

South Florida COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY 2012-2017







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FOR SOUTH FLORIDA (2012-2017)



Prepared for the Economic Development Administration



By South Florida Regional Planning Council



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STRATEGY REPORT

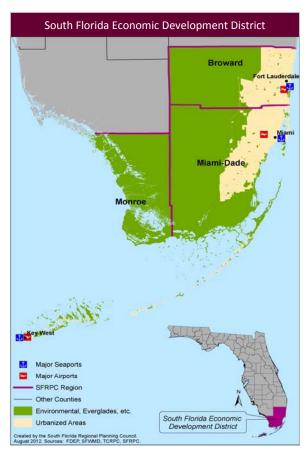
Executive Summary

The South Florida Region is made up of three counties (Monroe, Miami-Dade, and Broward) with a 2011 resident population of 4.4 million, which is a population larger than that of 25 states. The Region's role as a national and international banking, commerce and tourism gateway is supported by the Region's three international airports, executive airports, three seaports, industrial parks, foreign trade zones, and well as other critical infrastructure.

The South Florida Region is part of the seven-county Southeast Florida Region which includes Palm Beach, Martin, St. Lucie and Indian River counties. Miami-Dade, Broward, and Palm Beach comprise the Miami-Fort Lauderdale-Pompano Beach Metropolitan Statistical Area (MSA), the nation's 8th largest MSA and 4th largest

urbanized area with a population of almost 5.7 million. When considering South Florida's economy, it is important to recognize that the MSA functions as one economic engine with a number of public, private and nonprofit regional initiatives integrating activity within the three-county MSA and beyond.

After slowing down dramatically in the final years of the last decade, the population has begun growing again. It is highly mobile, combining a large influx of international migration with large intra-regional shifts and a significant number of domestic migrants. The growing and highly diverse population is an asset for the Region's competitiveness in the global economy. It provides a multi-ethnic, multi-lingual workforce and culturally diverse environment for businesses. This continuing growth will also require the Region's local governments to make major investments in infrastructure, to both maintain and expand existing services such as transportation, water, wastewater, solid waste and education for both existing and new residents. Challenges due to lower incomes, higher poverty rates, relatively lower educational attainment level, and growing economic disparity will require significant efforts to ensure sustained growth of the Region's economy and the creation of quality jobs.



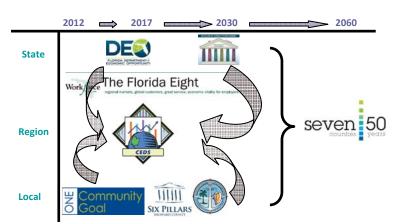
The South Florida Regional Planning Council was designated an Economic Development District (EDD) by the Economic Development Administration (EDA) in May, 1994. The functions of the EDD include, but are not limited to preparing and maintaining a Comprehensive Economic Development Strategy (CEDS), assisting in the implementation strategies identified in the CEDS, and providing technical assistance to Economic Development Organizations throughout the Region.

The Comprehensive Economic Development Strategy (CEDS) for South Florida is a roadmap to diversify and strengthen the Regional economy of Broward, Miami-Dade, and Monroe Counties. The regional CEDS will guide federal and state investment priorities and funding sources, delineate lead organizations

responsibilities for execution of the CEDS, while bringing together public and private sectors leaders and decision-makers. This is not a plan for the Council, rather it is a strategy for the communities and businesses of South Florida. It is done through the CEDS Strategy Committee, which is composed of representatives of main economic interests of the Region from public and private sectors, community organizations, workforce development boards, institutions of higher education, minority and labor groups, and private individuals.

This 2012 update of the *CEDS* has a unique opportunity to align and bring together several important state, regional, and local economic development initiatives through an integrated, synergistic, and results-oriented approach to economic development planning and implementation at the state, regional, and local levels. It shares the Florida Chamber Foundation's Six-Pillars of Florida's Future Economy™ as its organizing foundation. These pillars are Talent Supply & Education, Innovation & Economic Development, Infrastructure & Growth Leadership, Business Climate & Competitiveness, Civic & Governance Systems, and Quality of Life

& Quality Places. The State of Florida is using the Six-Pillars to develop its Five-Year Statewide Strategic Plan, and the other 10 Regional Planning Councils are preparing their similarly-focused CEDS using the same Six-Pillars framework. At the local level, this CEDS integrates the recently updated Miami-Dade County *One Community One Goal* vision, the *Broward County Six-Pillars* Strategic Plan, and Monroe County's *Evaluation and Appraisal Report* of its Comprehensive Plan.



While the South Florida *CEDS* is focused on Monroe, Miami-Dade and Broward, the South Florida Region is part of the seven-county Southeast Florida Region economy which includes Palm Beach, Martin, St. Lucie and Indian River counties (the Treasure Coast Region). The two regional CEDS will be integrated into the Southeast Florida **Seven50** project to form a 2060 vision plan.

The remainder of the **Strategy Report** lists the economic development goals, objectives, strategies, as well as the Priority Project Areas developed by the CEDS Strategy Committee. It is followed by a plan of action that outlines the activities necessary to implement the goals and objectives of the Strategy. The following **Technical Report** provides an outline of current economic and demographic conditions of the Region, a detail analysis of regional economic development problems and opportunities, and an analysis of regional industry clusters.

Overview of Strategic Findings in the Technical Report By Pillar

Talent Supply & Education

We need to develop South Florida's "workforce of the future," a skilled labor force that is well educated and facile in the workplace. Educational institutions, workforce development groups, employers and industry leaders must work more closely to develop the curriculum and training programs needed to create a workforce that can meet the Region's economic diversification and growth goals. Targeted Industry partnerships need to be formed among industries and public sector partners such as economic development agencies, workforce development groups, and educational institutions.

The issue of "brain drain," or the loss of individuals with postsecondary talent, knowledge, training and skill from the Region, is one that South Florida needs to be mindful of. Educating a workforce and retaining a workforce are separate issues. Although the economic recession has reduced the mobility of the workforce somewhat, anecdotally South Florida appears to be suffering from a brain drain as some youth of the Region leave to seek their education and/or employment outside of the Region. It is important to understand the dynamics of the emerging workforce, which is increasingly mobile as a result of technology. Location decisions are driven by different values and opportunities (lifestyle, culture, diversity, housing, transit etc.) than was the case for past generations of workers.

It is essential that continued emphasis be placed on increasing the percentage of the population acquiring proficiency in English, graduating from high school and then going on to receive advanced educational degrees at the associate, bachelors, masters and doctoral levels. This should be coupled with strategies to ensure that South Florida's best and brightest choose to stay in South Florida to pursue their careers and lives

Talent supply and education depend on a variety of other pillars as well. Attracting and keeping talent depend on things like economic development (having good jobs), infrastructure (easy and reliable employment based transportation), business climate and quality of life. Talent supply should be viewed from a system approach rather than just an education and training perspective.

Innovation & Economic Development

South Florida has long tradition of small business success and the level of start-ups formation activity is high, however, the Region needs to increase its relatively low R&D spending, which is critical for the creation of high-tech, high-paid jobs and long-term sustainable growth.

Entrepreneurship is an important component of economic growth and should be considered as a major emphasis of any economic development initiative. In addition to enhancing research innovation capacity, South Florida also needs to invest in facilitating research commercialization and nurturing entrepreneurship, as well as to make sure adequate capital is available for start-ups and small businesses.

South Florida must support its small businesses with increased access to affordable capital and enhanced coordination and integration among small business assistance organizations that provide technical assistance and other essential services.

South Florida must develop broad-based regional leadership and agreement around the vision of South Florida as a thriving, world-class technology hub with specific goals, objectives and milestones. Regional stakeholders must provide organizational support to advance the development of an actionable agenda, secure funding to support startups and the coordination and execution of the plan, position the region as the

place where new ventures are welcomed, and develop an innovative marketing strategy which targets growing demographics and maximizes the region's role as the Gateway to the Americas.

Infrastructure & Growth Leadership

The airports and seaports are key economic engines driving South Florida's economy. The Region's ground transportation system works in synchronization with its airports and seaports as a vital economic engine that drives South Florida's economy. Maintaining and enhancing this infrastructure is critical. The impact that each planned improvement will have on other transportation modes of this system need to be considered together in order to maximize the benefits and efficiencies and ensure increased mobility of people and freight. In order to maintain leadership as international competitors, the Region's ports and airports will need to continue enhanced coordination and public and private investments will continue to be necessary.

Continued integration of land use and transportation planning and investment is a necessity as the Region seeks to accommodate projected population growth in a way that will enhance the Region's quality of life and support economic, community and workforce development. Increased investment in mass transit, both the public transit bus system and commuter rail, should remain an emphasis in regional planning. Additional transit service, particularly east-west service, is needed to create a regional transit system that improves connectivity and mobility in the Region.

Energy, particularly electricity, is a basic and critical component of infrastructure that fuels economic development. Increased availability, diversity of energy sources, and reliability of energy provision are key to increased economic productivity. Alternative sources for generating energy need to be explored further, including but not limited to, wind and solar technologies. Incorporating technological advancements to address energy challenges while securing public involvement in the decision-making and implementation processes will continue to be key to creating and protecting the Region's sustainability.

Current sprawl development growth patterns coupled with continued population growth, deteriorating water and wastewater infrastructure, depletion of traditional water resources, and natural disasters threaten to constrain the Region's future economic development and job creation potential. Strategic infrastructure investments are needed to support continued economic growth and maintain and enhance quality of life. These investments should be directed to support a smart growth strategy, to foster resilience to hurricane and global climate change impacts, and enhance the Region's public water supply and wastewater infrastructure.

Given the enormous costs associated with infrastructure creation, maintenance, replacement and operation, affordable funding mechanisms are needed to ensure that needed investments are made in a timely manner and to address backlogs and keep pace with new growth. Maintenance of a competitive, diversified and sustainable regional economy means that the South Florida region will need to significantly strengthen its infrastructure to support projected growth. It will be important to make sure, to the extent possible, that infrastructure investments are made in geographical locations that are most likely to be viable for at least the planned life of the infrastructure particularly in light of rising tides.

Advance preparation and adaptation for global climate change impacts and the development of mitigation measures to minimize greenhouse gas emissions are important policy and planning priorities for all vulnerable communities, especially the South Florida Region. The Region's communities need to prepare for the impacts of sea level rise and other global climate change impacts. Without these measures, global climate change and its associated sea level rise impacts will diminish the Region's economic appeal, especially to investors.

To continue to create, recruit, retain and expand businesses as well as to maintain an attractive regional quality of life for the Region's workers, additional strategic investments are needed in natural disaster planning, mitigation and preparedness activities, including funding of the technology to support these efforts.

Business Climate & Competitiveness

As capital markets tighten as a result of the weakened global economy, start-ups and small businesses find it harder and harder to access the capital they need to translate their ideas into usable technology. The need for financing programs has grown in recent years. If Florida is to retain these talented entrepreneurs, the State must continue to support financing tools which provide access to needed capital for diverse needs while protecting the State's investment.

On one hand, a business friendly tax system, incentive program, and an easy to understand permitting and regulatory climate can enhance the Region's ability to attract new businesses that will generate new economic and employment growth. On the other hand, adequate investment in infrastructure and public services rely upon the taxes collected from businesses and households. A virtuous circle of taxation and growth forms a solid base for a sustainable competitiveness of a region. There is a fine balance between taxation and provision of public services in order to optimize the long-term business environment of a community.

In addition, as identified at the Statewide 5-Year Strategic Plan by DEO, we need to "...reform and streamline licensing, permitting, development review and other regulatory processes to make them simple, efficient, predictable and, where appropriate, consistent across agencies and jurisdictions as well as provide simplified, timely, customer focused services to businesses at the state, regional and local levels."

Civic & Governance Systems

Management reviews of how to make South Florida's existing governance structures more effective and efficient should be undertaken. Existing regional organizations or multi-county collaborations should be the first options to improve regional civic and governance.

Existing and future plans should be organized under a unifying regional vision, building on the strong planning history at the local and sub-regional levels and providing a planning framework to align local and subregional plans with overarching regional goals.

A culture of planning and investment that integrates economic development, land use, transportation, water supply, environmental restoration and conservation, urban planning and design, and human systems planning supported by budget allocation processes to create a more sustainable and prosperous South Florida needs to be encouraged, developed and supported.

A regional social capital asset mapping and survey project should be undertaken to identify community engagement and leadership assets and gaps and measure the community's social fabric. This analysis will assist in the development of effective communication mechanisms to inform and receive input, understand how people connect to each and social institutions in the Region, and create non-traditional leadership development and engagement techniques.

Quality of Life & Quality Places

Neighborhood amenities continue to be a driving factor when residential location decisions are made. Intergenerational communities that sustain healthy lifestyles and provide access to cultural and social

amenities will be desirable to existing South Floridian and will be important in attracting new businesses to the Region; by positively addressing the quality of life issues about housing, education, transportation and amenities of concern to relocating employers and their employers.

Healthy communities that allow for regular physical activity and a variety of healthy food options are socially desirable. The social and economic attractiveness of the Region can be improved by planning and implementing policies and projects that ensure and sustain safe and efficient mobility, and equitable access to healthy foods and recreational activity.

As the changing climate impacts crops nationwide, local and regional production is important in ensuring food security within South Florida. The development of regional food processing hubs and food distribution systems can create employment opportunities and economic growth.

Diversity is an important aspect of the South Florida social, political, and economic landscape. With the Region positioned to be a Global Leader, cultural competency is imperative to preserve our unique cultural contributions and define a common cultural experience. As new shared-cultural identities are shaped the Arts will become essential in preserving various ethnic experiences.

Southeast Florida's economic competitiveness and quality of life is linked to its ability to promote urban infill development and provide the necessary infrastructure to support it. "Green Building" strategies and energy efficient technologies should be incorporated into future development and redevelopment plans to create a more economically and environmentally sustainable region. The Region's Community Redevelopment Agencies (CRAs) encourage investment in existing communities across South Florida and are in position to leverage sizeable investment in redevelopment planning and implementation efforts.

The issue of affordability and housing is a complex issue that transcends mere provision of affordable units. According to the 2011 Broward County Housing Needs Assessment, the basic premise of all housing markets is the need to create and maintain a full range of housing choices and opportunities for all residents. This axiom establishes that housing choice and needs differ in most communities due to a variety of factors including: household income, population age, proximity to employment and preference. The ability of our residents to earn wages that keep pace with housing costs and provide a broader choice of housing within the Region is a critical component to addressing the affordable housing challenge.

CEDS Goals and Objectives - Building the Pillars

Vision

South Florida will be the leading international community and commerce gateway, welcoming the world to Florida, the nation's top performing economy. It will be recognized one of the world's best places to live, visit, learn, work and conduct business.

Goals

- Lead the State and the nation in global competitiveness as an international center for trade, business, investment, talent, innovation, tourism, and the arts.
- Expand South Florida's intermodal transportation system so that it enhances the region's economic growth and prosperity.
- o Preserve and enhance the Region's natural environment and quality of life.

Objectives

- Improve employment in South Florida
- Foster opportunities for prosperity
- o Grow businesses
- Expand global commerce
- o Increase South Florida's attractiveness to employers, workers, residents and visitors
- Increase use of South Florida's intermodal transportation system by businesses, residents, and visitors.

Cross-Cutting Strategies

- 1. Improve collaboration and alignment among the South Florida's public, private and non-profit entities to create one voice in support of the Region's economic vision.
- 2. Develop regional talent and innovation clusters using global best practices.
- 3. Create a globally competitive Southeast Florida supperregion by integrating economic development, infrastructure, and other resources within Monroe, Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, and Indian River Counties.
- 4. Enhance South Florida's position as a global hub for trade, visitors, talent, innovation and investment.
- 5. Enhance South Florida's resiliency to respond, maintain continuity of business operations, recover and adapt to future disruptions to the Region's economy.
- 6. Focus on increasing equity and reducing economic disparities in the Region in each of the other strategies to increase community engagement on prosperity.

Area-Specific Strategies

Talent Supply & Education

7. Align education and workforce development programs to develop and retain talented workers with the skills to meet current and future employer needs in South Florida.

- 8. Develop an integrated pre-K through post-secondary system including career education system and training on running small/micro businesses to prepare the region's students for becoming successful workers or entrepreneurs.
- 9. Lead the State in science, technology, engineering, arts, and mathematics (STEAM) research, education and market-relevant technical skills.
- 10. Expand access to education and training programs for South Florida residents in distressed communities.
- 11. Develop a cultural education curriculum that affords graduates the ability to communicate among the languages of South Florida.

Innovation & Economic Development

- 12. Foster a strong and diverse economy by nurturing the emerging industries and strengthening the existing competitive clusters in the Region.
- 13. Grow, sustain, and integrate efforts related to R&D, technology commercialization, and seed capital to create, nurture, and expand innovation businesses in the Region.
- 14. Enhance South Florida's position as an international trade center and adequately market the Region's reputation as global destination for businesses.

Infrastructure & Growth Leadership

- 15. Develop and maintain multimodal, interconnected trade and transportation systems to support a globally competitive economy and focus on improvement.
- 16. Develop and maintain diverse, reliable, and cost effective energy sources and systems by incorporating technological advancements and exploring alternative sources for generating energy.
- 17. Continue the development and implementation of regional water conservation and alternative water supply projects to ensure supply and healthy water quality for the environment and residents of south Florida.
- 18. Develop a priority list and strategies to fund regional capital improvement projects to correct aging infrastructure, especially transportation, water and sewer systems.

