the Centers of Excellence Program should be expanded to recruit and retain intellectual talent with an emphasis on inter-disciplinary research within and between universities.

(Note: The topic of university investment is addressed in more detail under the Priority Recommendation “Invest in Florida’s Innovation Economy.”)

Success Measures				
Indicator	Baseline Benchmark	Target Goal	Most Recent Data	Comments
High School graduation rate	69% (2002-03)	(FL DoE 5-year plan)	71.9% (2004-05)	Steady progress
BA degrees awarded per 100,000 Floridians	320.5 (2001) Revised data for 2001 is 321.4	(FL DoE 5-year plan)	367.0 (2004)	Steady progress
Science and engineering degrees awarded per 100,000 Floridians	4.6 (2002)	(FL DoE 5-year plan)	5.7 (2004)	Steady progress
Employees retrained			To be determined	
EmployFlorida job applicants available to Florida businesses			To be determined	
EmployFlorida businesses accessing employment data			To be determined	

¹ “The Battle for Brainpower,” *The Economist*, October 5, 2006.

² Paul Peterson, Hoover Institution, *Reforming Education in Florida: A Study Prepared By the Koret Task Force on K-12 Education*, 2006.

³ Florida Department of Education, *Governor Bush Signs A++ Plan for Education*, June 5, 2006.

⁴ Florida ranks between 42nd and 45th in the nation in high school graduation rates. Florida Council of 100, *Preparing for the Future: A Brief Review of the Major Drivers of Florida's Future in the First Decades of the 21st Century*, January 2006, and The National Center for Public Policy and Higher Education, *Measuring Up 2006, The State Report Card on Higher Education – Florida*, September 7, 2006.

⁵ Florida TaxWatch, Center for Educational Performance & Accountability, “Putting Minds to Work” Pays Big Dividends! -- *The Impact of Florida Community Colleges on Students' Prosperity and the State's Economy: A Solid Return on Investment*, February 2006.

⁶ Council for Education Policy Research and Improvement, *Career and Professional Education: Preparing Florida's Students for the Knowledge Economy*, September 2004, and The Florida Legislature's Office of Program Policy Analysis and Government Accountability, *More Than Half of the State's School Districts Have Career Academies, Most Operating in 2004-05 Incorporated Nationally Recognized Core Elements*, July 2006.

⁷ Florida Council of 100, January 2006, and Gartner, Inc., *A Report for Enterprise Florida, Workforce Florida, Inc., and Agency for Workforce Innovation*, May 2006.

⁸ Enterprise Florida, Inc., *Strong Knowledge Base* at

<http://www.eflorida.com/innovationadvantages/default.asp?level1=24&level2=148>, accessed September 29, 2006.

⁹ Enterprise Florida, Inc., *Technology Transfer* at

<http://www.eflorida.com/businessadvantages/1/techtransfer.asp?level1=24&level2=149®ion=nc>, accessed September 29, 2006.



Priority Recommendations

Priority: Ensure Business Climate Competitiveness

Why This Priority Matters to Florida's Economic Development

An effective business climate allows businesses to conduct their affairs with minimal interference while accessing high-quality productive inputs and customers at low costs. Because a state's business climate goes a long way toward determining a firm's bottom-line, businesses almost always relocate or expand in places with business climates favorable to their industry.¹ Thus, Florida's overall business climate is key to maintaining and enhancing its competitiveness. Without a good climate, the cost of doing business in Florida would rise, harming existing firms and deterring others who might be contemplating a move to the state.

Business Case

With Florida ranking among the top 10 states in the country in three recent business climate surveys, Florida appears to be an attractive place to run a business.² However, issues in two key areas now threaten that status: insurance and affordable workforce housing. In addition, as competition among states increases for high-stakes economic development projects, the competitiveness of Florida's business incentives remains a front-burner issue.

Insurance

Bad back-to-back hurricane seasons inflicting \$38 billion in insured losses have led global reinsurers to dramatically raise rates and limit the amount of coverage they are willing to write in Florida, thus creating a crisis in Florida's commercial property insurance market. With premium increases of 300, 400, and even 1,500 percent, business owners are having a hard time finding and affording property insurance, thus cutting into their income, threatening job creation, and causing them to take greater financial risks with their buildings.³ In fact, a survey conducted by the Office of Insurance Regulation found that policies of 42 percent of respondents were either cancelled or not renewed by their insurer in the last six months,

and, only by paying higher rates and receiving reduced coverage, 32 percent of respondents were able to secure new policies.⁴

Experts are indicating that Florida's property insurance crisis threatens the state's commercial real estate market and ultimately, Florida's economy.⁵ Among the troubling signs:

- Some sales of commercial property are grinding to a halt.
- Business borrowers are bordering on default with their bankers.
- Companies are developing plans to create their new jobs elsewhere or move out altogether rather than pay the high cost of operating here.⁶

The state has quickly taken action in response to this difficult and complex situation by creating two blue-ribbon committees (Property & Casualty Insurance Technical Advisory Committee and Property & Casualty Insurance Reform Committee) to study Florida's insurance market from a wide variety of perspectives and make recommendations to the Governor and the Legislature on how to mitigate the crisis. Additionally, the Governor and the Cabinet approved an emergency rule establishing a property and casualty joint underwriting association (JUA) to make commercial property insurance available to Florida businesses that are unable to find coverage in either the admitted or surplus lines insurance markets. However, viewed only as short-term way to ease insurance availability problems for small businesses, the JUA's future beyond a year is unknown.⁷

Affordable Workforce Housing

Affordable workforce housing has become a key economic development issue since it affects two major concerns: Florida's quality and cost of living and the ability to recruit talent which is crucial to economic growth.⁸

While this has been a national issue, Florida has been particularly hard-hit. Nationally, the median house price rose 54 percent and the median family income dropped 3.5 percent between 2000 and 2004.⁹ Over the past few years, the real-estate boom in Florida has outpaced that of the rest of the nation and greatly outpaced Florida's household income growth rate with median home prices increasing 77 percent and median family income only increasing 1.4 percent.¹⁰ Scarcity of land, increasing population, skyrocketing insurance premiums and real estate prices, hurricane rebuilding costs, increasing fuel costs, increasing building supply costs, an escalating property tax burden, delays due to growth management concerns, and other factors have contributed to a scarcity of affordable workforce housing in Florida that business leaders cite as "threatening Florida's strong economy and quality of life."¹¹

Once characterized as an issue touching only low-income families, the provision and retention of affordable workforce housing is now affecting the middle class.¹² Some Florida communities are experiencing a critical shortage of housing for individuals who are employed in essential service occupations, such as teachers, police, hospital workers, and others who do not qualify for existing affordable housing programs. As a result, these communities are finding it increasingly difficult to recruit, employ, and retain personnel necessary to provide essential public services to Floridians.¹³

Aware of the problem, the 2006 Legislature voted spend \$516 million to help the working poor, middle-income residents, and those affected by hurricanes find homes they can afford.¹⁴ In part, the package:

- Required local governments to survey their surplus land for possible use for affordable housing

- Encouraged local governments to develop strategies for providing affordable housing for the purpose of recruiting and retaining essential service personnel
- Provided \$50 million to create the Community Workforce Housing Innovation Pilot Program for the purpose of providing affordable rental and home ownership opportunities for essential services personnel with medium incomes in high-cost and high-growth counties

The Florida Chamber Foundation has taken a leadership role by convening summits of top policy and agency leaders, economic experts, and housing professionals to help Florida's regions and business leaders engage in tackling Florida's affordable workforce housing problems. Key priorities which have emerged include: incentives and educational programs for employer-assisted housing, promotion and support of innovation in design, products and construction, and the use of affordable housing as part of an index for regional and community planning.

Several regions and communities have also begun to address this issue with special task forces assessing impact and brainstorming solutions. Affected areas studying the problem touch all parts of the state, including Miami, Jacksonville, Orlando, and Palm Beach, Collier, Lee, Sarasota, Brevard, Marion, Hillsborough, Okaloosa, Santa Rosa, Walton, and Escambia Counties.

Some market relief may be in sight. Although it is expected to take at least a couple of years to “work off the excesses of the last decade,” forecasters are now projecting housing prices to decline significantly in areas such as Florida, California, and the Northeast.¹⁵ This correction is expected to be gradual, lengthy, and vary by market due to Florida's ongoing rapid population growth.¹⁶ As noted by David Denslow, an economics professor at the University of Florida, “We will see the affordability of housing in Florida improve...Much of Florida is still cheaper than New York, Boston, California and other areas.”¹⁷

Business Incentives

Designed to encourage businesses to relocate to a particular state or to help existing businesses expand, incentives are an important factor in today's highly competitive environment among states and countries for attracting high-paying jobs and vibrant private companies.¹⁸ By 1998, more than 40 states had established incentives for capital investment or job creation.¹⁹ Until a national policy discourages competition among states for relocating businesses or stops states from offering certain kinds of tax incentives, Florida needs to provide such incentives or risk being uncompetitive.²⁰

Florida offers incentives for business recruitment, retention, and expansion in a variety of areas, including targeted industries, workforce training, road infrastructure, and special opportunities. In recent years, the Governor and the Legislature have taken several actions to ensure the competitiveness of Florida's incentive toolbox, such as:

- Re-enacting the Qualified Targeted Industries Job Tax Refund Program and the Qualified Defense Contractors Job Tax Refund Program (capped at \$35 million)
- Providing steady funding for Florida's Economic Development Transportation Fund, commonly referred to as the Road Fund (\$10 million)
- Greatly increasing the size of Florida's Quick Action Closing Fund (\$45 million)
- Providing \$200 million for the creation of an Innovation Incentive Fund for significant economic development projects, including the location or expansion of research and development entities and innovation businesses in Florida

Competition from other states is stiff, however. Many states offer large incentives to attract businesses in growth industries. For example:

- Texas provided \$40 million for SEMATECH for the development of advanced materials for semiconductor manufacturing and \$50 million to capture Texas Instrument's next generation chip manufacturing facility. In addition, in June of 2005, Texas implemented a \$200 million Emerging Technology Fund.²¹
- New York provided \$210 million to capture International Sematech's \$403 million R&D facility at SUNY's Albany campus (Center of Excellence in Nanoelectronics).²²
- North Carolina provided \$242 million in incentives to attract a Dell computer plant and \$41 million to lure a Novartis vaccine plant.²³

Recommended Actions

Study and address the insurance issue

Florida's insurance market – both commercial and residential -- continues to be an issue of concern. Two state-level blue-ribbon committees are addressing this issue by bringing all stakeholders in the market (e.g., policyholders, insurance companies, lenders) to the table to find solutions that are economically beneficial to all.