Business Climate & Competitiveness

- 19. Streamline and reform permitting, development review, and other regulatory process to provide a predictable legal and regulatory environment for businesses
- 20. Ensure regional and local agencies provide collaborative, seamless, consistent and timely customer service to business
- 21. Develop a business friendly tax system and incentive program by finding the balance between taxation and provision of public services to enhance the competitiveness of the Region in attracting new businesses, and support the growth of existing businesses.
- 22. Expand opportunities for access to capital for businesses throughout their life cycle.

Civic & Governance Systems

- 23. Improve coordination and collaboration between and among all levels of government as well as the private sector, including enhancing public-private partnerships, and make strategic investments that are aligned with and further regional priorities.
- 24. Increase civic participation rates by implementing successful voter education and other outreach programs.
- 25. Design a transformational leadership training system and assure public involvement in coordinating decision-making and investments at the regional level.

Quality of Life & Quality Places

- 26. Develop, maintain and promote intergenerational communities with a range of housing choices and opportunities for all residents; efficient public transportation systems; safe pedestrian networks; and access to quality health care and educational facilities; and other quality of life amenities.
- 27. Mobilize and promote the Regions diversity and cultural assets in order to leverage the Region's present and future dynamics.
- 28. Develop, maintain and promote integrated connections between inner city communities and the larger regional economy.
- 29. Promote and protect South Florida's Natural Resources of Regional Significance in a sustainable manner.

CEDS Plan of Action - Each Pillar Becomes a Target Area in the Plan

Cross-cutting Plan of Action

- 1. Complete the Seven50 Regional Prosperity Plan incorporating the South Florida Region's CEDS and the Treasure Coast Region's CEDS.
- 2. Promote a Southeast Florida integrated multi-modal transportation plan connecting activity centers, airports, seaports, rail, management highway lanes, dedicated bus lanes, pedestrian and bicycle pathways.
- 3. Transform and repurpose the Institute of Community Collaboration into a regional economic development research institute and regional data clearing house.
- 4. Implement the Comprehensive Everglades Restoration Plan.
- 5. Partner with Southeast Florida Regional Climate Change Compact to implement Regional Climate Action Plan.

Talent Supply & Education

6. Support the efforts and initiatives of the WorkForce One, South Florida Workforce, and the education system.

Innovation & Economic Development

7. Support the efforts of the Beacon Council, Greater Fort Lauderdale Alliance, and Monroe County.

Infrastructure & Growth Leadership

8. Support the transportation and logistics initiative of Florida Eight in Southeast Florida.

Business Climate & Competitiveness

9. Implement a supportive initiative in the region focusing on market data and information; entrepreneurship education and technical assistance; and building operational, financial, and physical support networks (incubators, angel networks).

Civic & Governance Systems

10. Continue to engage private, public, and non-for-profit organizations and expand the Southeast Florida Regional Partnership to develop and implement the Seven50 Regional Prosperity Plan.

Quality of Life & Quality Places

11. Support plans and projects that increase accessibility to ensure healthy and safe physical environments.

Strategic Projects, Programs and Activities - Priority Projects Under Each Pillar

The following regional projects, programs and activities are designed to implement the Goals and Objectives of the *CEDS*.

Talent Supply & Education

- 1. Support institutional initiatives on science, technology, engineering, arts, and mathematics (STEAM) that enrich students' educational experience and in the long term contribute to the positive workforce development of the region.
- 2. Support efforts like Broward College's "Train to Gain" initiative which is customized, industry based, relatively short term training aimed at bridging the skills gap between the existing skills of the worker and the rapidly changing needs of industry.
- 3. Support region wide vacancy and skills gaps surveys segmented by industry to determine those needs on frequent basis (If employers are the "customers" then we need to "hear the voice of the customer".
- 4. Support the efforts of the South Florida Educational Consortium to facilitate coordination of educational resources and credit articulation among educational institutions.
- 5. Promote efforts to have educational institutions give college credit for relevant military occupational experience to expedite soldier re-entry into civilian life.
- 6. Engage Early Learning Coalitions to see how the business community and economic development can support early learning and school readiness. (If kids are not prepared to enter school they fall behind and are at risk of dropping out. We cannot have that in a job market that is knowledge based).
- 7. Rally Business support for the existence and continuance of the Children's Services Councils in all the counties which have one. Kids are our future workforce.
- 8. Support the efforts to use the entire potential workforce including people with disabilities, those with language barriers, ex- offenders, older workers, displaced homemakers, veterans, homeless and others with special barriers to becoming productive members of society.

Innovation & Economic Development

9. Support Life Sciences South Florida (LSSF) initiative to promote innovation, investment, entrepreneurship and economic growth in the areas of biotechnology, pharmaceuticals, diagnostics, and information to generate high-technology and high paying employment.

- 10. Support and expand "South Florida Your Global Business Connection" a regional economic development marketing plan, which was funded by Enterprise Florida in 2008.
- 11. Support projects that promote and enhance marine, tourism, renewable energy, military, and agriculture sectors.
- 12. Support initiatives to develop and enhance innovative clusters in the region.

Infrastructure & Growth Leadership

- 13. Facilitate the selection of a single plan for public, regional, integrated transit service for the Southeast Florida Railroad Corridor.
- 14. Support the implementation of the All Aboard Florida, inter-regional, passenger service between Miami and Orlando.
- 15. Implement plans and projects which enhance intermodal freight mobility and trade in the Southeast Florida region.
- 16. Support projects implementing the Southeast Florida Managed Lanes Network and ensure equitable access for all users.
- 17. Support regional water projects identified in the South Florida Water Management District's Lower East Coast Water Supply Plan.

Business Climate & Competitiveness

- 18. Prepare a feasibility study and business plan for a Regional Family of Funds (privately capitalized and leverage with Federal resources) that could include New Markets Tax Credits Community Development Entity, a funding vehicle for Community Development Financial Institutions, and a triple bottom line investment fund to provide capital for "Smart Growth" sustainable development projects.
- 19. Obtain investments to recapitalize the Regional Revolving Loan Fund Program and double the number of loans closing.
- 20. Support programs or projects to streamline permitting and regulatory environment for businesses.
- 21. Support comprehensive emergency management planning effort to enhance the region's resiliency to natural and manmade disruptions on business operations.

Civic & Governance Systems

- 22. Conduct asset mapping of non-profit agencies' programs and services to determine if there are any gaps and leveraging opportunities among not-for-profits as well as with the public sector.
- 23. Utilize Seven50 regional planning process to identify opportunities to improve efficiencies and effectiveness of regional governance.
- 24. Utilize Seven50 regional planning process to provide outreach to citizens to enhance their awareness of the need for regional development plan to achieve regional prosperity.

25. Support projects and programs to identify and provide more funding for non-for-profit organizations.

Quality of Life & Quality Places

- 26. Attract investment in developing and promoting new cultural attractions and strength partnerships between arts and cultural organizations and non-arts entities.
- 27. Expand the State Road 7/U.S.441 Strategic Master Plan including Palm Beach, Broward, and Miami-Dade Counties.
- 28. Supports pedestrian-oriented transit access functionality/Transit Oriented Development (TOD) projects that expands on transportation choices; increase in regional mobility; lower costs to access to all community destinations; and overall enhancement of all community conditions.
- 29. Prepare a regional affordable workforce housing plan and provide incentives to promote the creation of diverse affordable workforce housing options including rentals utilizing public resources, tax and appropriate bonus incentives.

Strategy Committee List for the Comprehensive Economic Development Strategy 2012-2017 for South Florida

First Name	Last Name	Title	Organization	CEDS Strategy Committee Category
José	Abreu	Aviation Director	Miami-Dade County Aviation Department	Public officials
			Service Employees International Union,	
Martha	Baker	President	Local 1991	Minority and labor groups
_		Co-Chair of the Regional		
Robert	Barron	Business Alliance	Regional Business Alliance	Private sectors
Roderick	Beasley	Executive Director	South Florida Workforce	Workforce development boards
Irma	Becerra-Fernandez	Interim Vice President	FIU Office of Engagement	Institutions of higher education
		650	FORS HIGH BY GUE	B :
Rosana	Calambichis	CEO	ECRS, LLC dba Big Chef	Private sectors
			MetroBroward Economic Development	
Michael	Carn	President/CEO	Corporation	Private sectors
James	Carras	President	Carras Community Investment, Inc.	Private sectors
James	Carras	Tresident	Garras Communicy investment, inc.	Titude Sectors
Heather	Carruthers	Commissioner	Monroe County	Public officials
Steve	Cernak	Director	Port Everglades	Public officials
Rafael	Cruz	Director	Small Business Development Center	Economic development organizations
		Regional Community		
Ana	Cruz-Taura	Development Director	Federal Reserve Bank	Community Leaders
		Executive Vice President for		
Husein	Cumber	Corporate Development	Florida East Coast Railway, LLC	Private sectors
			Coalition of Affordable Housing	
David O.	Deutch	President	Providers/Pinnacle Housing Group	Private sectors
Kevin	Gale	Editor in Chief	South Florida Business Journal	Private sectors
			South Florida Regional Transportation	
Joe	Giulietti	Executive Director	Authority (SFRTA)	Public officials



First Name	Last Name	Title	Organization	CEDS Strategy Committee Category
Diana M.	Gonzalez	President	DMG Consulting Services	Private sectors
Bertha	Henry	County Administrator	Broward County	Public officials
Mason	Jackson	President/CEO	WorkForce One	Workforce development boards
Raymond	Jones	Director of Marketing & Sales	Florida East Coast Railway, LLC	Private sectors
Marianne	Winfield	Executive Director	Smart Growth Partnership	Community Leaders
Tom	Kennedy	Executive Director	South Florida Manufacturers Association	Private sectors
Ralph	Marrinson	President	Marrinson Group	Private sectors
Manuel	Mencia, Sr.	Vice President	Enterprise Florida, Miami - Int'l Trade & Business Development	Economic development organizations
Karen	Moore	Chief Consultant	NewSynergies	Private sectors/individuals
Jaap	Donath	Vice President	The Beacon Council	Economic development organizations
David	Orshefsky	Attorney at Law	Orshefsky Holdings, Inc.	Private sectors
B. Jack	Osterholt	Deputy Mayor	Miami-Dade County	Public officials
Dennis	Pastrana	President/CEO	Goodwill Industries of South Florida, Inc.	Private sectors
J. Gary	Rogers	Executive Director	Lauderdale Lakes Community Redevelopment Agency	Economic Development Organizations
Barbara L.	Romani	South Region Manager	CitiBank	Private sectors
Norm	Seavers	AVP Economic Development	Broward College - Institute for Economic Development	Institutions of higher education
Lester	Simon		M.S.A. Consulting	Private sectors
Germaine	Smith-Baugh	President/CEO	Urban League of Broward County	Minority and labor groups

Comprehensive Economic Development Strategy

First Name	Last Name	Title	Organization	CEDS Strategy Committee Category
			South Florida Regional Transportation	
Jack	Stephens	Deputy Executive Director	Authority (SFRTA)	Public officials
Robert	Swindell	President/CEO	Greater Fort Lauderdale Alliance	Economic development organizations
Norman E.	Taylor	Managing Partner	Norman E Taylor & Associates, LLC	Private sectors/individuals
			Broward College - Institute for Economic	
Mary	Tearle	Director	Development	Institutions of higher education
			Marine Industries Association of South	
Carlos	Vidueira	Executive Director	Florida	Private sectors
			SFRPC Council Member/Hinshaw &	
Paul	Wallace	Vice Chair	Culbertson	Private sectors
			First Colonial Realty (SFRPC RLF Board	
Barrington G.	Wright	Vice President	Member)	Private sectors
George	Yap	Chairman	LEASA Industries Company, Inc.	Private sectors

TECHNICAL REPORT

Overview - The People in the Region

The South Florida Region is made up of three counties (Monroe, Miami-Dade, and Broward) with a 2011 resident population of 4.4 million, which is a population larger than that of 25 states. After slowing down dramatically in the final years of the last decade, the population has begun growing again. It is highly mobile, combining a large influx of international migration with large intra-regional shifts and a significant number of domestic migrants. Although the Region's population is still slightly older than the rest of the nation, having been a popular retirement destination in the past, it is getting older more slowly now as a result of a reduction in the number of retirees arriving, the natural increase of the population (births minus deaths), and international migration.

Recent trends suggest that the Region will continue to benefit from a more ethnically and racially diverse labor force, growing in tandem with the overall population. However, when compared with the rest of the nation, challenges remain to address lower incomes, higher poverty rates and lower educational attainment.

While the South Florida CEDS is focused on Monroe, Miami-Dade and Broward, the South Florida Region is part of the seven-county Southeast Florida region which includes Palm Beach, Martin, St. Lucie and Indian River counties. Miami-Dade, Broward, and Palm Beach comprise the Miami-Fort Lauderdale-Pompano Beach Metropolitan Statistical Area (MSA), the nation's 8th largest MSA and 4th largest urbanized area with a population of almost 5.7 million¹. When considering South Florida's economy, it is important to recognize that the MSA functions as one economic engine with a number of public, private and nonprofit regional initiatives integrating activity within the three-county MSA and beyond.

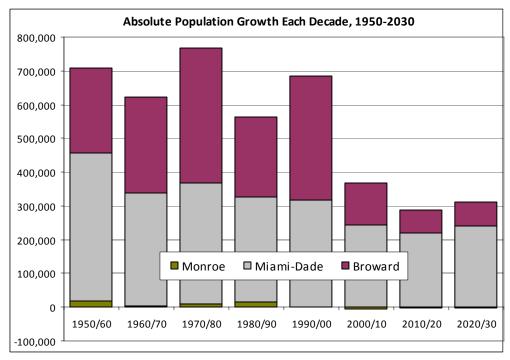
Growth Trend 1: Continued Growth

The Atlantic Ocean to the east and the Everglades system to the west create natural boundaries for the Region. Much of the Region's land area is either not suitable for development or has been developed in some form, so future growth will increasingly take the form of infill development and redevelopment. South Florida grew more slowly than the nation as a whole during the last decade – the Region's population grew by 9.1%, compared to 9.7% for the U.S. South Florida is projected to add about 82 new residents each day, leading to an increase of almost 600,000 people in the next two decades.

Technical Report

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¹ U.S. Bureau of the Census Estimates (April 5, 2012)



Graph 1: Absolute Population Growth, 1950-2030

Source: Census Bureau and University of Florida, Bureau of Economic and Business Research

In 2011 Miami-Dade was the 7th largest county in the U.S., with almost 2.6 million residents, and Broward was the 18th largest, with 1.8 million. These two counties, along with Palm Beach to the north, make up the nation's 8th largest metropolitan region, with a population of almost 5.7 million. In fact, South Florida's economic ties increasingly extend further north, to Martin, St. Lucie and Indian River Counties, with residents moving across the 7-county region in their daily commutes to and from work, straining the Region's transportation infrastructure.

Growth Trend 2: A Diverse and Mobile Population

International migration, domestic migration and natural increase all contribute to population growth in South Florida. During the past decade, the Region absorbed approximately 360,000 new residents, of which 80% were foreign-born and the other 20% were native-born. Natural increase (the excess of births over deaths) contributed 216,000 new residents (60% of total growth). Net domestic out-migrants (who could be either foreign-born or native) numbered approximately 144,000 (-40%). In 2010, 43% of the Region's residents were born abroad, up from 26% in 1980. The flow of migrants in and out of the Region contributes to the exceptional diversity in the ethnic and racial composition of South Florida's population.

Historically, South Florida was a destination for residents from other areas of the United States, sustained by a large wave of retirees that began in the 1950s and continued for several decades. Today, the Region experiences net out-migration to other areas in the State of Florida and elsewhere in the nation. The two driving forces in this shift are the reduction in the volume of new retirees coming to the Region and the significant number of international migrants who come to South Florida and then move on to other parts of the State and the country. This exceptional **mobility** of the population in the Region and the resulting changes in its composition contribute to the high proportion of residents who come from "somewhere else."

• Almost half of the Region's residents (2.1 million) are of Hispanic or Latino origin; about four out of ten of those who self-identify as Hispanic or Latino are native-born Americans. Among foreign-born Hispanics, the largest group is from Cuba (with more than 600,000); in 2010 there were more than 135,000

residents from Colombia, and at least 50,000 each from Nicaragua, Venezuela, Peru, Honduras and the Dominican Republic.

- The Black population represented 22% of the total population in 2010, up from 20% in 2000. In the South Florida Region, it includes African Americans as well as large communities of Haitians (141,000), Jamaicans (103,000) and people from other Caribbean and Latin American nations.
- The Asian population increased more than other racial or ethnic groups between 2000 and 2010 (38%), although it still represents only 2% of the Region's population.

The cultural and linguistic diversity of the population contributes to a distinctly international flavor in South Florida. This bodes well for the Region's ability to integrate itself into the global economy, but it also brings a set of challenges for educating the population and building a common vision for the future.

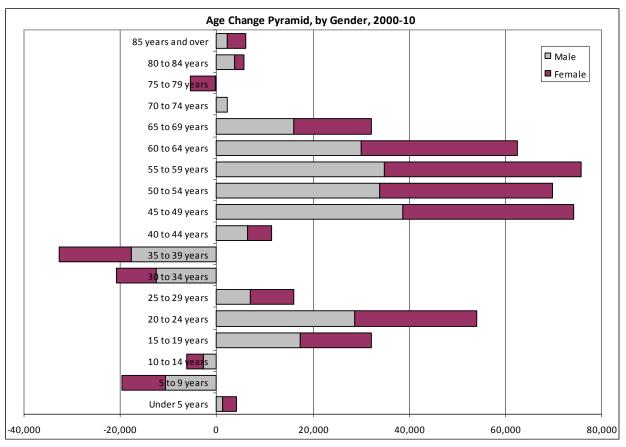
Growth Trend 3: Changing Age Composition

South Florida's population is older than the rest of the nation, but it is getting older more slowly now. Today the Region's population is younger than in the rest of the State of Florida – median ages in 2010 were higher in Monroe (46.4) than in the State of Florida (40.7), but lower in Miami-Dade (38.2) and Broward (39.7); these compare to the national average of 37.2. In fact, the age composition of the Region's population is influenced by conflicting trends. Among these are:

- A gradual slowing in the rate of growth of South Florida's elderly population. Migrants who came to South Florida to retire in the 1950s, 1960s and 1970s are not being fully replaced by new migrant retirees.
- A preponderance of international in-migrants, who tend to be younger than the existing population as a whole.
- The "Baby Boom" generation (roughly the 45-64 age cohort in 2010) continues to age, including a significant number of aging foreign-born residents from South and Central America and the Caribbean.
- A reduction in the size of the younger workforce (30-44) this cohort corresponds to the "Baby Bust."
- A new bulge in the distribution as the larger-than-average cohort of children of "boomers" (age 15-29 in 2010) moves through adolescence and into the workforce.