- ***Strengthen the dialogue between the Florida Office of Insurance Regulation and economic development stakeholders***

Because the availability and cost of insurance has emerged as a new business climate issue, the dialogue between the Office of Insurance Regulation and the economic development community has become more important. This partnership can have a dual impact: not only to address a business climate issue but also to help recruit insurance companies to Florida to help diversify Florida's economy.

Address the affordable workforce housing issue at state and local levels

- ***Implement customized, regional solutions***

Regional solutions will be fundamental to the affordable workforce housing dilemma. A toolbox has emerged which can serve as the foundation for addressing this issue. It includes such strategies as community land trusts, employer-assisted housing, use of pre-fabricated (not "manufactured") houses, linkage fees, bonus density formulas, inclusionary zoning, reduced regulatory barriers/expedited permitting, impact fee incentives, infill development and mixed-used housing, and green building. Communities should customize the toolbox of potential solutions as part of their regional and community planning initiatives.

- ***Promote state and local outreach efforts to the private sector in order to engage companies in the development of affordable workforce housing solutions***
 - *Employer-assisted housing:* Some private employers in the state are beginning to provide down payment assistance or bonuses to help their employees find suitable housing. Outreach efforts should include an education component regarding the mutual benefits of employer-assisted housing as well as technical assistance to minimize companies' administrative costs.²⁴

- *Innovative housing solutions:* The private sector should be encouraged to explore the use of new design techniques, products, and construction practices which would make workforce housing more affordable. This could include the use of new construction materials and green building technologies as well the fabrication of high-end modular homes.

Strengthen Florida's competitive business climate for the Innovation Economy

Florida has a competitive business climate which it continues to improve. Because job creation is an important outcome, the eligibility requirements of current state economic development incentives focus on high-wage job creation. However, start-up companies that are built upon the commercialization of new technologies tend to focus on R&D and usually do not create the requisite number of new jobs needed for many current incentives.

A business climate that rewards R&D would have two key goals: it would be consistent with good tax policy (e.g., tax consumption, not inputs into production), and it would stimulate innovation in Florida. Development of incentives that reward capital investment and R&D should be priorities in order to boost Florida's output in the new Innovation Economy.

- ***Invest in the Innovation Incentive Fund***

The Innovation Incentive Fund should be replenished and maintained as a flexible funding source for large and small R&D projects and facilities that generate growth-enhancing innovations.

- ***Establish a Florida tax credit for incremental R&D spending***

Although research by the Federal Reserve Bank of San Francisco indicates that state R&D tax credit programs are nearly as important as the federal R&D tax credit program, Florida does not currently offer a tax credit for incremental R&D spending.²⁵ Therefore, companies conducting R&D activities in Florida are at a disadvantage compared to their peers in other states that do offer such a program. By providing a credit equal to a certain percentage of increased R&D spending, Florida can be competitive with Georgia, North Carolina, Texas, New York, and California, whose credits range from 5 percent to 12 percent. This proposed incentive would help to attract high-wage, professional research jobs, which would boost Florida's image as a premier R&D-friendly state.

- ***Identify and evaluate incentives for innovation and productivity***

Enterprise Florida should research the competitive use and efficacy of supplemental business incentives that reward knowledge creation and productive output in addition to job creation.

Success Measures

Indicator	Baseline Benchmark	Target Goal	Most Recent Data	Comments
High tech employment as % of US total	4.5% (2002)	4.8% (2012)	4.79% (2004)	After a nationwide drop in high-tech jobs in 2003, Florida recovered 6,683 high-tech jobs in 2004 and has reached the original target goal.
Per worker productivity relative to U.S. average	87.9% (2001) Revised data for 2001: Florida stood at 89.6% of the U.S. average	TBD (2012)	92.2% (2005) (Based on preliminary employment data)	With real GSP growth of 7.8% from 2004 to 2005, Florida continues to move in the right direction. Based on preliminary data (subject to revision), Florida has surpassed the original target goal.
Avg. manufacturing workers' comp insurance rate as % of US average	166% (2003)	TBD (2012)	147% (2005)	Improvement both in Florida's numerical showing and in its national ranking. Moving towards target goal.

¹ International Economic Development Council, "Business Climate," *Economic Development Reference Guide*, 2006.

² Florida Council of 100, *Preparing For The Future: A Brief Review of the Major Drivers of Florida's Future in the First Decades of the 21st Century*, January 2006.

³ Harriet Johnson Brackey, "Soaring insurance costs threaten Florida's real estate industry, survey says," *South Florida Sun-Sentinel*, September 19, 2006, and Jim Saunders and John Bozzo, "Gov. Bush: Insurance market a 'serious, serious problem'," *Daytona Beach News-Journal*, July 15, 2006.

⁴ Executive Office of the Governor, *Governor Bush and Florida Cabinet Move to Activate State Reinsurance Pool for Florida Businesses*, August 1, 2006.

⁵ Harriet Johnson Brackey, September 19, 2006.

⁶ Gregg Fields and Beatrice E. Garcia, "A crisis for business in Florida," *Miami Herald*, July 25, 2006.

⁷ Brian Kern, "Florida's Commercial JUA Now Open for Small Business Risks," *Insurance Journal*, September 18, 2006.

⁸ EntreWorks Consulting, "Housing: Why Economic Developers Must Engage," *EntreWorks Insights*, May 2006.

⁹ Public Policy Institute, *2006 Housing Study – A Framework For Affordable and Workforce Housing*, Fall 2006, and EntreWorks Consulting, May 2006.

¹⁰ Florida Council of 100, January 2006, and Florida Housing Coalition, 2006.

¹¹ Mitch Stacy, "Tampa summit examines state's affordable housing crisis," *Sarasota Herald-Tribune*, September 15, 2006.

¹² Ibid.

¹³ Florida Senate, Transportation and Economic Development Appropriations Committee, *Senate Staff Analysis and Economic Impact Statement for CS/CS/SB 132*, April 25, 2006.

¹⁴ Mitch Stacy, September 15, 2006.

¹⁵ Martin Crutsinger, "Forecast sees housing prices falling," *Bradenton Herald*, October 3, 2006.

¹⁶ Jerry W. Jackson, "Soaring Insurance Worries Experts," *Orlando Sentinel*, September 21, 2006.

¹⁷ Chad Terhune and Rafael Gerena-Morales, "Families Flee Florida," *Wall Street Journal*, September 27, 2006.

¹⁸ Collins Center for Public Policy, Inc., *Florida Qualified Target Industry Tax Refund Program: An Independent Analysis*, February 2005.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Enterprise Florida, 21st Century Economic Development Task Force, *Priority Recommendations*, January 2006.

²² Ibid.

²³ ECNext, Inc., "North Carolina lawmakers approve \$242 million in incentives to lure Dell," *Knight-Ridder Tribune Business News*, November 5, 2004, and Dudley Price, "\$41 million lures vaccine plant," *The News & Observer*, July 19, 2006.

²⁴ "What is being considered?" *Naples Daily News*, May 7, 2006, and Brevard Workforce Housing Task Force, *Housing For All: Implementing Policies and Programs that Make a Difference*, April 2006.

²⁵ Dan Wilson, "The Rise and Spread of State R&D Tax Credits," *FRBSF Economic Letter*, October 14, 2005.



Priority Recommendations

Priority: Promote Sustainable Development to Ensure Florida's Superior Quality of Life

Why This Priority Matters to Florida's Economic Development

Expected to become the third most populous state in the nation by 2011 with about 20 million residents, Florida is blessed to be a high-growth state.¹ Population-driven economic growth creates jobs and income for our citizens while generating growing fiscal revenues for our governments to invest in our public systems and infrastructure.

Rapid population expansion does, however, pose multi-faceted growth management challenges, making it more difficult to create a high-wage, high quality-of-life economy. Growth-affected areas such as transportation, environment, education, land use, and overall quality of life are interrelated and must be dealt with in concert so that all aspects of Floridians' lives improve together. Further, if not proactively addressed, there is the potential for our population-driven economy to overtake and overwhelm our ability to respond.

Business Case

Two key development issues continue to be central to the state's current and future economic well-being: growth management/land use planning and multimodal infrastructure.

Growth Management / Land Use Planning

In recent years, the Governor and the Legislature have adopted major growth management reforms and a funding plan to ensure the continued high quality of life for Florida. The first major growth management bill to pass in 20 years:

- Realigned Florida's growth management framework to better link planning for future land uses with planning for provision of adequate infrastructure;

- Closed the concurrency gap between new development and construction of needed transportation and school facilities;
- Provided infrastructure funding at \$1.5 billion in Fiscal Year 2005-06 for roads, schools, and water facilities and \$750 million annually thereafter; and
- Established the Century Commission for a Sustainable Florida to create 25-year and 50-year visions for Florida's future.

Land-use patterns, though, continue to greatly impact the long-term economic development potential of our cities, counties, and regions, especially as the state builds-out. Due to the complexity of the current land-use planning laws, rules, and codes, it has become increasingly difficult to plan proactively for Florida's growth. Conflict over land-use designations still occurs more frequently than visioning efforts that address the numerous interwoven issues affecting growth management today, such as transportation, workforce housing, environment, and commerce.

As a result, economic development vision and strategy at all levels of Florida's government are seldom incorporated in growth management and required approvals. For example,

- Government regulation of growth management-related decisions is delaying certain local economic development projects. Because of the way that Florida's growth management policies have evolved, growth management has sometimes meant stopping – or at least standing in the way of desirable development. For example, in Leon County – not a coastal county nor one of Florida's more highly populated counties – it takes 230 to 311 days to get a building permit even when the property in question is appropriately zoned.² Regulatory barriers like this push businesses to locate in other states and hamper Florida's economic growth and prosperity.³
- The lack of developable land is greatly increasing the cost of doing business. For example, as industrial land is converted to other uses, prices for business-eligible land increase as then does the cost of doing business.

Multimodal Infrastructure

As the state's backbone for the movement of people and goods, a multimodal transportation system that is efficient, affordable, and reliable is crucial to a competitive economy that provides high-wage job creation. Although Florida's current multimodal infrastructure of highways, railways, seaports, and airports connects it to the world in every conceivable way, the state faces many challenges in meeting its future multimodal infrastructure needs, including severe capacity constraints across all modes, inadequate intermodal connectivity, and lack of a balance between transportation expansion needs and community livability.⁴

Florida is responding to projections of sustained growth and related trends with a concerted effort to ensure that the next few decades are a period of economic prosperity and high quality of life. The Florida Department of Transportation (FDOT) and its partners are in the midst of a fundamental shift in the way the transportation system is planned and managed. Associated initiatives include:

- *2025 Florida Transportation Plan*: Emphasizing transportation's role in supporting economic competitiveness, community building, and conservation planning, the recently updated *2025 Florida Transportation Plan* establishes long-range goals for the future development of Florida's entire multimodal transportation system. The Plan emphasizes the need for regional visions,

programs, and action plans that integrate transportation, land use, economic, community, and environmental systems.

- *Strategic Intermodal System:* The Strategic Intermodal System (SIS) includes the major transportation hubs, corridors, and connectors that are most important to Florida's statewide economic competitiveness. The SIS will improve access between regions of the state, especially economically distressed areas; provide for smooth and efficient transfers for both people and freight between transportation modes; reduce delay and improve the reliability of travel and transport between regions, states, and nations; and encourage multimodal solutions along key trade and economic corridors.
- *Future Statewide Corridors Initiative:* The FDOT and the Florida Transportation Commission are working with other statewide, regional, and local partners to develop policies and criteria that will be used to identify and evaluate future statewide corridor investments to be implemented over the next 50 years. These will include enhancements to existing highway corridors, expanded freight and passenger rail service, and the creation of new corridors that serve regions that are not well-connected today.
- *Regional Coordination and Visioning:* The FDOT, the Department of Community Affairs, and regional and local partners are currently participating in a prototype regional visioning effort in Central Florida (myregion.org) which integrates transportation, land use, economic, community, and environmental perspectives on development in an effort to determine how to accommodate an estimated 3.7 million new residents in the seven-county region by 2050. The FDOT is also monitoring several other regional visioning processes around the state that are in the planning stages and partnering with regions to advance regional transportation programs, such as the Transportation Regional Incentive Program, the Small County Outreach Program, and the Small County Road Assistance Program.
- *Rural Economic Development:* The FDOT is paying particular attention to the role of transportation investments in stimulating economic growth in Florida's Rural Areas of Critical Economic Concern. Through the Rural Economic Development Initiative, FDOT is exploring how and where to improve transportation access between rural areas and surrounding markets to facilitate economic development opportunities. Strategic investment opportunities in rural areas may include new transportation corridors as well as new hubs such as "inland ports" or logistics centers.

Recommended Actions

Sustainable development that balances the state's economic development, growth management, and infrastructure needs is key to ensuring that Florida's growing number of residents has a prosperous future. Two elements, growth management/land use planning and multimodal infrastructure will especially impact the state's ability to accommodate growth.

Increase balance, flexibility, and business focus of growth management/land use planning efforts

- ***Promote an integrated smart growth agenda through regional visioning forums***

The Department of Community Affairs should partner with the economic development community, the Florida Department of Transportation, and others to revisit state growth management/land

use policy and design a broader vision with state and regional guiding principles. More specifically, at both the state, regional, and local levels, there needs to be a shift in mindset that integrates:

- A regulatory shift to integrated comprehensive planning that is more closely linked to state and local economic development priorities
- A process that is based on customized solutions, not on inflexible rules
- A process that is implemented through incentives, not penalties
- Planning that efficiently balances regional land uses (e.g., commercial, industrial, residential, green)

Improve Florida's multimodal infrastructure to meet current and future growth challenges

Florida's multimodal transportation system must adapt once again to keep pace with our changing communities and economy. The transportation system must support increasing demand for mobility of both people and freight resulting from a growing population and economy. The transportation system also must support the development of livable communities by enhancing connectivity and accessibility among the places people live, work, and spend their free time.

- **Assess the need for mass transit for Florida's cities**

Florida's multimodal infrastructure system should work to alleviate the traffic congestion of today. Already built-out, many metro areas need relief through solutions such as public and mass transit. These options may be particularly important as Florida's communities strive to address issues such as affordable workforce housing and cost of living.

- **Enhance Florida's multimodal infrastructure system**

- Improve the coordination of transportation and economic development planning at the state, regional, and local levels, including paying increased attention to international trade needs in the transportation planning process
- "Fast-track" transportation projects that meet vital economic competitiveness needs
- Increase the capacity and efficiency of the state's major seaports and airports, including seamless truck and rail access to these gateways

- **Address Florida's long term needs with the Future Statewide Corridors Initiative**

The Department of Transportation's Future Statewide Corridors Initiative will be a critical program to help anticipate and plan for Florida's future growth and transportation needs.

- **Utilize supplemental funding models such as privatization to meet Florida's growing transportation needs**

In the past, federal, state, and local governments provided for all transportation needs, sometimes through public-private partnership. Increasingly, transportation needs will be met through private means, including innovative financing (e.g., toll facilities, concessions) and projects that marry a private entity (e.g., design-build firm) with a private financier.⁵ For example, a comprehensive program of privatized toll-roads (concessions) could be implemented in which private consortiums finance, design, construct, maintain, and operate speed-to-market transportation linked to airports, ports, and residential areas.

- ***Provide innovative transportation solutions***

The birth and development of new transportation solutions that allow for speed-to-market delivery systems, such as Intelligent Transportation Systems, the Small Aircraft Transportation System, and Very Light Jets, should be fostered. NASA, with Florida as one of the participating states, is developing technologies that will allow low-use small airports to be utilized by a new, under the radar, system of small aircrafts. Additionally, very light jets will soon act as “air taxis,” linking previously unconnected Florida cities as part of a new point-to-point, on-demand regional jet service. Both of these technologies are designed to increase businesses’ speed to market.

¹ Enterprise Florida 21st Century Economic Development Task Force, *Priority Recommendations*, January 2006. In fact, the U.S. Census projects continuous population expansion throughout the next several decades, with Florida adding more residents than either California or Texas, the two largest states in the nation which have greater economic size and yet will add fewer residents than Florida by 2030.

² As cited in Florida Governor’s Council of Economic Advisors, *Growth Management Task Force Policies and Recommendations*, December 17, 2004, these numbers are estimates from the city staff in Tallahassee, reported in the *Tallahassee Democrat*, November 8, 2004, page A1. A developer in that same article claims that the permitting process takes about a year and a half, or roughly twice as long as the estimate made by the city.

³ Florida Governor’s Council of Economic Advisors, December 17, 2004.

⁴ Florida Department of Transportation, *2025 Florida Transportation Plan*, April 7, 2006.

⁵ Tampa, for example, is about to become home to the first toll road in Florida designed, financed, built, operated, and maintained by a private company, negotiated through a public contract. Emily Nipps, “Private toll road would blaze trail in state,” *St. Petersburg Times*, June 18, 2006, and Enterprise Florida 21st Century Economic Development Task Force, January 2006.