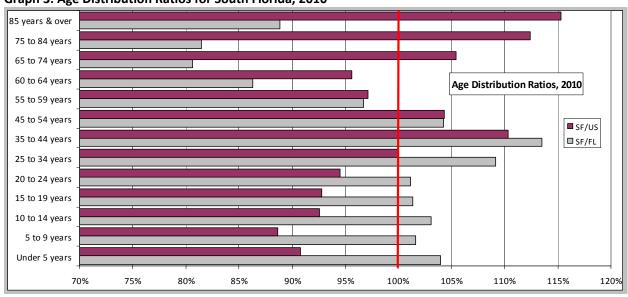
The last three changes in the age composition of the Region's population mirror changes at the state and national level. Graph 2 shows the change in age composition of South Florida's population over the last decade. The 30-44 age cohort fell from 24.3% of the total in 2000 to 21.2% in 2010. Florida's decline was from 22.4% to 18.8%, while the national change was from 23.3% to 19.8%. Graph 3 shows that, despite the decline, South Florida in 2010 had a larger share of population than the State of Florida in every age range from 0-54, and matched or exceeded the national share in the 25-54 range, which is the prime workforce cohort. The smaller share in the under 25 range when compared to the national average is consistent with the observed decline in school enrollment, and requires additional study to understand.

Graph 2: South Florida Population Change by Age Group, 2000-2010



Source: U.S. Bureau of the Census, Decennial Census.

Graph 3: Age Distribution Ratios for South Florida, 2010



Source: U.S. Bureau of the Census

South Florida's labor force of 2.3 million in 2011 compares to the State of Florida's 9.2 million and the nation's 153.6 million. The region's economy added almost 300,000 new jobs in the first seven years of the last decade, but lost more than 200,000 the following two years; the slow recovery since 2009 added only 70,000 jobs. South Florida's unemployment rates, which for many years remained above those for the State and the nation, dropped below the national average beginning in 2003, falling to an all time low of 3.6% in 2006. With the recession, the unemployment rate rose above the national rate again in 2009, and closed the decade at 11.2%, before dropping back to 10.3% in 2011. The region's labor force participation rate in 2010 was about 64.0%, compared to 60.4% for the State of Florida and 64.4% for the nation – Broward County led the Region with a rate of 68.0%.

<u>Challenge 1: Lower Personal Income</u>

With a total personal income of \$168 billion in 2010, South Florida's contribution to the State of Florida's economy of \$720 billion (23.3%) is about the same as its share of the state's population. The region's per capita personal income in 2010 was \$38,769, slightly above the average for the State of Florida (\$38,210), but well below the national average (\$39,937). About 19.3% of personal income in South Florida in 2010 was derived from dividends, interest and rent, compared to 24.5% for the State but only 16.8% for the nation. Notably, this proportion of investment income is down from almost 29.0% in 1990, reflecting a decline in the retirement population in South Florida, even as it has continued to increase in the rest of the State of Florida. Monroe County continues to retain and attract retirees, and in 2010 drew 42.0% of its personal income from investments. This shift is also apparent in the Region's larger proportion of personal income derived from wages and salaries (60.6%) compared to the State (54.8%), although both were well below the national average of 64.8%. Transfer payments (20.1%), most of which are for retirement, were slightly above the national average of 18.5%.

Challenge 2: Higher Poverty Rate

Poverty rates in South Florida remain higher than in the State of Florida and the nation for the population as a whole. The region's overall poverty rate in 2010 was 17.9%, up from 15.1% in 1999. During the same period, the rates rose from 12.5% to 16.5% for Florida, and from 12.4% to 15.3% for the U.S.. Rates for children were significantly higher in the Region, and also increased, from 20.1% to 22.9%, while poverty rates for the elderly increased from 14.6% to 18.0%. Within the Region, Miami-Dade had the highest poverty rate in 2010 (20.4%), followed by Broward (14.6%) and Monroe (11.1%).

Challenge 3: Lower Educational Attainment Level

In 2010, over a quarter of South Florida's population 25 years or older (26.9%) had at least a bachelor's degree, which was a little better than the average for the State of Florida (25.8%), but a little below the U.S. average (28.2%). This was up from 23.0% in 2000. Broward County topped the list with 29.3% of its adults having completed at least a bachelor's degree, followed by Monroe (28.7%) and Miami-Dade (25.2%). However, the Region lags behind in other aspects of educational attainment – in 2010, 18.6% of the population 25 years and older in the Region had not completed high school, compared to 14.5% for Florida and 14.4% for the United States. In other words, 554,000 adult residents of South Florida did not have the minimum academic requisite for pursuing a higher education and better-paying jobs. This will represent an ongoing challenge for the Region as the population continues to grow.

Challenge 4: English Language Proficiency

In 2010, over a million of the Region's residents 5 years and over (26.8%) spoke English less than very well. This compares to only 8.7% nationally, and 11.9% for the State of Florida. In South Florida, the majority of those lacking English proficiency (908,000) were speakers of Spanish, and most (837,000) resided in Miami-Dade County. Still, there were more than 50,000 residents that were born in the United States who spoke English less than very well, representing the second generation and beyond of immigration. English

proficiency is a key qualification to enhance overall employment opportunity and to ensure success in the global marketplace.

Challenge 5: Growing Economic Disparity

While diversity is one the Region's great strengths in a global marketplace, there is growing economic disparity in the Region between the demographic cohorts that are growing (Black or African American and Hispanic) and the White population, which is declining in number. The impacts of unemployment, poorer health, lower personal income, higher poverty rates and lower educational attainment are magnified in low-income communities, some of which are segregated and mired in generational poverty. Economic development depends, in part, on an educated and talented workforce. Additional attention and strategies

are needed to ensure that steps are taken to reverse these trends, break cycles of poverty, and increase access to opportunity to maximize South Florida's human capital and develop the potential and capacity of the Region's future workforce. Only then will we be able to create more sustainable region, communities and a truly robust and resilient economy.

As illustrated in the accompanying map, the Region's population will grow increasingly diverse in the future. As discussed in this section, there are special issues of concern



PolicyLink

A New Generation Gap?

The Diverging Demographics of Seniors and Youth

with respect to growing economic disparity and equity that merit focused attention particularly as the Region's diversity grows.

2010 Census (Summary File 1), Census TIGER/Line, NHGIS, and ESRI

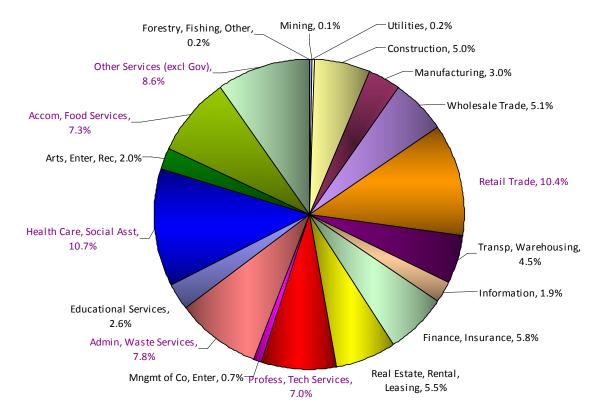
Strategic Findings

As will be discussed in detail later in the Talent Supply & Education section, a growing and highly diverse population is an asset for the Region's competitiveness in the global economy. It provides a multi-ethnic, multi-lingual workforce and culturally diverse environment for businesses. On the other hand, this continuing growth will also require the Region's local governments to make major investments in infrastructure, to both maintain and expand existing services such as transportation, water, wastewater, solid waste and education for both existing and new residents. Challenges due to lower incomes, higher poverty rates, relatively lower educational attainment level, and growing economic disparity will require significant efforts to ensure sustained growth of the Region's economy and the creation of quality jobs.

Overview – The Economy in the Region

With a total value of \$178 billion² in goods and services (Gross Domestic Product, GDP), the South Florida Region produced 25% of the State of Florida's output and accounted for almost 1.4% of the nation's GDP in 2009. With GDP growing only at 11.1% between 2001 and 2009, the Region lagged behind the nation as a whole (12.6%), and it grew much slowly than the State of Florida (16.0%).

The region's six largest private sectors (in 2-digit NAICS³ codes) are: Health Care and Social Assistance, Retail Trade, Other Services⁴, Administrative Support and Waste Management Services, Accommodation and Food Services, and Professional and Technical Services (Graph 4). Together with the Finance, Real Estate, Wholesale Trade, Construction, and Transportation sectors, these 10 sectors account for 78% of regional employment.



Graph 4: The Region's Industry Structure, 2009.

Source: REMI Policy Insight Plus⁵ data, derived from Bureau of Economic Analysis, U.S. Department of Commerce

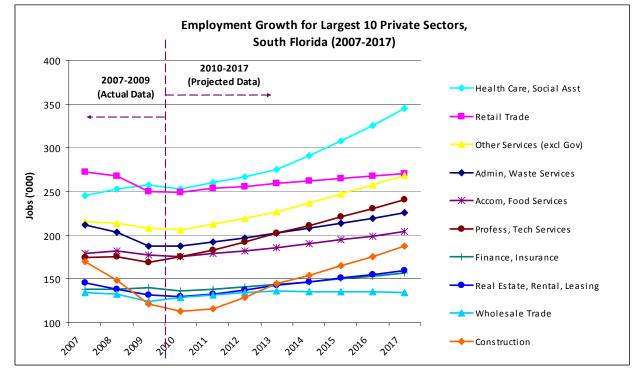
² In 2005 Dollar.

³ NAICS: The North American Industry Classification System (NAICS) was developed as the standard for use by federal statistical agencies in classifying business establishments for the collection, analysis, and publication of statistical data related to the business economy of the US. NAICS was developed under the auspices of the Office of Management and Budget (OMB), and adopted in 1997 to replace the old Standard Industrial Classification (SIC) system.

⁴ Establishments in this sector are primarily engaged in activities such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, and providing drycleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

⁵ REMI Policy Insight Plus, a nationally acclaimed economic and demographic forecasting model, developed by Regional Economic Models, Inc.

The region's economy accounts for one fourth of total employment in the State of Florida. The great recession caused the South Florida economy to lose 152,000 jobs and more than \$13.8 billion in GDP from 2007-2009. It is projected to rebound and grow at an average annual pace of 2.4%, which is faster than the nation's annual pace of 1.7%, from 2009 to 2017. Among the six largest private sectors, the total number of jobs in the Health Care and Social Assistance sector is projected to grow most dramatically, from 258,000 in 2009 to 345,000 in 2017, a 34% increase. Substantial growth is also projected for the Professional and Technical Services and Administrative and Support Services sectors (Graph 5).



Graph 5: Employment Growth for 10 Largest Private Sectors, 2007-2017

Source: REMI Policy Insight Plus Data, derived from Bureau of Economic Analysis, U.S. Department of Commerce

For all non-farm private industries in South Florida, the projection of employment by sector shows that most of them will experience an increase in the near future. Construction is the highest, expecting a 55% increase from 2009 to 2017. It is followed by a 42% increase in Professional and Technical Services, Education, Health Care, Other Services, and Real Estate sectors. The growth patterns of these sectors mirror those of the State of Florida and the United States.

The average compensation rate for all non-farm private sectors is comparable to the state level but 10% lower than national level. South Florida's workers' compensation rate is a double-edged sword for region's competitiveness in each industry: a comparatively higher compensation rate helps attract skilled workers to the Region but also implies a higher labor cost to businesses. The region has higher average compensation rate than the State and Nation in the Retail Trade, Real Estate and Rental Services, Educational Services, and Accommodation and Food Services sectors. However, a decent wage is just one side of the equation of the quality of life. As further discussed in the Quality of Life and Quality Places Section, residents of the Region are paying more than the national average price for food and beverages, housing, insurance, and transportation which directly affects the quality of life and the attractiveness of the Region for wage workers.

Table 1: Employment and Average Compensation (wages + benefits) By Sector

Industry	Employment		Average Compensation Per Jobs			
	Total Jobs	Growth	Wages		As of	As of the
	(2009)	(2009-17)	Benefi	ts (2009)	Florida	U.S.
Forestry, Fishing, Other	4,645	-8%	\$	14,389	0.8	0.7
Mining	2,740	-24%	\$	4,275	0.4	0.1
Utilities	5,311	-5%	\$	105,218	1.1	0.9
Construction	121,304	55%	\$	37,696	1.0	0.9
Manufacturing	71,286	1%	\$	55,520	0.9	0.8
Wholesale Trade	124,160	9%	\$	66,220	1.0	1.0
Retail Trade	250,264	8%	\$	32,112	1.1	1.2
Transportation, Warehousing	107,907	14%	\$	45,281	1.1	1.0
Information	44,911	11%	\$	67,138	1.1	0.9
Finance, Insurance	139,807	12%	\$	52,530	1.1	0.9
Real Estate, Rental, Leasing	131,999	21%	\$	15,373	1.1	1.1
Professional, Tech Services	169,087	42%	\$	55,704	1.1	1.0
Mngmt of Companies, Enterprise	17,710	6%	\$	110,770	1.2	1.0
Admin, Waste Services	187,593	20%	\$	24,784	0.9	0.9
Educational Services	63,016	38%	\$	40,687	1.2	1.2
Health Care, Social Assistance	257,604	34%	\$	42,899	0.9	0.9
Arts, Entertainment, Recreation	48,173	16%	\$	28,047	1.0	1.3
Accommodation, Food Services	177,221	15%	\$	25,974	1.2	1.3
Other Services (excl Gov)	208,046	29%	\$	18,301	0.9	0.8
Total	2,132,784	22%	\$	35,593	1.0	0.9

Source: REMI Policy Insight Plus Version 1.3.5 data, derived from Bureau of Economic Analysis, U.S. Department of Commerce, and Bureau of Labor Statistics.

Shift-Share Analysis

A shift share analysis dissects employment growth/decline of a specific industry in the region over a multiyear time period into three categories⁶, Share Change, Mix Change, and Shift Change. Share Change is the change due to general national growth, or the growth rate of the region compared to the growth rate of the nation. Mix Change is attributed to the industry growth, or the difference in the industry growth in the region compared to the industry growth that would have occurred at the national growth rate for that industry. Shift Change is the competitiveness of the Region, or the difference between the regional industry change in employment compared to the employment change, if the region's industries had grown at the rate of the nation.

a.Share Change - Change of Industry Due to National Growth

b. Mix Change - Actual Industry Growth

c.Shift Change - Regional Competitiveness

Table 2: SHIFT-SHARE Analysis for All Non-Farm Private Sectors in South Florida, 2012-2017

Contain	Chava Chavas	Bain Change	Chift Change	Total Change
Sectors	Share Change	Mix Change	Shift Change	Total Change
Forestry, Fishing, Other	511	-361	-161	-11
Mining	259	-437	90	-89
Utilities	602	-708	111	5
Construction	15,342	33,876	9,726	58,943
Manufacturing	9,212	-18,392	3,703	-5,477
Wholesale Trade	15,999	-18,747	3,315	567
Retail Trade	30,494	-21,319	5,314	14,489
Transportation, Warehousing	13,819	-5,934	-783	7,102
Information	5,273	-2,323	2,545	5,495
Finance, Insurance	16,772	-4,356	3,682	16,098
Real Estate, Rental, Leasing	16,374	4,294	1,883	22,552
Professional, Tech Services	22,945	17,998	6,852	47,794
Mngmt of Companies, Enterprise	2,228	-2,797	595	26
Admin, Waste Services	23,439	3,131	2,460	29,030
Educational Services	8,434	6,644	1,039	16,117
Health Care, Social Assistance	31,817	37,797	8,053	77,666
Arts, Entertainment, Recreation	5,855	571	68	6,494
Accommodation, Food Services	21,711	-586	668	21,793
Other Services (excl Gov)	26,092	15,429	7,814	49,335

Source: REMI Policy Insight Plus Version 1.3.5 projection data, calculated by SFRPC.

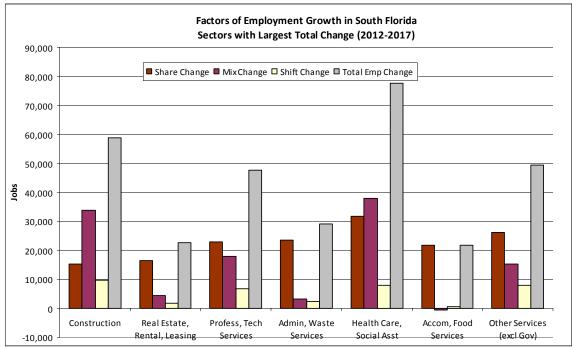
As shown in Table 2, most of the private sectors are projected to grow except for Forestry, Mining, and Manufacturing. The biggest total employment changes occur in the Healthcare and Social Assistance Services, Construction, Administrative and Support Services, Other Services, Professional/Technical Services, Real Estate, and Accommodation, Food Services (Graph 6).

The equations are

$$\begin{aligned} e_i^{t+n} - e_i^t &= share\ change + mix\ change + shift\ change \\ e_i^{t+n} - e_i^t &= e_i^t \left[\frac{E^{t+n}}{E^t} - 1 \right] + e_i^t \left[\frac{E_i^{t+n}}{E_i^t} - \frac{E^{t+n}}{E^t} \right] + e_i^t \left[\frac{e_i^{t+n}}{e_i^t} - \frac{E_i^{t+n}}{E_i^t} \right] \end{aligned}$$



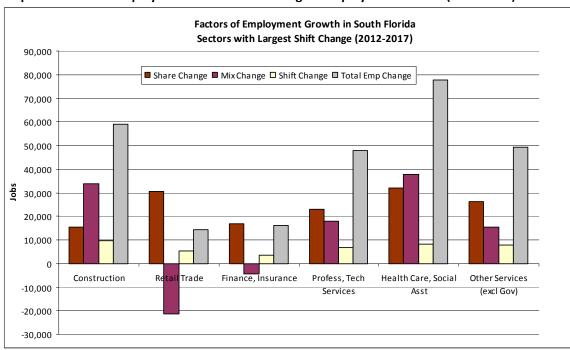
Graph 6: Factors of Employment Growth in South Florida for the Largest Total Employment Growth Sectors (2012-2017)



Source: Projection data in REMI Policy Insight Plus Version 1.3.5, calculated by SFRPC.

Total employment gains do not reflect the relative advantages of the Region in that sector. The chart below depicts the sectors with relative competitive advantage (largest shift changes) in the Region over the next 5 years (Graph 7).

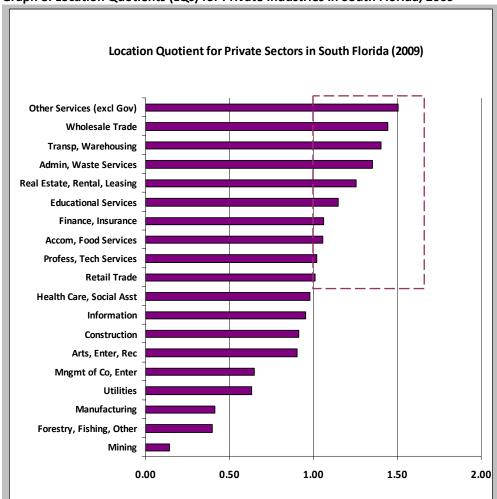
Graph 7: Factors of Employment Growth for Six Largest Employment Sectors (2012-2017)



Source: REMI Policy Insight Plus Version 1.3.5 projection data, calculated by SFRPC.

Location Quotient Analysis⁷

In the analysis of Location Quotients (LQ) for all private sectors, the proportion of regional employment is above average in ten 2-digit NAICS code sectors (Graph 8). The LQs are especially high in Wholesale Trade, Administrative and Support Services, Real Estate, Transportation, and Other Services sectors. In addition, the Professional and Technical Services, Information, Finance and Insurance, Accommodation and Food Services, Educational Services, and Construction sectors have shares of the Regional economy above the national average (LQ>1).



Graph 8: Location Quotients (LQs) for Private Industries in South Florida, 2009

Source: REMI Policy Insight Plus Version 1.3.5 data, derived from Bureau of Economic Analysis, U.S. Department of Commerce. LQs are calculated.

$$LQ = \frac{e_i/e}{E_i/E}$$

Where:

ei = Local employment in industry I, e = Total local employment, Ei = Reference area employment in industry I, E = Total reference area employment

⁷ The Location Quotient (LQ) technique is the most commonly utilized economic base analysis method. The LQ for each industry is calculated to determine whether or not the local economy has a greater share of this industry sector than expected when compared to a reference economy. In this case, the reference economy is the US. When an LQ > 1.0, regional employment in this sector is greater than expected and it is therefore assumed that these extra jobs export their goods and services outside the Region.

As shown above, the South Florida Region has a very strong concentration of Other Services, Wholesale Trade, Transportation and Warehousing, Administrative and Support Services, and Real Estate, but it is relatively weak in Forestry, Fishing, and Mining activities, Manufacturing, Utilities, and Management of Companies compared to the nation as a whole.

By looking at the location quotient Chart (Graph 8) and compensation table (table 2) together, it becomes evident that South Florida has high concentration in several median-high paying job sectors i.e., Wholesale Trade (\$66,220), Transportation (\$45,281), Financial and Insurance Services (\$52,530), and Professional and Technical Services sector (\$55,704), and compares well to the rest of the nation.

On the other hand, South Florida has much higher concentration of low-pay jobs sectors than the nation, i.e., Other Services (\$18,301), Administrative, Support and Waste Services (\$24,784), and Real Estate, Rental, and Leasing (\$15,373), and has much lower concentration on very high-paying job sectors, such as, Utilities (\$105,218) and Management of Companies and enterprises (\$110,770).

According to a July 2012 study by the Georgetown University Center on Education and the Workforce, there is an inherent relationship between educational investment, increasing the share of jobs that require postsecondary talent, and brain drain. Slow and consistent increases in state postsecondary attainment can attract high-value-added industries over the long term. However, in the short term, available jobs determine the demand for postsecondary training, talent and skill.

Ironically, increasing postsecondary attainment without sufficiently increasing the jobs that require advanced talent simply furthers the brain drain into states where college-level and higher-skilled jobs are available. While individual state residents will benefit from increased investment in higher education, the community or the Regional economy will not reap the full benefit of the investment in higher education. Conversely, where a region succeeds in economic development and the creation of higher skilled jobs but fails to invest in education, successful economic development may not translate into opportunities for local residents as the good jobs will tend to go to those educated elsewhere.

Strategic Findings

Both the quantity and quality of economic growth are important aspects in assessing the economic development status. South Florida has been growing slower than the nation during the recession but is projected to rebound at a faster rate. In addition, a more diversified economic structure -- a more favorable sectoral and geographic distribution of economic activity – needs to be achieved to raise the quality of the economic growth.

In Enterprise Florida's ⁹ Roadmap to Florida's Future, the state's 2010-2015 Strategic Plan for Economic Development, the need to accelerate Florida's economic diversification via cluster strategies is identified as one of six strategic priorities for economic development in Florida. The latest Florida Five Year Statewide Strategic Plan developed by Department of Economic Opportunity with a wide-range of stakeholder input also emphasizes the strategy to develop and implement a statewide strategy to develop regional industry clusters using global best practices ¹⁰. Broward County has recently updated its *Targeted Industries Study* ¹¹

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⁸ Carnevale, Anthony; Smith, Nicole. Georgetown Public Policy Institute, Center on Education and the Workforce "A Decade Behind: BREAKING OUT of the LOW-SKILL TRAP in the SOUTHERN ECONOMY." July 2012;

 $^{{\}color{blue} \underline{http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/DecadeBehind.FullReport.073112.pdf} \\$

⁹ Enterprise Florida, Inc. is the public-private partnership responsible for leading Florida's statewide economic development efforts. The organization's mission is to diversify Florida's economy and create better paying jobs for its citizens by supporting, attracting and helping to create businesses in innovative, high-growth industries.

¹⁰ http://www.floridajobs.org/materials112911/forum-specificpresentations/onepager.pdf, drafted 6/12/2012

¹¹ http://www.broward.org/econdev/Pages/TargetedIndustries.aspx

identified a new group of industries/clusters and the recently updated Miami-Dade County *One Community One Goal*¹² also indicated that "...the strategy of economic diversification is paramount to Miami-Dade County's economic future. "

Diversification is a critical component of the Region's economic development effort because a large, diversified economic structure is crucial for the Region's stability, prosperity, and global competitiveness. A cluster industry development strategy can help identify the strengths and weaknesses of the economy and accelerate the diversification of the Regional economy through a targeted focus on high-wage, high value-added cluster economic growth.

¹² http://www.onecommunityonegoal.com/



Analysis of Economic Development Problems and Opportunities - Filtered Through the Lens of the Six Pillars

1. Talent Supply & Education

To say that a talent production system is a complex web of interrelated entities, programs, and goals would be a gross understatement. Workforce Florida, Inc., the state's public-private partnership in charge of overseeing the administration of the state's workforce policy, programs and services, has established a lens

through which Florida's "Talent Supply Chain" ¹³ can be described, evaluated, and ultimately improved.

Workforce Florida defines this chain as "A system of resources and infrastructure that prepares people, on a lifelong basis, to advance the needs of enterprises of all scales, sizes and sectors."

ZONE 1 ZONE 2 ZONE 3 ZONE 4 Workforce Prekindergarten Primary/Secondary Postsecondary School Colleges & Preschool **Districts** Universities School Readiness **PUBLIC WORK-PUBLIC** Voluntary Pre-K Florida State Career College University Head Start Charter Academies System System Other Private Virtual Other Nonprofit Home School For-Profit Private At Home On Job Training Virtual/Distance WORKFORCE DEVELOPMENT SYSTEM Lifelong Learning Targeted Business Training

Source: Closing the Talent Gap – a 2010 report from the Florida Council of 100.

Significance

While this report focuses on education as the pathway to

employment and economic opportunity that allows an individual to expand their potential, it should be noted that education is the key to development of not only economic opportunity but a means by which people can explore their human potential and purpose, contribute to their community, and enhance their quality of life. Opportunities for life long learning is key to the development of quality communities and robust economies.

One of the critical components in economic development is the development of a workforce with skills and training necessary to strengthen and build competitive, innovation-driven industries. Business leaders, educators, and workforce development groups need to work together to develop a "comprehensive, coordinated, data-driven mission" and plan for ensuring the Region has the educated talent it needs for a strong economy.

Current Situation

Cultural diversity and a multi-ethnic, multi-lingual workforce is a great asset for the Region's competitiveness in the global economy, enhancing the role of South Florida as a modern, global hub for international trade and commerce and as one of the world's leading business centers for multinational corporations and financial services. The ethnic and racial composition of South Florida's population continues to grow more diverse due to the fact that the South Florida has been one of the United State's major international migration destinations since 1960s.

The higher education attainment of the Regional workforce is comparable to the State and the Nation. As discussed in the demographic discussion of this report, in 2010, 26.9% of South Florida's population 25 years or older had at least a bachelor's degree, which was a little better than the 25.8% average for the State of Florida, but a little below the U.S. average of 28.2%. However, lower high school graduation rates and the lag

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¹³ Closing the Talent Gap – a 2010 report from the Florida Council of 100.

in basic educational attainment of minorities, the growing demographic of the Region, remain the major concerns of the Region. In 2010, 18.6% of the population 25 years and older in the Region had not completed high school, compared to 14.5% for Florida and 14.4% for the U.S. In other words, 636,000 adult residents (18 years of age and older) of South Florida did not have a high school diploma or GED®, the minimum academic requisite for pursuing a higher education and better-paying jobs. Of these 636,000 adult residents, 397,000 are 45 years of age or older. Of these 397,000, 203,000 are 65 years of age or older. This data suggests that efforts to enhance the educational attainment of the Region's adult population and workforce should focus first on those under 45 years of age (239,000 in 2010).

Demographic shifts, racial and ethnic changes due to "new immigrants," and the aging of the workforce are impacting the U.S. economy as a whole and are more perceptible in South Florida. In 2010, 43% of the Region's residents were born abroad, up from 26% in 1980. The flow of migrants in and out of the Region contributes to the exceptional diversity in the ethnic and racial composition of South Florida's population. South Florida's population is older than the rest of the nation, but it is getting older more slowly now. Today the Region's population is younger than in the rest of the State of Florida. Median ages in 2010 were higher in Monroe (46.4) than in the State of Florida (40.7), but lower in Miami-Dade (38.2) and Broward (39.7). These compare to the national average of 37.2 years of age. The talent shortage threat resulting from an aging workforce is impacting the Region's economy.

Trends and Future Needs

The regional availability of skilled workers becomes increasingly important as firms are now more likely to make location decisions based on the presence of a skilled (e.g. high quality, high productivity) workforce than on traditional economic development conditions such as taxes. As the economy moves toward a more service-based and high-pay oriented development pattern, the need for skilled workers in South Florida will be further exacerbated.

Workforce development groups in the Region are proactively engaged in building the bridge between the labor force and the business community. South Florida Workforce and WorkForce One serve the Region's job seekers by providing information, access to resources, and employment assistance. Since 2007, South Florida Workforce has helped 388,188 people. Sixty-four percent of the individuals trained were placed in positions, and 131,416 were directly placed in jobs. Comparably, between July of 2007 and June of 2012, WorkForce One served 299,939 people, which 80,135 found employment, while approximately 66% of the persons trained were placed into jobs.

In addition to services to adult workers, these workforce development groups also provide training and employment service to youth on a regular basis. For example, the South Florida Workforce Board partnered with Miami Dade College to implement a Youth STEM (Science, Technology, Engineering, and Mathematics) Training and Employment program. This program provided the opportunity for 40 eligible young adults to fully engage in a STEM-related field of study and workforce activities through a Biotechnology College Credit Certificate (CCC) program. The South Florida Workforce Board has also partnered with several employers such as the University Of Miami's Miller School of Medicine to facilitate hiring program participants for STEM-related internships and job shadowing where the student is allowed to observe a professional at work. In addition, WorkForce One has served 5,578 youth (930 on average per year) with eight weeks of work experience with local employers during each summer since 2007 as part of its Summer Youth Employment Program (SYEP). The organization also provided career, employment, and training services to 2,645 youth aged 16-21 year-round by partnering with agency providers since 2007.

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¹⁴ South Florida Workforce Newletter, October – November 2011.

The overall economic competitiveness of the Region is contingent upon young people being prepared to work in STEM-related occupations, which are forecasted to grow about 70 percent faster than employment in other occupations. We need to prepare an adequate supply of qualified future workers for employment in STEM fields.¹⁵

Across South Florida, it is indisputable that the arts are transforming our region into one of the most dynamic and diverse new cultural centers in the hemisphere. South Florida's creative industries are quite strong and are receiving national international attention for arts and cultural excellence. Over \$500 million has been expended by arts and culture audiences in the Region, not including the cost of admission. More than 35,000 full time jobs have been supported by the arts and culture industry; providing over \$1 billion in income to residents and generating approximately \$50 million in revenue to local governments.

To sustain this growing economic engine, it will be necessary to continue to develop new talent to grow and sustain the creative industries. Innovative educational partnerships such the one between Miami-Dade College and Miami-Dade Public Schools have led to the development of the New World School of the Arts (NWSA), a public magnet high school and college in Downtown Miami, with dual-enrollment programs in the visual and performing arts organized into visual arts, dance, theatre, musical theatre, instrumental music and vocal music. NWSA is Florida's premier center of excellence in the visual and performing arts. As a conservatory, NWSA develops talented students in the areas of dance, music, theater and visual arts from the ninth grade in high school through a Bachelor of Fine Arts or Bachelor in Music college degree. Programs like these contribute the talent needed to support this growing industry.

Skill-set development is supported by an extensive vocational education system consisting of public schools, community colleges, and universities. Technical centers, ¹⁶ many of which are provided through the public school system, provide short-term training designed to prepare a person for immediate employment in high-demand occupational clusters, such as Automotive Technology, Building Trades, Business/Computer Technology, Cosmetology, Culinary Arts, Health Sciences, Metal Fabrication Technology, Commercial Heating and Air Conditioning Technology, Industrial Technical Education, Real Estate, etc.

For example, FIU is the largest producer of Science, Technology, Engineering and Math (STEM) degrees for Hispanics, and one of the top producers of STEM degrees for all minorities. Furthermore, FIU is launching this year the STEM Transformation Institute to further expand STEM education reform across the disciplines at FIU. The center will further propel STEM education and teaching in the Region in partnership with Miami-Dade Schools; and nationally by serving as a national laboratory intended to develop, implement and evidence research-driven, replicable models for multicultural urban communities. The goals of the STEM Transformation Institute is to build on FIU's current research infrastructure of over \$20Million in active STEM Education-related grants to reform introductory courses in STEM from traditional lecture style to active learning environments which have shown greater success for our minority-majority population¹⁷.

Institutions of higher learning across the Region are pursuing a variety of science, technology, engineering, and mathematics (STEM) focused initiatives. These institutional initiatives are in support of socioeconomic and educational development within South Florida; they aim to enrich students' educational experience and in the long term contribute to the positive workforce development of the region.

¹⁷ August 10, 2012 Email from Irma Becerra-Fernandez, Ph.D., FIU, Interim Vice President for Engagement



 $^{^{15}}$ South Florida Workforce Newletter, October – November 2011.

¹⁶ Atlantic Technical Center, McFatter Technical Center, and Sheridan Technical Center in Broward County; Lindsey Hopkins Technical Education Center, Miami Lakes Education Center, and Robert Morgan Education Center etc. in Miami-Dade County.

- One of Florida International University's most ambitious priorities involves developing more graduate
 certificate programs for pre-kindergarten through 8th grade teachers that focus on enhancing math
 and science teachers' skills in an effort to provide South Florida students with more comprehensive
 STEM education. Furthermore, FIU's STEM Institute aims to strengthen STEM students' retention and
 educational commitment through college, as a means to contribute to the future economic and
 workforce development of the region.
- Broward College is conducting a feasibility study to determine the possibility of developing a STEM charter school, which will give students with a passion for STEM the chance to focus on those corresponding areas and strengthen their STEM skills even before high school entrance.
- Nova Southeastern University's priorities focus on enhancing the overall STEM student experience through targeted recruitment, engagement, and retention in the STEM fields.
- Lastly, University of Miami's efforts concentrate on providing hands-on research opportunities for high school and undergraduate students. The institutions' unique priorities illustrate their unified objective of bolstering STEM resources, education, and career paths in the South Florida Region.