Priority Recommendations

Priority: Invest in Florida's Innovation Economy

Why This Priority Matters to Florida's Economic Development

Driven by science and technology, today's innovation economy is fundamentally different from the industrial and information economies of the past.¹ Research and development has become the underlying source of wealth in the 21st Century by generating ideas and technologies that spur productivity and economic growth. This leads to new firm formation that, ultimately, translates into jobs – high-wage, high value-added jobs in emerging industries that help to accelerate the diversification of the economy.²

Thus, a key driver for diversifying Florida's economy is to boost the competitiveness of Florida's Innovation Economy. Not only will this significantly raise the quality of economic growth, it will also ensure that Florida participates in innovation and the creation of new companies and growth industries of the future.³

Business Case

Florida Universities

In 2005, Florida universities performed more than \$1.5 billion in sponsored research, working closely with business and industry to create cutting-edge technology.⁴ Moreover, since the year 2000, these institutions have brought more than \$427.4 million in royalties to the state with two schools (University of Florida and University of Central Florida) being ranked among the top 20 universities in the nation for number of U.S. patents issued in 2004.⁵

Mechanisms such as campus incubators, university venture funds, and other programs that encourage professors to commercialize their research are also an important factor generating new businesses in the areas around many universities. In 2005, for example, Florida universities struck agreements with more than 100 start-up companies.⁶

World-Class Research Institutes and Facilities

Florida has a robust foundation of intellectual talent in its research universities (e.g., University of Florida, Florida State University, University of South Florida, University of Central Florida, University of Miami, etc.) and its research institutes (e.g., Moffitt Cancer Center and Research Institute, Institute for Human and Machine Cognition, etc.). Recently, Florida has added to this base with several additional institutes such as Scripps Florida, the Burnham Institute for Medical Research, and the Torrey Pines Institute for Molecular Studies as well as investments in university Centers of Excellence. Together, this constitutes a robust and expanding base for Florida's Innovation Economy. University and private research institutes with a focus on basic and applied research, technology commercialization, and industry partnerships can serve as catalysts for increasing the number of invention disclosures, patents, licensing income, and spin-off start-up companies – all key innovation economy indicators.⁷

Innovation Economy Legislation

In 2006, the Governor and the Legislature provided \$382 million for implementation of the Governor's Innovation Economy Initiative which will spur the growth and expansion of science-based industries, businesses, and jobs throughout the state. Among other programs, the initiative funded the:

- 21st Century Technology, Research, and Scholarship Enhancement Act
 - World-Class Scholars Program (\$20 million) to attract top researchers to the state
 - Centers of Excellence Program (\$30 million) to create concentrated programs of high-level research and technology commercialization
 - State University System Research and Economic Development Investment Program (\$45 million) to provide matching funds to eligible institutions to construct and acquire research facilities and specialized equipment to support research, foster economic development, and accelerate Florida's Innovation Economy
- Florida Innovation Incentive Fund (\$200 million) to provide resources for significant economic development projects, including the location or expansion of research and development entities and innovation businesses in Florida

Entrepreneurship

Other key ingredients of the Innovation Economy are a vibrant culture of entrepreneurship, cutting-edge technology incubators, and the presence of a "creative class," all of which combine to produce new ideas, strategies, and innovations. Entrepreneurship programs continue to gain strength at Florida's universities and colleges (including the hosting of a statewide collegiate business plan competition), and Florida now boasts more than 20 business incubators. In addition, emphasizing the factors most important in attracting the creative class (e.g., culturally rich communities and the perception of Florida's communities as progressive and stimulating places), several regions have initiatives to actively cultivate the creative class.⁸ Thus, given the strong correlation between the location decisions of this class of workers and job and income growth, local and regional investments in creative infrastructure (e.g., arts, culture, history, and libraries) have become more important.⁹

Challenges

The United States has traditionally been a global beacon for prosperity based on innovation –accounting for half of the U.S. GDP growth over the last 50 years. That preeminence can no longer be taken for granted. The nation faces critical challenges, including an educational system losing ground in science and education, a decline in federally funded research, other states (e.g., India, China) catching up, and barriers to high-skilled immigration.¹⁰

These national issues are doubly important to Florida. Florida's innovation economy faces challenges on several significant fronts, most notably for a world-defining talent base – the foundation for innovation. While Florida's national rankings have improved, it still has a sizeable gap to close vis-à-vis the rest of the country. For example:¹¹

- Florida has seen a recent increase in both the number of Science & Engineering (S&E) graduate students and in S&E degrees awarded. While Florida's national rankings have improved, relative to population size it still has a sizeable gap to close vis-à-vis the rest of the country.
- Despite Florida's large (and rapidly increasing) absolute numbers of technology professionals, they still account for a smaller share of Florida's total workforce than nationally.
- With about \$5 billion a year in R&D, Florida ranks 14th in the nation. Florida's economy is less R&D-intensive than the U.S. However, academic R&D accounts for a larger share of Florida's total R&D than nationally. R&D performed by Florida's universities has grown faster than for the entire country.
- Total number of patents granted to Floridians annually has declined from 2,600 to 2,300 over the past five years. However, Florida's share of total utility patents issued in the United States has increased slightly over the same period. Florida has approximately half as many patents per non-farm worker as the nation as a whole, but the gap is narrowing.¹²
- There has been some deterioration in Florida's position in the number of spin-out companies per \$1 million of R&D expenditure. Florida remains slightly above the average for all other U.S. states, but its national ranking has fallen from 7th to 20th place.
- There is currently a big deficit in seed, start-up, and early-stage capital in the state. Florida faces the challenge of starting companies, only to have them leave the state or wither on the vine due to the lack of early-stage seed capital funding. This "valley of death" is particularly acute in Florida because Florida is not the natural home of the venture capital community. In addition, since the late 1990's, venture capital investment moved away from early-stage investments. The net result has been that, in Florida, venture capital has fallen sharply both in absolute dollar terms and as a share of the U.S. total. Ironically, at the same time, the demand for early-stage venture capital in Florida has increased—due to steady improvements in Florida's intellectual base.
- The competition for R&D is becoming fiercer. For example,
 - New York provided \$210 million to capture International Sematech's \$403 million R&D facility at SUNY's Albany campus.¹³
 - North Carolina provided \$41 million to attract a Novartis vaccine plant.¹⁴
 - Texas provided \$40 million for SEMATECH for the development of advanced materials for semiconductor manufacturing and \$50 million to capture Texas Instrument's next generation chip manufacturing facility.¹⁵

Recommended Actions

Although Florida has great potential to be a world-class center of innovation and dynamic, technically advanced businesses, its ability to promote growth-generating R&D and seed start-ups in emerging industries will determine its success in the Innovation Economy of the 21st Century. What's at stake are high-wage, high value-added jobs that hold out the promise of increasing prosperity and living standards in the state. However, to realize this goal, the state must engage in a broad effort to create a "habitat for innovation" – an environment that encourages the development and application of advanced research while encouraging the growth of businesses and workers that will produce this innovation.¹⁶

Invest in a stimulus strategy for R&D to boost Florida's innovation capacity

Science-based research projects of significant scale and world-class excellence can help jump-start Florida's innovation infrastructure with science-based economic development. World-class research institutes and R&D facilities can serve as catalysts for evolving technology clusters; they can boost Florida's talent base at the very highest levels; and they can benefit Florida's existing research and university base with increased R&D collaboration.

This kind of high impact stimulus strategy combines two key activities: the recruitment of R&D facilities and the investment in Florida's R&D base (universities and research institutes). Together, they can serve as foundations upon which to build additional companies in a clustering concept. Through this approach, Florida can accelerate its talent and innovation base and diversify its economy in emerging technology sectors.

- ***Enhance the 21st Century Technology, Research and Scholarship Act with additional investments in the World Class Scholars Program and Centers of Excellence***
- ***Expand investment in the Florida Innovation Incentive Fund to recruit magnet R&D companies***

Invest in technology commercialization "gap funding" to realize the economic development promise of new innovations

Once Florida's talent base generates new research, the challenge is to bring it to market. To do so, the state's innovation infrastructure must be supportive of such efforts. This includes a variety of resources, including proof-of-concept grants and assistance, incubators, entrepreneurship education, and the capital necessary for successful commercialization and company formation. A key need is to accelerate technology commercialization with grant programs for very early-stage companies in the proof-of-concept stage.

- ***Establish and fund a statewide R&D matching grant program for small businesses to accelerate technology commercialization. Specifically, establish a matching grant program for federal Small Business Innovation Research Program and Small Business Technology Transfer Program awards with an annual allocation of \$5 million.***

Such a program would increase the probability of success of Florida companies that have already demonstrated proof-of-concept by bridging the financing gap between start-up and angel/seed investments.¹⁷ In the future, this program should be expanded to establish a statewide Florida

matching grant program for R&D in the commercialization stage with eligibility open to universities, research institutes, and the private sector.

Address the need for early-stage seed and venture capital in Florida

Access to venture capital is key if Florida is to be a successful innovation hub. Florida is not the natural home to venture capital firms. In addition, though Florida is one of the nation's top states in terms of concentrations of affluent individuals (especially retirees), this resource still remains largely untapped for the purposes of funding entrepreneurial activity. Tapping angel and private equity sources of investment capital is becoming all the more important with venture capital funds tending to fund larger, later-stage deals, thus increasing the early-stage funding gap. To address this need, several initiatives are needed:

- **Enact the Capital Formation Act¹⁸**

The Capital Formation Act was proposed but did not pass in the 2006 Legislative Session. This Act is a key component of the "Innovation Value Chain," and the Legislature should consider the creation of the Florida Opportunity Fund along with a concomitant bill granting public records exemptions for proprietary business information of venture capital funds and venture capital-financed companies. The Legislature should consider establishing this fund at not less than \$75 million.