There are more member institutions outside the Region also contributed toward the creation of a STEM regional initiatives inventory¹⁸; the inventory included over 100 initiatives within the South Florida Region.

In addition to undergraduate and graduate degrees, the Region's community colleges¹⁹ and universities²⁰ also provide Career and Technical Education/Continuing Education which meet the needs of the business community and the workforce by offering Certificates and Degrees Programs in high-demand skill sets and occupations.

Workforce development groups have started to invest in the research and analysis of current local labor force trends, business needs and strategies planning to better facilitate and enhance economic development efforts. The *Florida Eight* is a strategic project funded through Workforce Florida to build regional capacity, job and business retention, international diversification, and empower regional collaboration.

The whole talent supply chain needs to work collaboratively with economic development agencies and community organizations to establish a systematic approach for preserving and growing high-pay jobs. It is recognized that the feedback mechanism between the business community and education providers needs to be improved to quickly adapt the training programs to match the needs of existing and emerging industries.

Strategic Findings/Policy Implications

We need to develop South Florida's "workforce of the future," a skilled labor force that is well educated and facile in the workplace. Educational institutions, workforce development groups, employers and industry leaders must work more closely to develop the curriculum and training programs needed to create a workforce that can meet the Region's economic diversification and growth goals. Targeted Industry partnerships need to be formed among industries and public sector partners such as economic development agencies, workforce development groups, and educational institutions.

The issue of "brain drain," or the loss of individuals with postsecondary talent, knowledge, training and skill from the Region, is one that South Florida needs to be mindful of. Educating a workforce and retaining a

²⁰ Such as, Florida International University (FIU), Florida Atlantic University (FAU), Nova University, and University of Miami, etc.



¹⁸ To read more about the STEM initiatives inventory collected please refer to: http://lifesciencessf.org/resources/docs/Articles/STEM_Initiatives_Inventory-All_Institutions.pdf http://lifesciencessf.org/resources/docs/Articles/STEM_Initiatives_Inventory-Heather_Belmont.pdf

¹⁹ Miami-Dade Community College and Broward Community College.

workforce are separate but related issues. Although the economic recession has reduced the mobility of the workforce somewhat, anecdotally South Florida appears to be suffering from a brain drain as some youth of the Region leave to seek their education and/or employment outside of the Region. However, by incorporating career development plan early on during education may help retaining future workforce. It is important to understand the dynamics of the emerging workforce, which is increasingly mobile as a result of technology. Location decisions are driven by different values and opportunities (lifestyle, culture, diversity, housing, transit etc.) than was the case for past generations of workers.

It is essential that continued emphasis be placed on increasing the percentage of the population acquiring proficiency in English, graduating from high school and then going on to receive advanced educational degrees at the associate, bachelors, masters and doctoral levels. This should be coupled with strategies to ensure that South Florida's best and brightest choose to stay in South Florida to pursue their careers and lives.

Given limited resources, investments to increase the number of adults 18 years of age or older who have a high school diploma or GED® should focus on those adults that are 45 years of age or younger.

Talent supply and education depend on a variety of other pillars as well. Attracting and keeping talent depend on things like economic development (having good jobs), infrastructure (easy and reliable employment based transportation), business climate and quality of life. Talent supply should be viewed from a system approach rather than just an education and training perspective.

2. Innovation & Economic Development

Significance

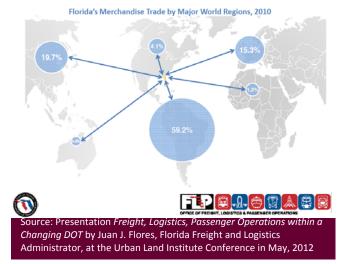
Technology, knowledge, and innovation are the drivers of competitiveness and economic growth in the 21st century. Innovation infuses the economy with growth-incubating new ideas, new products, services, and technologies. The system transforming innovation to new economic growth includes private and public research and development (R&D), investment for the new idea/technology/process, research commercialization, and entrepreneurship. Entrepreneurship is the mechanism by which innovation is transformed into production and job creation. Entrepreneurs and small business owners embody the spirit of innovation, entrepreneurship and individual initiative and they are essential to the economic growth and recovery. Given that regions are the basic unit for clusters of innovation, the vitality of the U.S. economy depends on creating innovation and competitiveness at the Regional level.²¹

Both the quantity and quality of economic growth are important aspects in assessing the economic development status. In addition to total employment growth, a more diversified economic structure needs to be achieved to raise the quality of the economic growth. Diversification is a critical component of the Region's economic development effort because a large, diversified economic structure is crucial for the Region's stability, prosperity, and global competitiveness. A cluster targeted industry development strategy

can help identify the strengths and weaknesses of the economy and accelerate the diversification of the Regional economy through a targeted focus on high-wage, high value-added cluster economic growth.

Another driver of economic development for South Florida region is international trade and logistics. South Florida has long been an important consumer market and a gateway for trade between the United States and Latin American and Caribbean nations. Domestic and international trade supports a sizable share of the Region's economy and creates significant transportation impacts.

Florida is a Crossroads of North/South & East/West Trade



Current Situation

Innovation and R&D

There are five academic research universities in the South Florida leading research and development (R&D) activities: the University of Miami (UM), Florida International University (FIU), Nova Southeastern University (NSU), Barry University and St. Thomas University. According to the Survey of Research and Development Expenditures by the National Science Foundation, together these institutions dedicated more than \$349 million in R&D research in FY2009. This investment accounts for one-fifth of the total academic R&D expenditure in the State of Florida and represents a growth of 20% in the past 5 years up from \$292 million in FY2005. This rate is much faster than the State (15%) as a whole and is comparable to the U.S. (20%)

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²¹ CLUSTERS of INNOVATION: Regional Foundations of U.S. Competitiveness, Professor Michael E. Porter, Harvard University, Monitor Group, ontheFRONTIER, Council on Competitiveness, 2001

Patents are the fruit of R&D activities. The South Florida region had 614 utility patents granted in 2010; one-fifth of the State total. This represents a growth rate in patents of 12% from 2006 to 2010, a little lower than the State (14%) and the U.S. (20%).

Entrepreneurship and Small Businesses

There has been a long tradition of entrepreneurship in the South Florida with its high concentration of international immigrants and minority population, who are more likely to start their own businesses. The 2011 Kauffman Index of Entrepreneurial Activity²², an indicator of new business creation in the United States, reveals that the Miami-Fort Lauderdale-Miami Beach Metropolitan area has relatively high entrepreneurial activity (470 per 100,000 adults) among the fifteen largest metropolitan areas in the United States, ranked 4th behind Los Angeles (580 per 100,000 adults), Atlanta (500 per 100,000 adults) and Phoenix (500 per 100,000 adults). It was much higher than the State of Florida (380 per 100,000 adults) and the U.S. (320 per 100,000 adults). Although most of the new businesses are probably not in high-tech and innovative sectors, they are important job creators as a whole and contribute to the recovery of the Regional economy.

To implement the cluster industry strategy for economic development, both Broward and Miami-Dade Counties have recently updated their targeted industry studies (2009 and 2012, respectively). A new group of ten (10) industries/clusters was developed in the *Targeted Industries Study (TIS)* in late 2009. ²³ Miami-Dade County, in partnership with the Beacon Council, finished the update of its *One Community One Goal (OCOG)* Target Industry Strategic Plan in May of 2012. The report identified seven (7) target industries and niche sectors and offered detailed strategic recommendations that represent long-term global growth potential.²⁴ The common targeted industries are Aviation/Aerospace, Creative Design/International Media & Production, International Banking & Finance/Global Business Services, Life Sciences & Health Care, Trade & Logistics. A detail analysis of these five (5) regional clusters and other traditional clusters is in the Regional Economic Clusters section.

International Trade and Logistics



Located on the crossroads of north-south and east-west trade lanes, Florida has been a critical point for processing, assembly, and shipping of goods to markets throughout the eastern United States, Canada, the Caribbean, and Latin America. the most Florida is transportation and logistics hub in the state with its seaports accounting for 60% of the State's total waterborne trade in containers (TEUs) and its airports accounting for more than 90% of the State's air cargo trade in value. The Miami Customs District, which includes South Florida airports and seaports from Palm Beach to Key West, reports that trade climbed to \$113 billion in 2011, up from \$95 billion in 2010. It has the fourth highest growth (18.3%) in total trade among the top 15 U.S. Customs Districts.

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²² Kauffman Index of Entrepreneurial Activity, 1996-2011, Robert W. Fairlie, March 2012

²³ http://www.broward.org/econdev/Pages/TargetedIndustries.aspx

²⁴ http://www.onecommunityonegoal.com/

Trends and Future Needs

Innovation and R&D

Although the level of start-ups formation activity is high, the Region needs to increase its relatively low R&D spending and utility patent activities, which is critical for the creation of high-tech, high-paid jobs and long-term sustainable growth. Recent trends show that South Florida will catch up as its R&D investment is

growing faster than the State as a whole.

In August 2009, FIU opened the Herbert Wertheim College of Medicine to enhance the University's ability to create lasting change through its research initiatives. The University's research expenditures are more than \$100 million per year. Research awards to FIU scientists have been growing steadily for the last few years. This research activity is reflected in the University's increased production of issued patents. In FY 2011, UM research and sponsored program expenditures increased to \$360.9 million. UM's Life Science & Technology Park recently opened the first of five buildings planned for the 8-acre park adjacent to the medical campus. The facility will bring together academia and industry for collaboration in bioscience research and innovation.



In addition to enhancing research innovation capacity, South Florida also needs to invest in facilitating research commercialization and nurturing entrepreneurship. The region's universities and colleges have launched various programs to serve that purpose. For example, the UM opened Launch Pad at its Toppel Career Center in 2008 to offer career guidance, resources, and advice to entrepreneurs, innovators, and inventors. Since its inception, Launch Pad has helped foster 50 new businesses and created more than 100 new jobs, contributing to the economic recovery of South Florida and demonstrating that positive economic impact results from investing in entrepreneurship. Similar programs such as the Center for Entrepreneurship at Miami Dade College, the Barry Institute for Community & Economic Development, the Pino Global Entrepreneurship Center at Florida International University, and the Institute for Global Entrepreneurship at St. Thomas University also are paving the way to the South Florida's greater success in economic development.

The region's higher education institutions work closely with economic development organizations to create partnerships in innovation, workforce preparation, and job creation. In 2010, FIU and the Beacon Council convened a meeting with many of the Region's top academic, technology, and economic leaders to begin discussion around a regional plan of action that would lead to the successful creation of an industry cluster. Now known as Life Sciences South Florida (LSSF),²⁵ the mission of this collaborative partnership is to ".... promote innovation, investment, entrepreneurship and economic growth in the areas of biotechnology, pharmaceuticals, diagnostics, and information to generate high-technology and high paying employment." Executive Committee members include the leaders of 16 educational, economic development and research institutions: Florida International University, University of Miami, Florida Atlantic University, Florida Gulf Coast University, Nova Southeastern University, Miami-Dade College, Broward College, Palm Beach State College, Indian River State College, the Beacon Council, the Businesses Development Board of Palm Beach

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²⁵ FIU's Response to the One Community One Goal Target Industry Study, Florida International University, 2012

County, Greater Fort Lauderdale Alliance, Florida Atlantic Research Park, University of Miami Life Sciences and Technology Park, Max Planck Florida Institute, and Scripps Florida.

Its current initiatives include:

- Conduct an extensive asset map and cluster analysis;
- Create, develop and strengthen programs designed to increase STEM student and workforce development within the Region.

Future initiatives include:

- Establish a shared communication portal, technology platform, research core facilities and institute of commercialization;
- Recruit, develop and retain talent in the Region.

While the development of South Florida as a high tech corridor for bio-science is well underway with LifeSciences South Florida, complementary efforts to develop South Florida as a world-class technology hub and corporate home of existing and start-up technology companies have not fared as well. Lacking the creation and coordination of an enduring broad-based coalition of regional stakeholders around technology, and despite investments in key infrastructure such as the NAP of the Americas in Miami-Dade County and the work of key leaders who sought to advance the development of South Florida as a center for technological innovation, early efforts were virtually derailed through the lack of consensus on how to proceed, the dot.com bust in 2000, and the Great Recession which began in 2008.

Key to restarting efforts to develop South Florida as a world-class Technology Hub²⁶ that will spur innovation and investment in the Region, is the development of reinvigorated broad-based, regional leadership group that can agree on the mission, specific goals, objectives and milestones for moving forward together. The benefits to the region would include significant investment in the creation of a robust and diversified 21st century economy, but also the means to enhance the quality, quantity and availability of technology and information for all South Florida residents. This will help to reduce economic disparity by helping to close the "digital divide" which separates more prosperous communities from poorer ones, limiting the ability of some residents to reach their educational and economic potential.

Entrepreneurship and Small Businesses

Small businesses, defined by the Small Business Administration (SBA) Office of Advocacy as independent businesses having 500 or fewer employees, account for 99.9% of the total establishments in the South Florida Region. Its growth has significant impact on the economic recovery in the nation as well as the Region. In 2010, total number of firms with at least 1 but less than 500 employees is 132,274, grew 1% from 2009 but still 5% less than the pre-recession level (138,468 in 2007).

One of the biggest obstacles for small businesses is access to capital. During the recession, both credit and capital availability for small businesses declined sharply, hampering entrepreneurs' efforts to finance operations and start new businesses. According to the FIFIC annual report on Community Reinvestment Act (ARC), total value of commercial bank's new loans to businesses with gross annual revenues <= \$1 Million (usually, these firms has less than 10 employees) declines 72% from 2,156,005 in 2007 to 599,832 in 2010, which is bigger than the national level of 53%. This precipitous decline can be explained by changes in both demand and supply. First, the recession caused a drop in aggregate demand, reducing the ability of and incentives for small businesses to invest in new capital equipment or hire new employees. .²⁷ But, falling

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²⁶ Based, in part, on conversations and correspondence with Dr. Rolando Montoya, Provost, Miami-Dade College; Mr. Jorge Guerra, Executive Director Workforce Education & Partnerships, Miami-Dade College; Mr. Michael Corbit, Business Projects Regional Consultant, Workforce Solutions; and Mr. Juan Pablo Cappello of Greenberg Traurig (Miami), author of "Did 'Silicon Beach' get beached in Miami?" Miami Herald, 5 August 2012.

²⁷ The White House, Supporting America's Small Businesses, 2011

demand was not the only problem. Declining creditworthiness of small business borrowers, an unwillingness of banks to lend money to small businesses, and tightened regulatory standards on bank loans have all been offered as explanations of the decline of small business borrowing. A recent study by the Federal Reserve Bank of Cleveland finds that homes constitute a significant source of capital for small business owners and that the impact of the recent decline in housing prices is significant enough to be a real constraint on small business finances.²⁸

According to the Florida Small Business Index Survey conducted by Florida Chamber of Commerce, access to capital remains an issue facing small business owners²⁹. The most recent survey in June 2012 shows that, of the respondents needing financing during the last six months:

- o 27% were able to obtain it, down from 29% in March.
- o 73% were not able to get the needed financing, and 52% believe it will be harder to obtain over the next six months compared to just 14% who believe it will be easier.

Various non-conventional loan programs in the Region have tried to provide much needed capital to start-ups and small businesses. For example, the South Florida Regional Planning Council Revolving Loan Program (SFRPC-RLF) is designed to meet the credit needs of businesses in the Region that are not entirely served by conventional lenders. The major reason conventional lenders decline to lend to small businesses is because they prefer lower risk, well-collateralized loans as opposed to higher risk, thinly-collateralized loans. They lend on a credit-scoring basis. The financing strategy for the RLF is to make general business development loans to businesses where credit is not otherwise granted by conventional lenders, and at the same time encourage these lenders to complete projects by allowing these funds to fill the gap. Since the Council's first EDA loan was made in March 2002, and the transfer of four additional EDA loans funds to the Council for management, the RLF Programs have brought added value to the Region through job creation, retention and private investment. These loan funds have now been consolidated into one loan fund. Since the initial transfer, the Council has serviced over 110 loans for a total over \$56.6 million in total project investment. In addition, 2,023 jobs have been created or retained in the Region by the financing of these projects.

Access to capital for small businesses, and especially for the innovative entrepreneurs, remains a challenge. In order to devise effective strategies to address this issue, a capital market audit may be needed to increase understanding of the issues.

International Trade and Logistics

South Florida is poised to grow further in the Trade and Logistics cluster with the Panama Canal expansion in 2014 and the numerous infrastructure developments and upgrades underway. PortMiami is undertaking more than \$2 billion in infrastructure improvements over the decade to remain competitive in the global marketplace. With an expansion plan that includes deepening and widening Port Everglades' waterways, adding five new cargo berths and bringing in direct freight rail connections, Port Everglades' plans will also accommodate the larger ships that will transit the expanded Panama Canal.

Strategic Findings/Policy Implications

South Florida has long tradition of small business success and the level of start-ups formation activity is high, however, the Region needs to increase its relatively low R&D spending, which is critical for the creation of high-tech, high-paid jobs and long-term sustainable growth.

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²⁸ The Effect of Falling Home Prices on Small Business Borrowing, Mark E. Schweitzer and Scott A. Shane, December 20, 2010

²⁹ Florida Small Business Index: In 2012 Quarter 3, it received 807 unique responses. Seventy-five percent of respondents had less than 10 employees; fifteen percent employ between 10 and 40 employees; and nine percent have between 41 and 500 employees. Ninety percent of respondents had less than 10 part-time employees; five percent employ between 10 and 40 part-time employees and one percent have between 41 and 500 part-time employees.

Entrepreneurship is an important component of economic growth and should be considered as a major emphasis of any economic development initiative. In addition to enhancing research innovation capacity, South Florida also needs to invest in facilitating research commercialization and nurturing entrepreneurship, as well as to make sure adequate capital is available for start-ups and small businesses.

South Florida must support its small businesses with increased access to affordable capital and enhanced coordination and integration among small business assistance organizations that provide technical assistance and other essential services.

South Florida must develop broad-based regional leadership and agreement around the vision of South Florida as a thriving, world-class technology hub with specific goals, objectives and milestones. Regional stakeholders must provide organizational support to advance the development of an actionable agenda, secure funding to support startups and the coordination and execution of the plan, position the region as the place where new ventures are welcomed, and develop an innovative marketing strategy which targets growing demographics and maximizes the region's role as the Gateway to the Americas.

3. Infrastructure & Growth Leadership

The quality of a region's infrastructure is critical to its ability to grow and maintain a vibrant economy. Wise investment in infrastructure is considered an economic development activity because it makes the Region more competitive through the creation of jobs and an enhanced quality of life. Investments in industrial parks; a robust multimodal transportation system which includes airports, seaports, and ground transportation; and electrical, water and sewer systems are critical components of the physical infrastructure that supports and fuels the Regional economy.

In South Florida, the Region's susceptibility to natural hazards such as hurricanes and global climate change and sea level rise will limit the economic productivity and potential of its communities absent strategic smart growth planning, disaster mitigation and long-term infrastructure investment frameworks. South Florida must balance its population growth with the limitations and challenges posed by its environment to retain its competitive edge.

Industrial Parks and Foreign Trade Zones

Significance

South Florida does not have a large manufacturing base, but has encouraged the development of clean industries such as bioscience, medical and information technology.

Current Situation

Miami-Dade County has 17,528 acres of designated industrial land, of which approximately 3,622 acres are vacant, and 37 business parks³⁰. Unincorporated Broward County, with a much smaller land base, has approximately 1,300 acres of industrial land.³¹ The largest concentration of the Region's industrial parks is located west of Miami International Airport. Other industrial and business parks are located on major corridors throughout South Florida. The five largest Parks in the Region are shown in the table below.³²

Table 3: Five Largest Business Parks in the Region

	Business Park	Developed Acres	Year Built	County
1	Flagler Station	872	1989	Miami-Dade
2	Miami Lakes Business Park	650	1965	Miami-Dade
3	Sawgrass International Corporate Park	635	1987	Broward
4	Gratigny Central Industrial Park	550	1980	Miami-Dade
5	Miramar Park of Commerce	480	1985	Broward

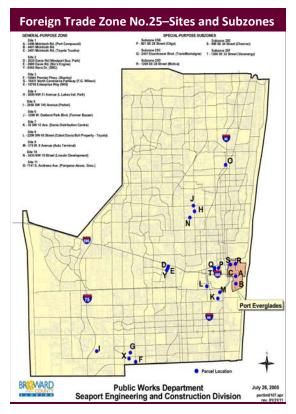
Fifteen Enterprise Zones have been designated in South Florida under the Florida Enterprise Zone Program. There are eight Enterprise Zones in Broward County and seven in Miami-Dade County. These enterprise zones offer additional fiscal incentives to relocating and expanding businesses to encourage investment and job creation in economically distressed areas. In addition, Miami-Dade County has two Empowerment Zones. One is located in the City of Miami's downtown business district and the other in the City of Homestead.

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³⁰ Miami-Dade County 2011 Evaluation and Appraisal Report; Beacon Council of Greater Miami, 2004

 $^{^{}m 31}$ Broward County 2011 Evaluation and Appraisal Report

³² South Florida Business Journal, 2012



There are six Foreign Trade Zones (FTZs) in the Region and multiple associated sub-zones throughout. The purpose of a FTZ is to expedite and encourage foreign commerce. FTZ sites are considered to be outside of the U.S. Customs territory, although physically in the U.S., for purposes of duty payments. Foreign or domestic materials can be moved into an FTZ area without being subject to U.S. Customs duties. Therefore, companies that operate in foreign trade zones can defer, reduce or eliminate customs duties. The Region's FTZs are located in the City of Miami, the City of Doral, south Miami-Dade County, Broward County Port Everglades, and the City of Fort Lauderdale Executive Airport. In addition to the original Site 1 of FTZ No. 25 located at Port Everglades, Broward County also has five special-purpose subzones located at the Port and eleven general-purpose FTZ sites located in the cities of Dania Beach, Fort Lauderdale, Hollywood, Lauderdale Lakes, Miramar, Pompano Beach, and the Town of Davie.³³

In 2012, The U.S. Department of Commerce granted Miami-Dade County the authority to establish a new Foreign Trade Zone (No. 281) that stretches north from Southwest Eighth Street to the Broward County Line. The new zone will be among the nation's first to operate under

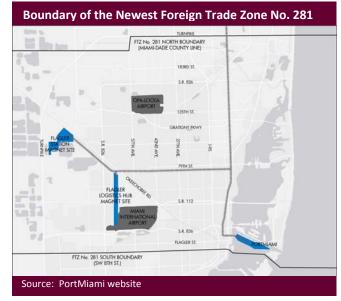
the new Alternative Site Framework's streamlined process. (FTZ #281 boundary map shown on the right)

Trends and Future Needs

Industrial parks will remain limited throughout the Region. South Florida's service-based economy and focus on the attraction of clean industries, has limited demand for industrial parks for "traditional" manufacture. There be continued development of business parks that accommodate office, commercial, warehousing and industrial uses.

Strategic Findings/Policy Implications

The demand for logistics related industrial spaces such as warehousing and high-tech industrial/office spaces from bioscience, medical and information technology businesses is expected to increase.



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³³ Port Everglades

Airports and Seaports

Significance

The airports and seaports are critical components of the Regional economy, supporting domestic and international trade.

Current Situation

The South Florida Region is served by two major international airports and two major seaports.

Miami International Airport (MIA) is the 12th busiest airport in the United States, with 38.3 million passengers in 2011.³⁴ It provides extensive air service to Central and South American destinations. Among U.S. airports, MIA is number one for international flights and international freight.

Fort Lauderdale-Hollywood International Airport (FLL) is an origin/destination airport. Most recent data indicates that only 9% of total passenger



traffic connects to other flights. In 2011, FLL ranked as the 21st largest airport in the U.S. and carried 23.4 million passengers including a significant volume of cruise ship passengers connecting to Port Everglades.

Cruises to the Caribbean and other destinations are available from Port Everglades and PortMiami. During FY 2011 Port Everglades had a total of 3,952,843 cruise passengers who arrived or departed from Port Everglades. ³⁵ Port Everglades is currently the Nation's second most popular cruise port. According to a recent study commissioned by the Cruise Lines International Association, in 2006 PortMiami ranked number 1 in the nation in the number of passenger embarkations with 1.89 million. PortMiami received more 4 million passengers in 2011.

Much of the cargo entering the South Florida Region is transported by sea through PortMiami and Port

Everglades. Total cargo volume at Port Everglades was 22.1 million tons in 2011^{36} , and 7.4 million tons at PortMiami in $2010.^{37}$ Foreign trade accounts for more than half the cargo volume for each port.

While not a major hub, Key West International Airport also has scheduled commercial air service. Additionally, there is a small but growing cruise port in Key West.

With more than six billion dollars in recent upgrades, MIA's annual impact on local tourism, cruise, international banking, trade and commerce is



³⁴ Airports Council International, 2011

 $^{^{}m ^{35}}$ Port Everglades Waterborne Commerce Report FY 2011

³⁶ Port Everglades Waterborne Commerce Report FY 2011 and Port Everglades FY 2011 Local and Regional Economic Impacts Report

³⁷Port Business Statistics <u>http://www.miamidade.gov/portofmiami/business-port-statistics.asp</u>

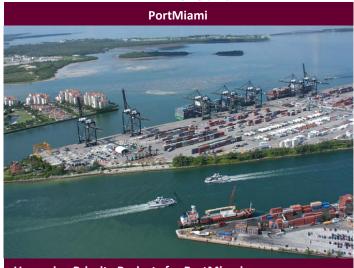
\$26.7 billion. MIA and related aviation industries contribute 282,043 jobs directly and indirectly to the South Florida economy. This equates to one out of 4.1 jobs in Miami-Dade County. FLL has an economic impact to the Region of \$2.6 billion and 39,500 direct and indirect jobs and Port Everglades provides more than 11,000 direct jobs and \$5.9 billion in personal income. Port Everglades generated approximately \$15.3 billion in business activity and approximately 161,000 jobs statewide in 2011. During fiscal year 2009, PortMiami contributed approximately \$17 billion to the Regional economy and supported over 175,000 jobs.

Trends and Future Needs

Long term investment and expansion programs are underway to accommodate projected growth in passengers and cargo at the major ports.

There are three major PortMiami projects noted in the Miami-Dade MPO's Transportation Improvement Program (TIP). The first is Phase III of a multi-billion dollar Miami Harbor Dredging project which will enable

the Port to double its cargo capacity. PortMiami is one of three ports on the along the nation's east coast that will be dredged to 50' when the Panama Canal expansion opens in 2014. 42 Second, the \$1.5 billion PortMiami Tunnel project will directly connect the Port to I-395 and the MacArthur Causeway, eliminating the need for semi-trucks transporting cargo to traverse through downtown Miami in order to reach the Port. Scheduled for completion in 2014, this massive project will result in alleviating congestion and greatly facilitating mobility in and out of the Port. This added efficiency in freight mobility will have a significant and positive economic impact on the Region. The third improvement is the intermodal and rail reconnection project which includes the rehabilitation of the rail bridge, construction of additional on-port rail lines and gantry system, and construction of an on-port



Upcoming Priority Projects for PortMiami

- -50 foot channel (2014)
- On-dock intermodal rail service (2013)
- Direct highway access via tunnel (2014)
- Super Post-Panamax Cranes

intermodal apron. These dredging, tunnel, and rail improvements are critical to PortMiami's continued economic growth and viability in international trade and will help to address the challenge of the limited available land in which the Port is situated.

⁴² One Community One Goal: Competitive Assessment



³⁸ Miami International Airport

³⁹ Fort Lauderdale International Airport

⁴⁰ Port Everglades Waterborne Commerce Report FY 2011 and Port Everglades FY 2011 Local and Regional Economic Impacts Report

⁴¹ PortMiami http://www.miamidade.gov/portofmiami/information.asp



Port Everglades has initiated a \$2.4 billion expansion plan designed to address the anticipated increase in seaport trade over the next 20 years, as described in the 2009 update of the Port Everglades Master/Vision Plan.

The ITCF will be the first on-port rail yard to process both domestic and international cargoes and it will enable unit trains to be assembled on the port without blocking local roadways. This will reduce congestion on local roadways and interstate highways by removing an estimated 180,000 truck trip annually by 2029. This will not only support freight management efforts in the Region but also will reduce harmful air emissions created on the roadways. 43

MIA is in the process of finalizing their

\$6.4 billion Capital Improvement Program (CIP), including new passenger terminals and air cargo facilities. Completion of the North Terminal Development Program which includes the American Airlines hub is part of the CIP. In July 2012, the MIA Metromover connection was completed, providing commuter rail connectivity between the airport and downtown Miami, providing very positive economic potential for the area. [See Ground Transportation, next section, for more details.]

The Miami-Dade Aviation Department will be finalizing its new Strategic Airport Master Planning Study (SMP 2015-2050) for the County's System of Airports early next year. The SMP will identify and assess the future

air transportation needs for Miami-Dade County, and will balance the needs related to infrastructure and facility preservation and modernization, capacity, customer-service enhancements, financial affordability, cost control, and environmental stewardship.

The Fort Lauderdale-Hollywood International Airport (FLL) has begun construction on the expansion of its South runway, a major project that is expected to be completed in the fall of 2014. The project will generate 11,000 jobs and contribute \$1.4 billion to the Regional economy. Other projects include the expansion and redevelopment of the airport's Terminal 4 which will double its international capacity; a complete modernization of Terminals 1, 2, and 3; and the development of an additional 5-gate



⁴³ The Future of Port Everglades", Powerpoint presentation by the Port Everglades Seaport Planning Manager, July 2012

Concourse A in Terminal 1.

Both Port Everglades and the FLL Airport have been capitalizing on the synergistic relationship that exists based on their proximity to each other as well as the interrelationship which exists based on program coordination and development through Broward County. Coordination between both agencies has grown and continues to enhance and sustain the economic growth of the Region. Both agencies are highly involved in regional efforts.

Strategic Findings/Policy Implications

The airports and seaports are key economic engines driving South Florida's economy. Expansion programs are planned at all four facilities to accommodate projected demand for passengers and cargo by increasing capacity to accommodate expected growth in the Region.

In order to maintain leadership as international competitors, the Region's ports and airports will need to continue enhanced coordination and public and private investments will continue to be necessary. A regional airport/seaport planning body that can transcend any potential intraregional friction in order to utilize one another's strengths will support the Region's economy and enable the Region's freight industry to continue successful competition with other airports and seaports around the country.

Ground Transportation

<u>Significance</u>

The Miami Urbanized Area is the fourth largest in the United States.⁴⁴ As such, traffic congestion is a serious concern which detracts from South Florida's economic vitality. However, unlike many other urban centers, this region is not a circular one emanating from a nucleus of activity; rather it is an elongated north-south stretch of dense population and development that hugs the Atlantic coastline for over 100 miles. The current situation will be described by county and then, regionally.

Current Situation

Miami-Dade County

The County's federal interstate system includes Interstates 95, 75, 195, 395, and Florida's Turnpike while

federal highways in Miami-Dade County comprise US-1, US-27, US-41, US-441, and A1A. Two major intermodal projects which are completed or in progress are improvements to the Miami Intermodal Center (MIC) and the NW 25th Street reconstruction and viaduct construction.

The MIC includes a Rental Car Center, the MIC Central Station, and the Miami Airport (MIA) Mover. The Rental Car Center and the MIA Metromover were completed and began operations in July 2010 and September 2011, respectively. Construction of the MIC began in 2011 with anticipated completion in 2013. One

Source: Miami–Dade Aviation Department Presentation South Florida's Freight Portals –International Economic Engines at the Urban Land Institute Conference in May 2012

Page 46 Technical Report

Miami Intermodal Center

• AirportLink opening: Summer 2012

• Miami Central Station:

• Groundbreaking: Sept. 2011

• Scheduled opening: Fall 2013

HIAMIDADE
TRANSIT

Source: Miami-Dade Aviation Department Presentation South Florida's

⁴⁴ U.S. Bureau of the Census

critical feature is the completion of the Metrorail link to MIA, the first new Metrorail line since its opening in 1984. This linkage, which opened in July 2012, will now provide connectivity between various transportation modes including Tri-Rail, MIA Metromover, Metrobus, taxis, intercity buses and the airport. A related project that will enhance intermodal efficiencies is adding rail capacity to the final mile of the South Florida Rail Corridor just north of the MIC. At this time, the SFRC is limited to a single track across the Miami River so this improvement promises to add to the interconnectivity to rail and air mobility.⁴⁵

The NW 25th Street project includes widening and reconstruction of the roadway and the construction of a viaduct to separate truck traffic bound for the airport from NW 25th Street. Upon completion, heavy truck volumes will be alleviated and traffic flow will be improved. Planned improvements to the Strategic Intermodal System in Miami-Dade County include the PortMiami Tunnel construction (described in the Seaports and Airports section of this document), State Road 826/Palmetto Expressway, SR 826 to Interstate 95, the Krome Avenue corridor, and I-395.

Created in 1994 the Miami-Dade Expressway Authority (MDX) serves as "... an innovative transportation agency dedicated to the enhancement of mobility in Miami-Dade County." MDX is funded with toll revenues from its system of 34 centerlane roadway miles which include the Dolphin Expressway (SR 836), the Airport Expressway (SR 112), Don Shula Expressway (SR 874), Gratigny Parkway (SR 924), and the Snapper Creek Expressway (SR 878). Improvements that will enhance mobility include existing system improvements, system expansion, and facility improvements. Feasibility studies to create the US 1 Express are underway and may result in incorporating managed lanes within the South Miami-Dade Busway along U.S. 1 and project development of a transportation corridor from the MIC to Dadeland along an existing Florida East Coast railway right-of-way. 46

Broward County

Six major north-south highways in the Region provide access to and from Broward County: Interstate 95,

Florida's Turnpike, Interstate 75, US-27, US-1, and US-441. Interstate 595 is the primary east-west, intra-county corridor in Broward that serves commuters and provides direct access to both Port Everglades and the Fort Lauderdale-Hollywood International Airport.

In order to address east-west congestion in Broward County, the major project currently in this part of the Region is a \$1.2 billion package of improvements on the I-595 corridor. A public-private partnership agreement that was signed early in 2009 by the State and a private concessionaire



⁴⁵ Miami-Dade County MPO Transportation Improvement Program

⁴⁶ Miami –Dade MPO Transportation Improvement Program, Citizen's Version, FYs 2-012/13 to 2016/17



enabled the massive project to be expedited by several years. Extending from I-75 east to I-95, project construction commenced in late 2010 and is to be completed in 2014. Improvements will include major ramp upgrades and a 3-lane median that will enable tolled, reversible managed lanes. These lanes, known as the 595 Express, will operate eastbound in the mornings and westbound in the afternoons. An express mass transit system, multi-mile linear greenway for bicyclists and pedestrians, and safer entrance and exit ramps are some positive outcomes of these improvements.⁴⁷

Other significant improvements in Broward County include recent completion of mainline widening by Florida's Turnpike Enterprise from Atlantic Boulevard to south of Sunrise Boulevard and continued emphasis on public transit including plans for implementing transit-oriented corridors and hubs. "The Wave," an environmentally friendly streetcar system that is to be built in downtown Fort Lauderdale, is an example of promoting livable communities by integrating land use, transportation and economic development. In June 2012, the Fort Lauderdale Downtown Development Authority received notification of their award of an \$18 million TIGER grant from the Federal Transit Administration to undertake the first phase of "The Wave" Streetcar Project.