- **Systematically leverage Florida's wealth for high-tech business investment**

- *Facilitate angel investment networks:* Angel investors are critical to the commercialization process, often filling the capital gap between \$500,000 and \$2-5 million, the stage at which many firms decide where to locate. So far, Florida's high-tech entrepreneurs have benefited from the involvement of individual angel investors, investors who are now beginning to come together in the state and build networks. The state should facilitate the recruitment of high-worth individuals into organized angel investment networks and assist in the matching of these networks and commercializable innovations.
- *Tap into Florida based family investment companies:* There are a growing number of family investment companies that wealthy families have built to invest and manage their own money. Many have professional management in place, and they actively seek to fund innovative deals (especially earlier-stage deals). The state should explore ways in which its entrepreneurial, high-tech start-ups can be married with these family investment companies.

Establish Florida as an innovation leader by strategically capitalizing on emerging technology opportunities

Emerging technologies offer the opportunity to develop excellence and leapfrog the competition. Although these technologies are often high-risk initiatives, selected carefully and considered in conjunction with Florida's strengths, a strategy to prioritize and invest in emerging technologies can pay significant dividends. A proactive approach to science and technology innovation can provide direction to public investments in research – such as the development of new Centers of Excellence – and help align Florida's educational programs to anticipate future needs and opportunities.

Nanotechnology, which has become a national R&D priority, serves as a case-in-point for the need and benefit of such a strategic approach. In 2003, President Bush signed the 21st Century Nanotechnology Research and Development Act which authorized \$3.7 billion in federal R&D funding over 4 years. In 2006, federal funding for nanotechnology research was estimated at \$1.3 billion, and a National Science Foundation estimate indicates that it will be a trillion-dollar industry by 2015.¹⁹ More than 20 states have organized nanotechnology initiatives to prepare for and take advantage of nanotechnology.²⁰ New York has proposed investing \$1 billion for nanotechnology; North Carolina has developed a nanotechnology roadmap; and California has evaluated its challenges and opportunities for nanoscience and nanotechnology. Currently, Florida has several university-based programs but ranks 31st for economic development resulting from nanotechnology.²¹

A key to Florida's future in the innovation economy will be to identify and evaluate key "sputnik" ideas that could help Florida jumpstart key opportunity areas, take advantage of federal funding, and leapfrog other states. While nanotechnology is a prime example, other potential areas include bioinformatics, Homeland Security, disaster preparedness and recovery, and alternative energy.

The key for leveraging emerging technologies is to anticipate trends and make strategic investments in targeted research areas. To provide direction, several states have established state-level science and technology advisory boards and commissions for science and technology policy guidance. For example, the North Carolina Board of Science and Technology – a division of the North Carolina Department of Commerce – "advises and makes recommendations to the Governor, the General Assembly, the Secretary of Commerce and the Economic Development Board on the role of science and technology in the economic growth and development of North Carolina." The California Council on Science and Technology is a not-for-profit, 501(c)(3) corporation established in 1988 by state legislation to offer expert advice to state government and to recommend solutions to science and technology-related policy issues.

- ***Establish a Florida advisory science and technology board to provide policy guidance on emerging technologies***

This scientific advisory board should be established as a Governor's Commission on Science and Technology to offer expert advice on emerging technologies and provide guidance on science and technology policy issues and public investments. The advisory commission should include national and Florida experts to anticipate and evaluate emerging scientific trends, review high impact federal funding opportunities, and recommend a Florida science and technology policy agenda.

- ***Establish a special purpose R&D matching funds program to enable Florida to compete for major high-impact federal R&D projects***

As federal agencies develop funding priorities, significant opportunities emerge for major R&D "centers of excellence" and high-impact national labs. Federal agencies such as National Institute of Health, National Science Foundation, Department of Energy, Department of Defense, and others regularly issue proposal solicitations that usually require state matches. To enable Florida to compete for high-impact federal research centers and labs, a special purpose research fund should be established to help match federal and university funding commitments. Sometimes, this could make the difference between success and failure and could enable Florida to capitalize on opportunities that would otherwise not occur.

Aggressively brand Florida as an “Innovation Hub”

One on the one hand, Florida’s R&D foundations need to be enhanced with additional investment and strategies. On the other, existing strengths also need to be marketed more aggressively. Based on a 2006 perception survey of national and international executives conducted by Enterprise Florida, Florida is not perceived to have excellence in education, workforce skills, R&D, and high-tech clusters. The reality may be better than the perceptions of Florida, and because perceptions do matter, Florida’s research assets and innovation capacity should be marketed even more aggressively. A global innovation branding campaign needs to be developed and funded.

- ***Establish a science and technology-based marketing program to brand Florida as a global “Innovation Hub”***

Success Measures				
Indicator	Baseline Benchmark	Target Goal	Most Recent Data	Comments
R&D as % of Florida GSP	1.0% (2000)	1.5% (2012)	0.9% (2003)	After an initial improvement (1.1% in 2002), Florida started sliding further away from the target goal in 2003.
Florida’s share of total US R&D expenditures	1.9% (2000)	2.5% (2012)	1.9% (2003)	After three years of improvement (peaking at 2.2% in 2002), Florida’s slice of the nation’s R&D pie in 2003 fell back to the 2000 baseline level.
Florida’s share of total # US patents	3.0% (2001)	3.5% (2012)	3.1% (2005)	Florida’s share has been mostly stagnant since 2001, but it is moving in the right general direction. (In the meantime, there have been minor fluctuations, including an increase of 0.2 percentage points in the most recent year).
Florida’s share of total US venture capital invested	1.7% (2002) Revised data for 2002: Florida’s share was 1.85%	3.0% (2012)	1.66% (2005)	Although 2005 saw a slight increase over 2004 VC levels, Florida’s share still remains below the 2002 baseline level.

¹ U.S. Council of Competitiveness, *InnovateAmerica*, 2004.

² In fact, the U.S. Department of Commerce estimates that R&D creates 36 direct and indirect jobs per every \$1 million spent. The Center for Innovative Entrepreneurship, *The Economic Benefits of Research and Development Spending*, April 26, 2006, and Tom Still, "Academic R&D pays for itself in terms of jobs and economic growth," *OnWeac*, May 31, 2005.

³ Enterprise Florida 21st Century Economic Development Task Force, *Priority Recommendations*, January 2006.

⁴ Enterprise Florida, Inc., *Strong Knowledge Base* at

<http://www.eflorida.com/innovationadvantages/default.asp?level1=24&level2=148>, accessed September 29, 2006.

⁵ Enterprise Florida, Inc., *Technology Transfer* at

<http://www.eflorida.com/businessadvantages/1/techtransfer.asp?level1=24&level2=149®ion=nc>, accessed September 29, 2006.

⁶ Florida State University, Office of IP Development and Commercialization, *Florida University Aggregate Totals for 2000-2005*, August 10, 2006.

⁷ Enterprise Florida, Inc., *2006 Innovation Scorecard*.

⁸ For example, these communities include Tampa, Orlando, and Jacksonville.

⁹ Florida Chamber Foundation, "New Cornerstone: A Vision for Florida's Economic Future," *New Cornerstone*, September 2003.

¹⁰ Enterprise Florida 21st Century Economic Development Task Force, January 2006.

¹¹ *Ibid.*

¹² U.S. Patent and Trademark Office, 2006.

¹³ Enterprise Florida 21st Century Economic Development Task Force, January 2006.

¹⁴ Dudley Price, "\$41 million lures vaccine plant," *The News & Observer*, July 19, 2006.

¹⁵ Enterprise Florida, 21st Century Economic Development Task Force, January 2006.

¹⁶ Florida Chamber Foundation, "Innovation Economy: Incubating and Sustaining Florida's Emerging Businesses," *New Cornerstone*, February 2003.

¹⁷ Enterprise Florida, Inc., Technology Entrepreneurship and Capital Committee, *Proposal for a Florida Research Commercialization Matching Grant Program*, August 2006.

¹⁸ Enterprise Florida, Inc., Technology Entrepreneurship and Capital Committee, *Florida Early Stage Capital Proposal, Business Case: Fueling Florida's Next Bright Ideas*, January 2006.

¹⁹ National Science and Technology Council, *The National Nanotechnology Initiative: Research and Development Leading to a Revolution in Technology and Industry, Supplement to the President's 2007 Budget*, July 2006, and Kent Hoover, "More research needed on nanotechnology risks," *Bizjournals, Washington Bureau*, December 12, 2005.

²⁰ North Carolina Board of Science and Technology, *A Roadmap for Nanotechnology in North Carolina's 21st Century Economy*, April 2006.

²¹ HPC Wire, *U.S. States Turn to Nanotechnology For Jobs, Investment*, January 27, 2005.