Broward County is served by two freight railroads: the Florida East Coast (FEC) and CSX. The FEC provides direct rail service to Port Everglades and is the only provider of single and double-stack intermodal service in southeast Florida. CSX is the State's largest railroad and operates train-loading facilities in Fort Lauderdale.

Monroe County

The U.S. 1 South improvement project from Florida City to north Key Largo, spanning both Miami-Dade and Monroe Counties, was completed in September 2011. The project has greatly improved safety and mobility to the Florida Keys. Upcoming projects over the next few years will involve resurfacing and bridge maintenance.⁴⁸

In recent years, regional mobility is addressed through concerted efforts of the South Florida Regional Planning Council, Treasure Coast Regional Planning Council, FDOT Districts IV and VI, Florida's Turnpike Enterprise, the Broward and Miami-Dade Metropolitan Planning Organizations (MPOs), the South Florida Regional Transportation Authority (SFRTA), and the Southeast Florida Transportation Council. Monroe County's transportation issues are elevated through its relationship with FDOT District VI.

Regional

The present transportation system is struggling to keep pace with increased traffic congestion, constrained lanes, limited room for expansion, and the desire for increased mass transit alternatives. In the Miami-Dade County, it is expected that by 2025 its population will increase by 39% and person trips by 34% when compared to current levels. In Broward County, the population is projected to increase by 48% by the year 2030. A total of 20% increase in population is projected for the tri-county region of Monroe, Miami-Dade, and Broward by 2040. In addition, as the tourism industry continues to grow in the Region, increased number of visitors will add additional pressure on transportation and other critical infrastructure. Roadways and public transit will need to expand, accordingly.

The movement of freight is hampered by congestion on the Interstate and Florida Turnpike systems. There are two ports and two rail corridors that operate within this region. The ports are the terminus of goods being shipped in and out of the Caribbean and Central America. Moving freight in this region can be

⁴⁷ i-595.com

⁴⁸ Florida Department of Transportation, District 6.

⁴⁹ Miami-Dade Transportation Plan to the Year 2025

⁵⁰ Broward County MPO Long Range Transportation Plan 2030 Update

⁵¹ University of Florida, Bureau of Economic and Business Research, *Projections of Florida Population by County, 2011-2040* (March, 2012).

enhanced by utilizing roadway facilities during off-peak times. In addition, freight movement can be improved by enhancing the quality and convenience of mass transit alternatives to encourage increased transit use by residents and visitors to the Region.

Recognizing that county lines are not important to commuters, there is now inter-county coordination of bus routes in Southeast Florida, some of which provide express bus service for commuters. Pedestrian sidewalk connectivity is being addressed in this region through MPO support and in addition, many municipalities are installing sidewalks to increase pedestrian mobility and safety.⁵²

Express toll lanes on Interstate 95 became operational in Miami-Dade County from north of Interstate 395 to just north of Golden Glades with electronic toll collection commencing in January 2010. Construction is underway to develop Phase 2 of these express lanes from north of the Golden Glades in Miami-Dade County to Broward Boulevard in central Broward County. At a cost of \$106 million, the project is scheduled for completion in late 2014. Express Bus service between Miami-Dade and Broward Counties began in January 2010. Studies are underway to determine the feasibility of extending the I-95 Express Lanes northward.⁵³

Trends and Future Needs

Long term investments to expand and maintain the Region's transportation/transit infrastructure are needed to sustain the mobility of people and freight in Southeast Florida. There is a continued emphasis on improving the built environment and developing and coordinating land use and transportation planning and investment.

There are several studies underway to create fixed route rail systems in region and State. Until recently there was no dedicated funding source to help operate such systems. In 2002, the Miami-Dade County electorate approved an additional ½ penny sales tax dedicated to transit projects. This year, Florida East Coast (FEC) Industries has recently announced their plans to build a privately owned, maintained and operated intercity passenger rail service from Miami to Orlando. The FEC estimates that passengers will complete the entire route in three hours, providing a streamlined alternative to roadways and air flights for tourists, business travelers, university students and other travelers who need to travel between South and Central Florida. Phase I of the project envisions four planned station stops, one each in Miami, Fort Lauderdale, West Palm Beach, and Orlando. The service will be a fuel-efficient alternative for travelers commuting from the Miami Urbanized Area to Orlando. The FEC projects that as many as 3 million cars will be removed each year from the State's roadways, alleviating traffic congestion and air pollution from auto emissions. Because 200 of the 240 miles of infrastructure and right-of-way are already owned by the FEC, its plan is to complete the ambitious project by 2014.⁵⁴

Regionally, there has also been interest to reestablish passenger rail service on the FEC within the tri-county area of Miami-Dade, Broward, and Palm Beach. Implementation of such service is not envisioned to compete with the current commuter service provided by the South Florida Regional Transportation Authority (SFRTA) on the CSX tracks. Because the FEC tracks are further east and will make many stops at the municipalities along the seaboard, service would be slower and more tailored to shorter trips than the SFRTA's Tri-County Commuter Rail Service. Plans include the ability to make limited transfers between the FEC and the CSX tracks for those passengers who need to combine the two services. At this time, there are two approaches for FEC passenger rail. The two approaches are very different from one another with one focusing on a long-term strategy and the other being shorter term. Both proposals are undergoing further analysis at the request of the Southeast Florida Transportation Council (SEFTC), a decision-making body composed of the



 $^{^{52}}$ Miami-Dade and Broward MPOs' Transportation Improvement Programs for Fiscal Years 2012/13 to 2016/17

⁵³ www.95express.com

⁵⁴ www.allaboardflorida.com

three MPO Chairs in the Miami Urbanized Area. Through regional collaboration following a study conducted by the Treasure Coast Regional Planning Council and a consultant, there is the potential to combine the two approaches into one cohesive plan.

The South Florida Regional Transportation Authority's (SFRTA) Tri-Rail commuter transportation along the CSX corridor, west of the FEC corridor, will continue to be a principal means of transportation in the Region. The SFRTA is exploring funding sources for Tri-Rail locomotive replacements and is committed to feeder bus service from train stations to central business locations along the north-south corridor. Strategies are being employed to improve service levels by increasing passenger train frequency, enhancing the quality and services available on the trains, and assuming responsibility for train dispatching along the South Florida Rail Corridor.

As the Florida's Turnpike Enterprise (FTE) continues to improve interchanges, expand, and maintain its mainline that runs north and south through Miami-Dade and Broward Counties, the FTE is also implementing an open road tolling collection system that will enhance mobility along the corridor by eliminating traffic congestion at traditional toll booths.

Strategic Findings/Policy Implications

The Region's ground transportation system works in synchronization with its airports and seaports as a vital economic engine that drives South Florida's economy. Maintaining and enhancing this infrastructure is critical. The impact that each planned improvement will have on other transportation modes of this system need to be considered together in order to maximize the benefits and efficiencies and ensure increased mobility of people and freight.

Continued integration of land use and transportation planning and investment is a necessity as the Region seeks to accommodate projected population growth in a way that will enhance the Region's quality of life and support economic, community and workforce development. Increased investments in mass transit, both the public transit bus system and commuter rail, should remain an emphasis in regional planning. Additional transit service, particularly east-west service, is needed to create a regional transit system that improves connectivity and mobility in the Region. Exploration and implementation of other technologies that are not petroleum dependent is encouraged to protect the Region's viability and sustainability.

Exploration and implementation of new technologies in improving ground transportation will continue to be an essential ingredient in the expansion of South Florida's economy. This will require gradual transformations in the Region's infrastructure and the public's readiness to accept these improvements. Maintaining public involvement through these multimodal and intermodal advancements will be paramount in implementing such transformations as:

- Continuing to enhance mobility through tolling, express regional mass transit, and advanced electronic message signage;
- Linking airports and seaports to ground transportation modes;
- Expanding commuter rail and rail freight transportation connectivity; and
- Creating the infrastructure needed to accommodate new alternative fuels such as compressed natural gas and electricity that will protect the Region's viability and sustainability.

The South Florida Regional Planning Council recognizes the efforts of many partnerships and organizations in guiding the future development of the Region's transportation system. A key leader in recent years in improving coordination of regional transportation planning is the Southeast Florida Transportation Council (SEFTC). Composed of the three Chairs of the Miami-Dade, Broward, and Palm Beach MPOs, the Council meets quarterly and utilizes a technical advisory committee to oversee regional long range planning and analysis of significant mobility projects and programs. Looking to the future, transformational leadership that

can transcend or eliminate intraregional competition and institutional barriers to promote greater synergy between the Region's myriad organizations and the range of infrastructure investments would be of great value in South Florida. Further consideration of optimal MPO coordination is encouraged.

Electricity and Energy

Significance

Energy, particularly electricity, is a basic and critical component of infrastructure that fuels economic development. Increased availability, diversity of energy sources, and reliability of energy provision are key to increased economic productivity.

Current Situation

Florida's electricity consumption is estimated to increase by nearly 30 percent over the next 10 years. In addition to petroleum, South Florida is largely dependant upon electricity as a source for heating, cooking and cooling. Less than 1 percent of the energy consumed in the state comes from fuels found in Florida, leaving it heavily reliant on imported sources of fuel.

There are two companies responsible for providing electric services in Monroe County. Florida Keys Electric Cooperative System⁵⁵ (FKEC) provides electric service to the Upper and Middle Keys from north Monroe County to the Seven Mile Bridge; the bridge which connects the Middle and Lower Keys. Keys Energy Services⁵⁶ provides electric service from south of the Seven Mile Bridge through the Lower Keys to Key West. Florida Power and Light⁵⁷ (FPL) is responsible for electric services throughout most of Broward and Miami-Dade Counties.

FPL obtains 71 percent of its electricity from clean-burning natural gas. Nuclear power, which produces no greenhouse gas emissions, accounts for another 21 percent of power production. The company also operates three commercial-scale solar energy centers in Florida.

Reducing petroleum usage is critical in securing a more sustainable future for the Region. In September 2011, the Council and its Florida Gold Coast Clean Cities Coalition received a one-year \$500,000 grant from the U.S. Department of Energy to support the development of a plan to accelerate electric vehicle use and charging infrastructure in the Region.

Partnering with FPL, the Council is:

- reaching out to public and private fleet operators interested in accelerating electric vehicle (EV) deployment;
- establishing criteria to select, site and prioritize public EV charging infrastructure;
- developing an education and outreach plan;
- identifying opportunities to standardize and streamline local and state government policy, regulations and permitting to help overcome EV adoption; and
- planning for a future demonstration project along the U.S.-1 corridor in Miami-Dade County involving the deployment of self-serve rental/car share electrical vehicles, public charging stations, and opportunities for smart grid and renewable solar technologies.

⁵⁵ Florida Keys Electric Cooperative Association (FKEC) located in Monroe County serves over 31,000 member-owners with two 138,000 volt transmission lines and 23,000 kilowatts of generating capacity. Its service area extends from north Monroe County to the Seven Mile Bridge.
⁵⁶ Keys Energy Services is a member of the Florida Municipal Power Agency's (FMPA) All-Requirements project. Keys Energy Services is connected to the mainland transmission grid through a 61-mile long 138 kilovolt transmission line. The line extends up along US 1 Highway through the Florida Keys Electric Cooperative service territory and ties into Florida Power and Light at the Miami-Dade-Monroe County line.
⁵⁷ FPL is the largest supplier of electricity within this region, serving more than 4.6 million electricity customers in eastern and southern Florida. FPL is among the largest and fastest-growing electric utilities in the US.

Encompassing the seven counties of Southeast Florida, this planning effort will be a critical tool in preparing communities in Monroe, Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, and Indian River for the deployment of electrical vehicles. The project is expected to result in comprehensive plans and recommendations to inform, facilitate, and expand the penetration of electrical vehicles and charging

infrastructure in the Region and beyond.

Trends and Future Needs

Over the five years from 2010 through 2014, FPL is investing approximately \$15 billion to strengthen and improve Florida's electric generation and delivery system. The company recently began to pursue the modernization of its 1960s-era, oil-fired Port Everglades plant in Broward County. Scheduled to open in 2016, the new, state-of-the-art energy center will use high-efficiency, combined-cycle natural gas technology to produce up to 1,277

Key Issues in Southeast Florida include:

- 1. The need to ensure there is enough generating capacity to meet demand;
- The need to enhance fuel diversity and explore alternative sources for generating energy, particularly low carbon, renewable "clean energy" fuels; and
- 3. Protecting or "hardening" the Region's electrical infrastructure to protect it from Florida's seasonal inclement weather and improve reliability of the electrical system.

megawatts of electricity, or enough power for approximately 260,000 customers. Over its 30-year operational life, the plant's dramatically improved efficiency is expected to produce more than \$400 million in net savings for customers, over and above the cost of construction. FPL is upgrading its St. Lucie and Turkey Point nuclear plants to expand their combined generating capacity by 490 MW, which is equivalent to building a new medium-sized power plant, and pursuing the licenses for two new nuclear units at the existing Turkey Point site.⁵⁸

As to the provision of electricity to the Keys, an 12-mile long distribution line currently serves the energy demand in North Key Largo. This line has already reached critical capacity during peak periods and is exceeding desirable levels under normal operating conditions. The FKCE will be installing the North Key Largo Substation to continue to provide efficient, safe and reliable electric service to the North Key Largo residential communities, a state park, and a national wildlife refuge. ⁵⁹

Weather patterns make the Region vulnerable to the ravages of hurricanes. Since the devastating 2004 and 2005 hurricane seasons, FPL has invested nearly \$1 billion in strengthening the electrical infrastructure against severe weather to improve reliability. Included in these ongoing improvements are pole inspections and replacements, critical infrastructure hardening, vegetation management and other important storm preparedness initiatives.

Strategic Findings/Policy Implications

Increased placement of underground electrical system will improve reliability and continuation of business and improve the quality of life of South Florida residents.

Alternative sources for generating energy need to be explored further, including but not limited to, wind and solar technologies that are being utilized in other parts of the country. Other programs aiming to reduce the usage of traditional fuel sources, such as rooftop solar panel installation and car-sharing program⁶⁰, are also important. Incorporating technological advancements to address energy challenges while securing public

⁵⁸ NextEra Energy Profile 2012

http://www.keysenergy.com/Oct2006-Sep2011-budget/22-24-StrategicPolicy.pdf

⁶⁰ For example, the "car2go" car sharing model in the City of Miami used in conjunction with Tri-Rail, Metrorail, Metrobus, or Metromover and rideshare alternatives, serves to substantially reduce the emissions and congestion common in dense urban cores. (www.car2go.com)

involvement in the decision-making and implementation processes will continue to be key in protecting the Region's sustainability.

Water and Sewer System

Significance

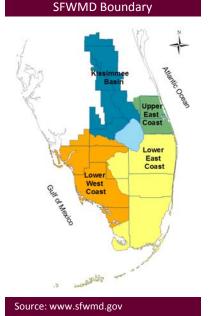
As the Region's population continues to grow, opportunities for the development of an increasingly diverse labor force and globally competitive business environment abound. These opportunities are tempered however, by increased pressures on the Region's potable water supply and treatment and transmission facilities for potable water and wastewater. Reinvestment in South Florida's older urban communities, with appropriate levels of redevelopment, is needed to accommodate projected regional growth. Properly planned and implemented, redevelopment can lead to more sustainable communities, a vibrant and competitive economy, and improved quality of life. Reinvestment in these areas, including the replacement of deteriorating infrastructure, repair and expansion of existing facilities, and development of alternative water supplies is needed to support economic development activities and investments.

Current Situation

The economic future of South Florida is threatened by some of the same factors that contributed to its past growth. Southeastern Florida was developed in the early part of the 20th century on the strength of its semitropical climate and flat, easy-to-modify terrain. The modern South Florida economy started in earnest with a combination of market forces and government policy. Henry Flagler built the Florida East Coast Railroad to bring in tourists and the construction workers that would build new towns and extend his railroad southward through the Florida Keys. Farmers came to South Florida, attracted by offers of free land and the ability to grow two crops per year. The Florida Legislature, at the urging of Governor Napoleon Bonaparte Broward, created the Everglades Drainage District which in 1906 began an extensive dredging project to drain the Everglades and provide land for development. The consequences of those combined actions are clear in today's South Florida:

- a large and growing population;
- an economy historically dependent on tourism and growthrelated industries such as construction and development as opposed to knowledge-based industries;
- an Everglades Ecosystem which is half of its original size. The
 development of aquifer recharge areas and wetlands, and
 manipulation of historic water flows have altered the natural
 system and in part, contributed to diminished water supply;
- strained systems for treatment and distribution of potable water and wastewater;
- periodic flooding; and
- intrusion of sea water into the Biscayne Aquifer, especially in times of drought.

Major water-related infrastructure issues continue to confront South Florida today. These issues include the inability of the Region's existing potable water supply to meet current and future water demand; aging, inadequate, and missing infrastructure⁶¹; septic tank usage in urban



⁶¹ Miami-Dade County estimates that needed repairs to its aging sewer infrastructure could easily reach in the hundreds of millions and could top \$1 billion based on past repair projects. Morgan, Curtis. Rabin, Charles. "Feds file complaint, demand Miami-Dade County fix faulty sewer lines. 2 May 2012.. Miami Herald

redevelopment areas, increased pressure on strained treatment and distribution systems for water and wastewater; stormwater runoff; salt water intrusion into drinking water wells; and vulnerability to flooding from potential climate change issues, sea level rise and ocean surge.