Priority Recommendations

Priority: Establish Florida as a Pre-eminent Global Hub

Why This Priority Matters to Florida's Economic Development

In an increasingly integrated world where seamless supply chains are taken for granted, Florida can no longer be competitive by simply relying on its status as a conduit for goods, people, and data flowing to and from Latin America and the Caribbean. Instead, it needs to become a key node in the network of global business, focusing on high value-added activities like developing new technologies and processes for the global marketplace. This will enable more Florida companies to be globally-oriented, a business perspective typically resulting in higher wages, faster growth, higher profitability, and greater resilience to domestic market disruptions and downturns in business cycles.¹

Business Case

For geographic, historical, and cultural reasons, Florida has a competitive advantage in capitalizing on the process of globalization. Some of Florida's key advantages include:

- Geographic location at the crossroads of the Western Hemisphere
- Well-developed transportation, communications, financial, and trading ties to other countries
- Extensive "soft infrastructure" for international business, such as numerous international banks, consulates, bi-national chambers of commerce, and other multiplier organizations
- A multicultural, multilingual workforce with extensive personal and family ties to many different countries

Four key components of Florida's global portfolio are international trade, free trade agreements, foreign direct investment, and international tourism.

International Trade

Florida has well developed trading ties to other countries, in particular those in the Western Hemisphere. Florida's share of total U.S. exports of goods rebounded to 3.7 percent of the national total in 2005 – very

close to the record levels seen in 2000.² Florida has the nation's second largest (after California) number of companies that export, approximately 35,000 in all, while the total volume of merchandise entering or exiting the United States through Florida's two U.S. Customs Districts is set to exceed \$100 billion this year.³ Among U.S. states, Florida is the 8th largest exporter of state-origin (*i.e.*, locally-produced) goods, as well as the 3rd largest exporter of high-tech products.⁴ Florida's combined exports of locally-produced goods and services amounted to an estimated \$54.3 billion in 2005, supporting more than half of a million jobs for Floridians.⁵

Free Trade Agreements

As part of the global process of economic integration, more and more countries have in recent years been entering into bilateral or multilateral agreements to dismantle barriers to commercial links between them, as well as to ensure common standards in areas such as labor rights, environmental protection, intellectual property protection, and the ability to enforce contracts. Since the idea to launch a free-trade area encompassing all 34 market economies in the Western Hemisphere (the Free Trade Area of the Americas, or FTAA) was officially launched at the Miami summit in 1994, Florida has been an eager and early proponent of dismantling barriers to cross-border commerce in the Americas and beyond.

In fact, the United States has entered into or is negotiating free trade or trade promotion agreements with several countries around the world, including many Western Hemisphere markets where Florida already has an established leading market share. Examples include the U.S.-Chile Free Trade Agreement, the United States-Dominican Republic-Central America Free Trade Agreement (DR-CAFTA), the U.S. Peru Trade Promotion Agreement, and the U.S.-Colombia Trade Promotion Agreement. These and other bilateral or multilateral agreements to lower or eliminate barriers to trade, investment, and bidding on public procurement projects present particular economic opportunities for Florida in the form of additional business activity that would be channeled through the state, as well as benefits to Florida's exporters of products and high value-added services.

Foreign Direct Investment

Marking the first increase in Florida's inward foreign direct investment (FDI) stock since 2000, the total value of holdings by foreign affiliated companies in Florida grew by 1.2 percent in 2004 to \$31.7 billion.⁶ Moreover, Florida has become 4th in the nation in terms of the number of workers employed by U.S. subsidiaries of foreign firms, with a total of 238,000.⁷ Florida's share of the nation's total FDI pie, however, has been falling over the last several years with its ranking among the states in FDI stock dropping from 5th to 10th place.⁸

International Tourism

The number of international visitors to Florida has dropped from 7.5 million in 1999 to 6.4 million in 2005.⁹ Regarding Europe, for example, the total number of visitors from Germany, France, Italy, Spain, and the Netherlands in 2004 was only 72 percent of the total in 1999, the peak year. That translates to some 246,000 fewer visitors to Florida.¹⁰ This drop in "eurozone" visitors to Florida was considerably steeper in Florida than overall in the U.S.¹¹

This decline in international visitors is doubly hurtful since foreign tourists stay longer and spend twice as much as domestic travelers.¹² Possible reasons for the decline include the red tape generated by

homeland security policies, the disappearance of affordable hotels on Florida's beaches, and competition from other states and countries.¹³

Challenges

Increase in Global Competition

With global integration come new challengers to Florida's economic success. China and India, for example, have become major competitors as their resource base (a combined Gross Domestic Product of \$10 trillion and a population of 2.4 billion) grows and their global reach expands. Other, developing countries and regions (such as Brazil, Panama, Bahamas, South Africa, emerging Europe, and emerging Asia) are also becoming increasingly competitive, offering abundant labor resources and/or an expanding technology base. The time when Florida could count solely on its location and its ports to make it a dominant player in the world economy is long gone by.¹⁴

Additionally, Florida has to compete with other states as well as sovereign nations for international tourism business. Some of those countries, such as the United Arab Emirates, spend many times what Florida does on recruiting tourism. Other nations (e.g., Spain, Dominican Republic, Cuba) are offering all-inclusive and discounted tourism deals that travelers can't get in Florida anymore.¹⁵

Need for Greater Geographic Diversification of Florida's Trade

Florida's trading activity has traditionally had a strong focus on the Latin American/Caribbean (LAC) region, which is understandable given Florida's competitive advantage in those markets. However, with 52 percent of Florida-origin exports going to LAC markets and 58 percent of Florida's total worldwide trade being with that region, Florida is highly vulnerable to cyclical downturns in those markets, as happened in 2002-2003.¹⁶ When LAC economies experience a slowdown, Florida's total international trade also tends to stagnate or decline.

Need for Greater Diversity of Foreign Investments in Florida

Not only does Florida need to boost its overall foreign direct investment (FDI) numbers, it also needs to be able to attract a greater variety of types of operations. For example, firms from many countries have sales, management, or general representative offices in Florida for the Latin American/Caribbean region, but their manufacturing or R&D facilities are located elsewhere. Also, due to Florida's perceived peripheral location in the Southeastern corner of the United States, fewer European and Asian firms than might be possible use Florida as a springboard to North American markets.

Homeland Security Challenges

A large amount of anecdotal evidence indicates that Florida's economic health stands at great risk from the unintended consequences of national security policies and procedures imposed in reaction to the 9/11 terrorist attacks. Reacting to the national tragedy, Congress enacted several measures intended to safeguard against further terrorist attacks, including the U.S.A. Patriot Act, the Maritime Transportation Act, the Bioterrorism Act, the Aviation and Transportation Security Act, and the Enhanced Border Security and Visa Entry Reform Act. Concurrently, various agencies of government reacted with more zealous enforcement of existing security policies and procedures.¹⁷ It is now apparent to business leaders around

the state that these well-intentioned measures have not struck the appropriate balance between the interests of our physical security and our economic security.¹⁸ As a result, the growing numbers of U.S. Homeland Security regulations are adversely impacting the flow of trade, foreign investment, and visitors to Florida.¹⁹ Miami, for example, has slipped from the list of best cities for Latin American business largely because of rising security-related rules, costs, and hassles for international business after the 9/11 terrorist attacks.²⁰

International Branding

In 2006, Enterprise Florida contracted for the performance of a Business Image Study to gauge outside perception of the state. As part of the study, Canadian, British, and German business executives working in the Information Technology, Life Sciences, Manufacturing, Aviation/Aerospace/Defense, or Financial/Professional Business Services sectors were interviewed. Results showed that international business executives' perceptions of Florida have significantly improved since 2002 with 81 percent of Canadian respondents, 60 percent of British respondents, and 64 percent of German respondents having a favorable business image of Florida. However, 20-25 percent of executives interviewed do not have any image of doing business in Florida, positive or negative, suggesting that there is significant room for growth and an excellent opportunity to continue molding positive perceptions of Florida.

Transportation Infrastructure

Florida's multimodal transportation system, a critical element of its success in the international marketplace, is one of the most intermodal in the nation with 14 deepwater seaports, 19 commercial airports, nearly 3,000 miles of rail lines, and a highway system that connects ports of entry to interstate and intrastate markets.²¹ However, despite its size, Florida's transportation system faces severe capacity constraints due to the state's rapid population and economic growth.²² As a result, the system struggles to keep pace with the needs of its global customers during a time of continued trade and tourism growth and increasing competition from other states and countries.²³

Recommended Actions

Upgrade Florida's status from trade gateway to commercial global hub

Florida should set aggressive goals for becoming a global leader in every aspect of international commerce. Competitiveness global analysis suggests the need to implement the following policies for moving Florida from its current "international gateway" status to a premier U.S. "global business hub" for international trade and foreign direct investment:

- ***Capitalize on free trade agreements to ensure Florida's leadership for trade***

Bilateral or multilateral international agreements lower or eliminate barriers to trade and investment, and Florida's economy stands to benefit significantly from this. In particular, free trade agreements in the Western Hemisphere disproportionately benefit Florida and are key to Florida's status as a hemispheric hub.

- **Expand Florida's market share in non-traditional export markets**

Florida continues to enjoy a dominant role in Latin American and Caribbean markets. Without losing this leadership role, Florida must develop market expansion strategies for new markets in Europe and Asia.

- **Increase foreign direct investment in Florida**

Florida's share of total inward foreign direct investment into the U.S. has been declining over the past few years. This trend needs to be reversed. Particularly important will be attracting foreign direct investment in targeted industry clusters or regional headquarters facilities from new and existing markets, including seeking-out large, high-impact anchor investors who would be likely to bring suppliers and affiliated companies with them to Florida.

- **Strengthen Florida's federal advocacy efforts**

Areas such as visas, immigration, regulatory barriers, and free trade significantly impact Florida. Florida, therefore, needs a more aggressive federal advocacy program to address these potential barriers to growth.

- **Increase global marketing**

A more aggressive global marketing program should be established and funded to brand Florida in key investment markets and selected emerging global markets.

Success Measures				
Indicator	Baseline Benchmark	Target Goal	Most Recent Data	Comments
Florida-origin share of total US exports of goods	3.45% (2002)	5% (2012)	3.69% (2005)	Improvement over previous year, and over baseline (2002). Moving in the right direction.
Florida's share of total US foreign direct investment	3.0% (2001)	3.5% (2012)	2.55% (2004)	Florida's share of the nation's total FDI pie has been falling over the last several years, including a further marginal decline from 2003 to 2004.

- ¹ Florida Chamber Foundation, "Growing Florida's Crossroads Economy," *New Cornerstone*, January 2003.
- ² World Institute for Strategic Economic Research, 2006.
- ³ U.S. Census Bureau, Foreign Trade Division, *A Profile of U.S. Exporting Companies, 2003-2004*, March 9, 2006, and U.S. Census Bureau, Foreign Trade Division as of April 2006.
- ⁴ World Institute for Strategic Economic Research, 2006, and *AeA Cyberstates 2006*.
- ⁵ Enterprise Florida, Inc., *International Business Facts About Florida*, April 2006.
- ⁶ U.S. Department of Commerce, Bureau of Economic Analysis, 2006.
- ⁷ Organization for International Investment, *Florida Ranks 4th in Nation for "Insourced" Jobs*, September 27, 2006.
- ⁸ U.S. Department of Commerce, Bureau of Economic Analysis, 2006.
- ⁹ Visit Florida Research, *Research*, at <http://media.visitflorida.org/about/research/>, accessed October 5, 2006.
- ¹⁰ Johannes Werner, "Many Europeans Are Avoiding Florida," *Florida Trend*, October 2005.
- ¹¹ *Ibid.*
- ¹² Florida TaxWatch, *Termites in Florida's Basement: The Economic Impact of National Security Policy on Florida's Economy*, December 2005, as cited in Florida TaxWatch, Center for Tourism, *The Impact of Tourism on Florida's Economy: Telling a More Complete Story*, March 2006.
- ¹³ Florida TaxWatch, March 2006, and Johannes Werner, October 2005.
- ¹⁴ Enterprise Florida 21st Century Economic Development Task Force, *Priority Recommendations*, January 2006, and Enterprise Florida 21st Century Economic Development Task Force, *Meeting Minutes*, August 18, 2005.
- ¹⁵ Johannes Werner, October 2005.
- ¹⁶ World Institute for Strategic Economic Research, 2006.
- ¹⁷ Charlie Ranson, Florida TaxWatch Center for a Competitive Florida, *Termites in Florida's Basement: The Economic Impact of National Security Policy on Florida's Economy*, December 2005.
- ¹⁸ *Ibid.*
- ¹⁹ Enterprise Florida 21st Century Economic Development Task Force, January 2006.
- ²⁰ Doreen Hemlock, "For Latin business, the winner is ... Sao Paulo," *South Florida Sun-Sentinel*, May 29, 2006.
- ²¹ Florida Chamber Foundation, January 2003.
- ²² Florida Department of Transportation, *2025 Florida Transportation Plan*, April 7, 2006.
- ²³ Florida Chamber Foundation, January 2003.



Priority Recommendations

Priority: Accelerate Florida's Economic Diversification

Why This Priority Matters to Florida's Economic Development

A large, diversified economic structure is crucial for Florida's stability, prosperity, and global competitiveness. The key elements of diversification include achieving a more favorable sectoral and geographic distribution of economic activity as well as raising the quality of that economic growth – addressing issues of both the quantity and quality of growth.¹

Florida has consistently outperformed the rest of the country from a quantitative standpoint. Florida's economic output (Gross State Product) has grown at more than double the national rate; employment has expanded at about 2½ times the national pace; and the unemployment rate has consistently remained a full percentage point or more below the nationwide rate. Florida's economy needs to continue creating jobs for residents as well as newcomers to the state.

The quality of Florida's economic growth also matters, since higher value-added jobs result in higher incomes and generate higher fiscal revenues. Raising the quality of Florida's economic growth also boosts the state's overall competitiveness in the global, knowledge-intensive economy. Even though challenges remain and Florida has yet to catch up with the national average, there is recent evidence of progress on quality indicators:

- Between 2000 and 2005 (most recent data), Florida's average annual wage rose by over 20 percent as compared to 15 percent for the nation.
- In 2005, the growth in Florida's per capita personal income outpaced overall U.S. growth by a full percentage point.
- Over the past five years, Florida has made significant progress in catching up with the nation in per-worker productivity, narrowing the gap by about three percentage points.

Business Case

Florida has multiple engines of growth that serve as the foundation for accelerating the diversification of Florida's economy through a targeted focus on high-wage, high value-added economic growth.

Agriculture – Biofuels

Agriculture is a foundation industry which generates nearly \$62 billion in total economic impact on Florida's economy while supporting 650,000 jobs throughout the state.² A major opportunity for Florida's agriculture is in the area of biofuels. Florida, the country's third-largest fuel consumer, can be a leader in producing energy from crops and biomass due to its large farm and forest acreage. In 2006, the Governor and Legislature established the Florida Renewable Energy Technologies & Energy Efficiency Act and amended the Florida Power Plant Siting Act to promote the use and development of biodiesel, ethanol, hydrogen, and other renewable fuels.³ The Department of Agriculture envisions four to six ethanol and biodiesel plants in production in the state within the next four years.⁴

Aviation / Aerospace

Florida ranks 3rd in the nation for employment in the Aviation/Aerospace industry with 1,703 aviation/aerospace companies that pay 79,331 employees an average annual wage of \$51,245.⁵ Currently focused on providing air transportation, aircraft and parts, flight training, and air traffic operations and support, the industry has adopted a cluster-based strategy for growth which considers the full range of economic activities related to the sector, including producing cutting-edge aircraft technologies and advanced materials; aircraft manufacturing, maintenance, refurbishing, and overhaul; and next-generation travel. As Florida targets these value-added segments of the Aviation/Aerospace industry, it faces stiff competition from other states and countries.⁶

Financial Services

Having generated an estimated economic output of more than \$72 billion in 2003, this sector is home to nearly 33,000 companies that pay 350,000 employees an average annual wage of \$59,262.⁷ The highest average salaries are in the "securities and commodities" sector, the second-fastest growing sector in the state.⁸ In 2004, the Financial Services cluster was designated as a "High Impact Industry" in order to make industry businesses eligible for special state incentives and tax credits. As part of that effort, research conducted for the public-private Florida Financial Services Cluster Initiative indicated that, with the proper actions, it would be possible for Florida to attract a global financial services headquarters, increase industry employment by more than 50 percent, and establish itself as the international leader in financial services infrastructure and support facilities within the next decade. Still, some challenges remain, such as increased competition from international banking centers that operate under less stringent government regulations, merger and acquisition activity, contingency requirements, effects of new technologies, and business process outsourcing.⁹

Information Technology

With over 20,000 IT companies employing nearly a quarter of a million workers, Florida has a robust IT cluster.¹⁰ The state ranks third in the nation in number of high-tech companies, fourth in the U.S. in high-tech employment, and third in the volume of IT exports.¹¹ Major areas of national excellence include modeling, simulation and training, and photonics/optics, a field in which the state has recently established

a Center of Excellence at the University of Central Florida. Based on a industry study by the Gartner Group, future opportunity areas for this broad sector include digital media (gaming software), simulation and modeling, optics and photonics, bioinformatics, and security software (passive and biometric authentication).¹²

Life Sciences

Florida is emerging as a major state for the Life Sciences industry and has been able to build upon its leadership in medical devices and health care, as well as its university research and technology commercialization advantages. To strengthen that base, Florida has invested in two university-based Centers of Excellence in life sciences as well as the recruitment of Scripps Florida, the Burnham Institute for Medical Research, and the Torrey Pines Institute for Molecular Sciences. Florida's biosciences infrastructure has also become more robust with 4 major wet labs, 9 technology incubators, and 9 research parks. Today, 569 Florida companies have created more than 24,000 jobs at an annual average wage of \$51,000 in the three sectors of biotechnology, pharmaceuticals/medicine manufacturing, and medical devices.¹³

As a result of these significant improvements, Florida is now ranked 10th in the nation for biotechnology.¹⁴ Florida also ranks 3rd in the Southeast in sponsored research, 8th in royalties and licenses, and 19th in the National Institute of Health awards. Florida is now clearly on the path of building a critical mass of cutting-edge life sciences initiatives designed to move the state from being an emerging location for life sciences to being a premier R&D hub.

Manufacturing

Although the manufacturing industry's share of the national and Florida economies has been declining, the sector is still important to the state's growth in that it contributes high-wage jobs. In fact, in Florida more than 16,500 manufacturers employ nearly 390,000 workers at an average annual wage of \$43,413.¹⁵ While the diverse industry faces challenges such as high insurance rates and the tangible property tax on equipment, other obstacles have been mitigated to a certain extent by the state's elimination of the sales and use tax on manufacturing machinery and equipment and the new trend regarding the return of offshored manufacturing jobs.¹⁶

Marine

This industry continues to be important as a contributor to a state that has significant marine resources. In fact, the four key segments of Florida's Marine industry (ports/seaport; boats, boating, and marinas; fishing; and marine science research) generate an estimated \$18.4 billion in annual economic impact and support more than 220,000 jobs.¹⁷ Although it has experienced 25 percent annual growth over the past 25 years, Florida's Marine industry is beginning to recognize new challenges. Facing development pressure (e.g., losing boat ramps, docks and recreational facilities to private development), a dwindling workforce, and skyrocketing property taxes and insurance costs, Florida's Marine industry is being stressed with increasing number of businesses choosing to leave the state.¹⁸ A major area of opportunity is marine sciences in which there are extensive research capabilities throughout Florida to help propel the industry in the future.

Military / Defense

Florida's public and private Military/Defense industry has an estimated \$44 billion economic impact on the state and accounts for 714,500 jobs.¹⁹ As a result of the work of the Governor's Advisory Council on Base Realignment and Closure and the state's awarding of millions of dollars of defense infrastructure and reinvestment grants to communities around the state, Florida ranked 3rd in the nation in terms of jobs gained during the 2005 BRAC process. The Florida Defense Alliance, however, emphasizes the need to continue to enhance the military value of Florida's bases and installations, the need for continued federal advocacy, and the importance of raising public awareness of the social, economic, and military value of Florida's bases/installations and defense-related industries.²⁰

Space

In 2006, the Governor's Commission on the Future of Space and Aeronautics in Florida created Space Florida to strengthen and diversify Florida's Space industry. Overall, the Space industry faces three key challenges.

- *Increased Competition:* The advent of more international launch sites and the rapid growth in alternative domestic spaceports has threatened Florida's inherent geographic advantage. States competing with Florida now include Alabama, California, New Mexico, and Texas.
- *Diversification:* Florida is still largely perceived to be a location for launching and processing spacecraft. Not only has relatively flat demand for launch services affected the overall industry, Florida has had very limited success in recruiting other Space industry activities, such as satellite and vehicle manufacturing. Florida's Space industry must play a major role in developing and manufacturing new spacecraft and develop capabilities in research fields such as life sciences, earth sciences, aeronautics, robotics, and national security-related research and technology initiatives. A key step occurred in September 2006 when Lockheed Martin announced that it would assemble Crew Exploration Vehicles at Kennedy Space Center rather than assembling the craft somewhere else and shipping it to Florida for launch.²¹
- *Space Tourism:* New technologies and entrepreneurial launch operators are opening new commercial markets in space tourism, and states such as New Mexico, Oklahoma, Texas, Virginia, California, and Alaska are investing in spaceport infrastructure for this emerging market.

Tourism

Tourism is one of Florida's foundation industries, contributing to the economy in several keys ways. The industry:

- Provides a large number of jobs for the state's growing population (944,500 jobs in 2005).²² Increasingly, these jobs are higher-wage, especially as they relate to management positions and the convergence of the Tourism and Information Technology industries.
- Generates a great amount of economic activity. In fact, 83.6 million tourists visited Florida in 2005, generating \$62 billion in expenditures and \$3.7 billion in retail sales tax collections.²³
- Contributes to the economic diversification of Florida's rural areas. Rural tourism activities such as canoeing, biking, and tubing are thriving under targeted state and local programs.

Despite its success, Florida's Tourism industry faces numerous challenges, the biggest of which is competition from other states and nations (e.g., Mississippi, United Arab Emirates) that are investing in

increasingly bigger marketing campaigns. Additionally, state and local tourism officials are trying to build a state tourism industry that is resilient in the face of problems such as high oil prices, new visa regulations, and new customs and immigration regulations.

Recommended Actions

Emphasize value-added growth with customized cluster strategies

The key to diversifying Florida's economy in the 21st Century is to have multiple engines of growth (industry clusters) with a focus on high-wage, high value-added growth within each engine. Within each industry, there may be scope for moving higher up the value-added chain and diversifying the range of markets served. Florida's industries need to leverage their existing strengths and also exploit the synergies possible across the different industries in the state to offer innovative, unique products and services. The key industry clusters can also accelerate moving up the value-added chain by collaborating with and relying more extensively on Florida's advanced educational and research assets.

- ***Establish a bi-annual statewide summit of key cluster leaders (industry and policy) to showcase cluster strategies, trends, and success measures***

Emphasize customized regional strategies

As a large, diverse state, Florida's regions play an increasingly important role in the successful diversification of Florida's economy. Thinking regionally helps develop customized approaches, leverages the connections between diverse clusters, and enables the building of critical mass for greater success.

- ***Implement the Rural Economic Catalyst Project***

The strength of a customized regional approach to rural economic development is proven. Based on a regional approach championed during the 2005 *Roadmap* process, a 7-point action agenda for rural Florida was adopted, leading to a \$2 million appropriation for the establishment of the Rural Economic Development Catalyst Project. The Catalyst Project will identify target industry clusters for each of the three Rural Areas of Critical Economic Concern (RACECs) and develop a direct marketing strategy to recruit rainmaker projects in these clusters to the RACECs.

- ***Establish a bi-annual statewide summit of key regional economic development leaders to foster regionalism and showcase regional strategies and scorecards***

Such a summit would promote the use of expert industry and cluster-related data and guidance to refine, enhance, and advance regional economic development strategies.

Success Measures

Indicator	Baseline Benchmark	Target Goal	Most Recent Data	Comments
Earnings by place of work by non-agricultural worker as percentage of U.S. average	86.4% (2001)	92% (2012)	87.3% (2005)	Progress being made

¹ Enterprise Florida, Inc., "Florida's Economic Diversification and Competitiveness," *Roadmap to Florida's Future: 2006 Annual Report*.

² Florida Department of Agriculture and Consumer Services, *Florida Agricultural Statistics*, at http://www.florida-agriculture.com/pubs/pubform/pdf/Florida_Agriculture_Statistics_Brochure.pdf, accessed September 29, 2006.

³ Florida Energy Office, *Florida's Energy Act*, at <http://www.dep.state.fl.us/energy/energyact/default.htm>, accessed September 30, 2006.

⁴ Susan Salisbury, "State ag chief sees bright future for ethanol production," *Palm Beach Post*, August 15, 2006.

⁵ Governor's Commission on the Future of Space and Aeronautics in Florida, *Final Report*, 2006, and U.S. Department of Labor, Bureau of Labor Statistics, 2004.

⁶ Governor's Commission on the Future of Space and Aeronautics in Florida, 2006.

⁷ U.S. Department of Labor, Bureau of Labor Statistics, 2006, and Center for Economic Development Research, College of Business Administration, University of South Florida, *Economic Contributions of the Finance and Insurance Sector in Florida's High Tech Corridor and the Rest of Florida*, December 2003.

⁸ Center for Innovation and Knowledge Management, John H. Sykes College of Business, University of Tampa, *Florida Financial Services Cluster Competitive Assessment*, June 2004, and Florida High Tech Corridor Council Inc., Tampa Bay Partnership, Metro Orlando Economic Development Commission, Pinellas County Economic Development, Jacksonville Regional Chamber of Commerce, Miami-Dade Beacon Council, *Florida Financial Services 2004: Executive Research Briefing*, 2004.

⁹ Center for Innovation and Knowledge Management, John H. Sykes College of Business, University of Tampa, June 2004, and Florida High Tech Corridor Council Inc., Tampa Bay Partnership, Metro Orlando Economic Development Commission, Pinellas County Economic Development, Jacksonville Regional Chamber of Commerce, Miami-Dade Beacon Council, 2004.

¹⁰ U.S. Department of Labor, Bureau of Labor Statistics, 2005.

¹¹ Gartner, *A Report for Enterprise Florida, Workforce Florida, Inc., Agency for Workforce Innovation*, May 2006; *AeA 2006 Cyberstates Report*; and, U.S. Department of Labor, Bureau of Labor Statistics, 2004.

¹² Gartner, May 2006.

¹³ U.S. Department of Labor, Bureau of Labor Statistics, 2005.

¹⁴ Ernst & Young, *Strength and Stability -- The Americas Perspective*, 2006.

¹⁵ U.S. Department of Labor, Bureau of Labor Statistics, 2005, and Manufacturers Association of Florida, 2005.

¹⁶ Enterprise Florida Manufacturing Advisory Council, *Manufacturing and Florida's Future*, January 2005, and Roger Herman and Joyce Gioia, *Reverse Migration of Manufacturing Base*, August 30, 2006.

¹⁷ Marine Industries Association of Florida, Inc., *Boating is Big Business in Florida*, at http://www.boatflorida.org/custom_pages/site_page_2708/index.html, accessed October 6, 2006.

¹⁸ Lori Becker, "Boat industry looks for lifesavers. Regional leaders discuss shared concerns," *Palm Beach Post*, October 5, 2006, and Doreen Hemlock, "Boat builders fleeing Florida," *South Florida Sun-Sentinel*, July 16, 2006.

¹⁹ *Florida Defense Industry Economic Impact Analysis*, 2003.

²⁰ Florida Defense Alliance, *Draft Strategic Plan*, April 2005.

²¹ Rick Neale, "Bush Touts Space industry Jobs," *Florida Today*, September 29, 2006.

²² Florida TaxWatch, Center for Tourism, *The Impact of Tourism on Florida's Economy: Telling A More Complete Story*, March 2006.

²³ Visit Florida, Inc., September 26, 2006.

ROADMAP TO FLORIDA'S FUTURE



390 North Orange Avenue • Suite 1300 • Orlando, Florida 32801 • T 407.316.4600

eflorida.com