The South Florida Water Management District (SFWMD)⁶² is in the process of updating its 2011-2012 Lower East Coast Water Supply Plan (LECWSP). The Draft 2011-2012 Water Supply Plan Support Document reports that South Florida's population, including Palm Beach County, is expected to increase from 5.6 million in 2010 to more than 6.6 million by 2030, creating the need for an additional 146 million gallons per day (MGD) in public water supply. Although the population and water use demands have slowed since the previous LECWSP Update (2006) and the slower than anticipated implementation of specific Comprehensive Everglades Restoration Plan (CERP) components, the SFWMD has indicated that South Florida may no longer rely on the Everglades to meet growing water supply needs. The Regional Water Availability Rule was adopted by the SFWMD in 2007 to restrict urban withdrawals from the Biscayne Aquifer to those levels realized prior to April 2006, demands beyond these levels must be met with the production of alternative water supplies (AWS). Between 2006 and 2012, 292 AWS projects with a total of approximately 439 MGD capacity were identified and approved within the SFWMD. The total construction costs once complete will be \$3.37 billion. The SFWMD has contributed by approved funding in the amount of \$204 million.

Chapter 2008-232, Laws of Florida, prohibits construction of new ocean outfalls and requires that all six ocean outfalls in Florida cease discharging wastewater by December 31, 2025. Additionally, wastewater facilities that discharged wastewater through an ocean outfall on July 2, 2008, are required to install a reuse system no later than December 31, 2025. The law requires utilities to submit detailed plans to the State by 2013 for how they will meet the 2018 and 2025 requirements for eliminating ocean disposal of wastewater.

When completed, those plans will be incorporated into the *LECWSP*, which local jurisdictions will have to abide. Approximately 180 millions of gallons (MGD) of reclaimed water will result from implementation of those plans. Implementation of these statutory requirements will inordinately impact Miami-Dade and Broward Counties and their communities. At this time, there are concerns related to the costs of meeting the mandates and the ability to use the water that is scheduled to be recaptured.

The Comprehensive Everglades Restoration Plan (CERP), the frame work and guide for the restoration, protection, and preservation of the South Florida ecosystem, is an ongoing effort to help provide for the water-related needs of the Region. According to the 2012 South Florida



Environmental Report, 60 percent of the land needed to fully implement CERP has been acquired. In 2011, 455 acres of land at a cost of \$15.5 million were acquired in Miami-Dade County. The SFWMD estimates expenditures for CERP projects through 2016 to total approximately \$184.4 million in construction and \$250,000 for land purchase.

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⁶² The South Florida Water Management District is a regional agency created by state law. Its responsibilities include oversight and regulation of South Florida's water resources to ensure sufficient supply for the natural system, human system, and agriculture; other responsibilities include ecosystem restoration and management.

In addition to the legal requirements for developing AWS and rerouting wastewater disposal, funding to repair aging infrastructure is a pressing issue for the Region. Miami-Dade County's water and sewer infrastructure ruptured 65 times between 2010 and 2012. A recent study of Miami-Dade County's three water treatment plants and 14,000 miles of pipelines reports that it would cost approximately \$1.1 billion to replace only the most deteriorated sections of the system.⁶³ The County and federal authorities are in discussions over where to begin repairs and funding mechanism.

Miami-Dade Water and Sewer Department estimates in its 15 year capital plan that the cost to address regulatory requirements, infrastructure rehabilitation, and projected growth demands is almost \$11 billion, well over the original estimates for Everglades restorations, and costs that are likely to borne almost entirely by their customers. Many of the system upgrades are very energy intensive, meaning that both operating costs and debt service costs will be increasing dramatically. Public and political support for the rate increases necessary and a long-term commitment to achieve these needs (ultimately doubling or tripling rates) will have to be developed if vision of the plan is going to be realized.⁶⁴

Monroe County's Sanitary Wastewater Master Plan (2006) has fallen short due to a gap of approximately \$336 million in funding.⁶⁵ Infrastructure upgrades are critical for improving the water quality in canals and nearshore waters surrounding the Keys.

South Florida's drainage infrastructure relies on gravity to move water through the canal system from flooded areas and to maintain higher levels of fresh water in the canal systems that can help prevent salt water instrusion into the Floridan aquifer, the primary source of South Florida's fresh water supply. Salt water intrusion occurs in coastal freshwater aquifers when the different densities of both the saltwater and freshwater allow the ocean water to intrude into the freshwater aquifer. These areas are usually supporting large populations where the demanding groundwater withdrawals from these aquifers is exceeding the recharge rate.

Sea level rise in South Florida is creating significant impacts along the coast and affecting canal function. Malfunctioning canal systems cannot discharge water from low-lying areas during high rainfall events and high tide. A recent analysis by Dr. Jayantha Obesekera, the South Florida Water Management District's Department Director of Hydrologic & Environmental Systems Modeling, indicates that of the 28 coastal structures in Miami-Dade, Broward and Palm Beach counties, approximately 13% of the structures would lose 100% of their capacity when sea level rise is about 4 inches, about 67% with an 8 inch sea level rise, and over 80% of the structures with a 1.5 foot sea level rise. Southeast Florida sea level rise projections, calculated using the U.S. Army Corps of Engineers guidance (U.S.ACE2009) and Key West tidal data from 1913-1999 as the foundation, indicates that sea level rise is projected to be 3-7 inches by 2030 and 9-24 inches by 2060. Based on this projection, a sea level rise of one foot is projected to occur between 2040 and 2070 and continue into the future.

The ability of drainage infrastructure in South Florida to reduce flooding and saltwater intrusion will decline as the region's gravity fed drainage system begins to fail with sea level rise and rising tides. While dramatic changes may not occur in the next 5 years, it is highly probable that they will occur in the next 50 years.

⁶⁸ Southeast Florida Regional Compact Draft Regional Climate Action Plan (December 2011)



⁶³ Rabin, Charles. "Repair bill over \$1 billion to fix crumbling Miami-Dade water, sewage system, report says. 24 July 2012. Miami Herald

⁶⁴ Dr. Douglas Yoder, Deputy Director, Miami-Dade Water and Sewer Department, August 15^t 2012 correspondence

⁶⁵ Monroe County 2010 Comprehensive Plan, Evaluation and Appraisal Report (2012).

⁶⁶ Florida Atlantic University, Sea Level Rise Workshop Summary Report, February 16-17, 2010

⁶⁷ Bloetscher, Frederick. Florida Atlantic University Department of Civil, Environmental and Geomatics Engineering. Water 2012, 4(2), 367-388; Protecting People, Infrastructure, Economies, and Ecosystems Assets: Water Management in the Face of Climate Change. 11 April 2012.

Trends and Future Needs

Since 2010, Broward, Miami-Dade and Monroe Counties have reassessed their individual water-related infrastructure needs through the Comprehensive Plan's Evaluation and Appraisal Report Process. Common findings include that further research on the implications of climate change and sea levels rise on the Region's water and sewer infrastructure is needed and that slower growth rates will ease demand in the short term.

The region's projected water demands will need to be met and include: approximately 47 million of gallons per day (MGD) of additional water for Broward County by 2025; 30.25 MGD for Miami-Dade County by 2020; and Monroe County's demand will increase from 8.89 to 10.94 MGD by 2030.

South Florida has taken ownership of the serious and expensive water and sewer issues confronting it. Recognizing that strong growth management and infrastructure planning are central to development in the Region, local governments have developed and are in the process of updating their water supply plans that are supported by financially feasible capital improvement plans. Significant commitments are being made by local governments to develop alternative water sources through reclaimed wastewater, reverse osmosis treatment of highly saline deep ground water sources found in the Floridan Aquifer, and stronger enforcement of conservation regulations.

Strategic Findings/Policy Implications

Current sprawl development growth patterns coupled with continued population growth, deteriorating water and wastewater infrastructure, depletion of traditional water resources, and natural disasters threaten to constrain the Region's future economic development and job creation potential. Strategic infrastructure investments are needed to support continued economic growth and maintain and enhance quality of life. These investments should be directed to support a smart growth strategy, to foster resilience to hurricane and global climate change impacts, and enhance the Region's public water supply and wastewater infrastructure.

In order to achieve the Economic Expansion and Diversification goals of the *Strategic Regional Policy Plan for South Florida* and those of Enterprise Florida's *Roadmap to Florida's Future*, the state's 2010-2015 Strategic Plan for Economic Development, it is critical that infrastructure backlogs and improvements are addressed.

Given the enormous costs associated with infrastructure creation, maintenance, replacement and operation, affordable funding mechanisms are needed to ensure that needed investments are made in a timely manner and to address backlogs and keep pace with new growth. Maintenance of a competitive, diversified and sustainable regional economy means that the South Florida Region will need to significantly strengthen its infrastructure to support projected growth. It will be important to make sure, to the extent possible, that infrastructure investments are made in geographical locations that are most likely to be viable for at least the planned life of the infrastructure particularly in light of rising tides.

Environmental Constraints

<u>Significance</u>

While South Florida's high rate of growth sets the Region apart in terms of its ability to generate jobs and income for its citizens and revenue for its public systems and infrastructure, it also poses challenges to the Region's sustainability. In South Florida, the Region's susceptibility to natural hazards such as hurricanes and global climate change (including associated sea level rise) can limit the economic productivity and potential of its communities absent strategic smart growth planning, disaster mitigation and infrastructure investment

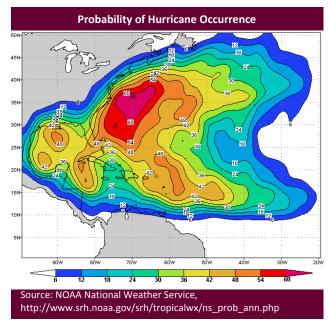
frameworks. South Florida must balance its population growth with the limitations and challenges posed by its environment to retain its competitive edge.

Current Situation

Hurricane Vulnerability

The South Florida Region is highly susceptible to hurricane landfall, disruption and damage. Statistics from the National Oceanic and Atmospheric Administration's Hurricane Research Center indicate that people living in Miami, Florida have a 48% chance per year of experiencing a strike by a tropical storm or hurricane.⁶⁹

Hurricane vulnerability is a key regional issue for both homeowners and businesses and for South Florida's economy. The disruptions caused by the active 2004 and 2005 hurricane seasons impacted South Florida's competitive advantage. Substantial insurance rate increases of more than 200% and unpredictable insurance policy cancellations dramatically reduced the economic and lifestyle appeal of South Florida to homeowners and businesses.⁷⁰ South Florida experienced



homeowner and business cost burden increases, a decline in the sales of commercial properties and an increase in the number of businesses and homeowners considering relocation. Business interruption was also an issue. According to *The Institute for Business and Home Safety*, one-fourth of all businesses that close due to a disaster never reopen.⁷¹

While South Florida is highly vulnerable to hurricane events, the Region is also home to the National Hurricane Center, the nation's prominent hurricane forecasting bureau, and has well developed, diverse and sophisticated emergency management programs. Each of the Region's three counties – Broward, Miami-Dade and Monroe – operate robust Emergency Management Agencies, which have Local Mitigation Strategies (LMS) in place designed to reduce community vulnerability to the impacts of identified natural and man-made hazard.

However, additional investments and technological capacity in emergency management and preparedness infrastructure are needed to keep pace with the additional populations relocating to South Florida. For example, the National Hurricane Center's critical QuikSCAT satellite, which enables more accurate hurricane forecasting, is expected to fail in the foreseeable future. Its replacement cost, currently estimated at between \$375 and \$400 million, is not currently budgeted⁷². This satellite is crucial to hurricane forecasting accuracy and evacuation planning.

⁷² Kaye, Ken. "Hurricane tracking satellite on its last legs, center director warns." 4 April 2007. Sun-Sentinel.



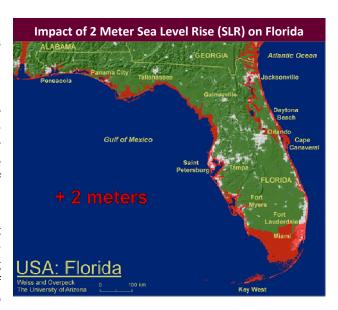
⁶⁹ National Oceanic and Atmospheric Administration http://www.aoml.noaa.gov/hrd/tcfaq/G12.html.

⁷⁰ Freer, Jim. "Insurance Crisis." 29 December 2006. *South Florida Business Journal*.

⁷¹ http://www.ibhs.org/business_protection/

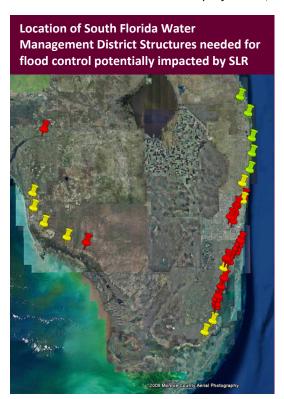
Global Climate Change and Sea Level Rise

One of the biggest challenges facing South Florida is the projected impact of climate change and sea level rise on the Region's infrastructure and economy, communities – (particularly vulnerable populations), environmental resources and unique ecosystems. South Florida is particularly vulnerable to sea level rise impacts because of its low topography; limestone foundation (which makes the building of barriers to prevent sea level rise costly if not impractical); dense coastal population; hurricanes and accompanying storm surge; and transportation, energy, and water management infrastructure that is located in coastal areas.⁷³ The impacts of higher sea levels are becoming increasingly manifest in higher incidences of flooding at high tide and salt water intrusion into the Biscayne Aquifer and drinking water wells.



Current Situation

Southeast Florida sea level rise projections, calculated using the U.S. Army Corps of Engineers guidance



(U.S.ACE2009) and Key West tidal data from 1913-1999 as the foundation, indicates that sea level rise is projected to be 3-7 inches by 2030 and 9-24 inches by 2060. Based on this projection, a sea level rise of one foot is projected to occur between 2040 and 2070 and continue into the future⁷⁴. Projected sea level rise will likely threaten South Florida's beautiful beaches and its tidal wetlands, which provide essential ecosystem services and include unique habitats which attract tourists from around the world.

Local, regional and federal partners are collaborating to develop agreement around the issues and strategies to improve climate resilience. Leaders in this area include the Southeast Florida Regional Climate Change Compact and Florida Atlantic University's Center for Environment Studies (FAU CES). FAU CES is the home of the Integrative Collaborative on Climate and Energy (ICCE)⁷⁵. Launched in the summer of 2009, the ICCE is a cross-university program creating relevant linkages across disciplines in order to advance basic and applied research in the area of climate change and adaptation. FAU has made climate change a research priority focusing on issues of adaptation in Florida's very vulnerable urban and natural systems. Working with

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⁷³ Dr. Leonard Berry, Florida Atlantic University Distinguished Professor of Geosciences; Co-Director of the Climate Change Initiative; Director, Center for Environmental Studies, April 19, 2012 Testimony to the U.S. Senate Committee on Energy and Natural Resources, Washington. http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=e0f5e6f1-34f1-4bd9-8243-8b3c77e1d27d

⁷⁴ Southeast Florida Regional Compact Draft Regional Climate Action Plan (December 2011)

⁷⁵ http://www.ces.fau.edu/climate_change

USGS and Florida Sea Grant, CES has developed a series of workshops examining the impact of current and future sea level rise on Florida's natural systems and the impact on Everglades Restoration. It has also sponsored a "summit" addressing the impact of sea level rise on Florida's transportation infrastructure. The ICCE focuses on issues of adaptation in Florida's very vulnerable urban and natural systems. University partnerships with the Florida Climate Institute and the University of South Florida provide a Florida-wide and Caribbean perspective. Cooperative work with USGS, SFWMD, USACE, Florida SeaGrant, the Southeast Florida Regional Climate Change Compact, and others provide a practical outreach for research findings. In addition, education and outreach at K-12, university, and community levels is an important component of FAU CES's work.

The Southeast⁷⁶ Florida Regional Climate Change Compact (Compact) ⁷⁷ is a collaborative effort among Broward, Miami-Dade, Palm Beach and Monroe counties, their municipalities and partners, who are working together to mitigate the causes, and adapt to the consequences, of climate change. The Compact was formalized in January 2010 following the 2009 Southeast Florida Climate Leadership Summit, when elected officials came together to discuss challenges and strategies for responding to the impacts of climate change. At that time the Compact outlined a collaborative effort to participate in a Regional Climate Team toward the development of a Southeast Florida Regional Climate Change Action Plan.

In subsequent years the Compact has worked to unite, organize, and assess the Region through the lens of climate change in setting the stage for action. Specific accomplishments include the development of regionally-consistent methodologies for mapping sea-level rise impacts, assessing vulnerability, and understanding the sources of greenhouse gas emissions. Collectively these work products provided the foundation for the draft "Regional Climate Action Plan," released for public comment in December 2011. The Action Plan calls for concerted action in reducing greenhouse gas emissions and anticipating and adapting to regional and local impacts of a changing climate to protect the assets of the Region's unique quality of life and economy, guide future investments, and foster livable, sustainable and resilient communities.

In addition to the development of policy and federal and state advocacy, the Compact has accomplished developed "Actionable Recommendations" for reducing greenhouse gas emissions and building climate resilience regionwide. Three work groups⁷⁸ developed recommendations which were subsequently reviewed and organized by a Compact Super Committee into the six categories of recommendations around Sustainable Communities and Transportation Planning; Water Supply, Management and Infrastructure; Natural Systems and Agriculture; Energy and Fuel; Risk Reduction and Emergency Management; and Outreach and Public Policy.

In January 2012, the Southeast Florida Regional Partnership's Sustainable Communities Initiative Executive Committee authorized staff to contract with the Compact to provide base information and technical assistance in support of expanding the Compact to include Martin, St. Lucie, and Indian River counties. The work of the Compact is an important part of the "Seven50: SE Florida Prosperity Plan" currently under development by the Southeast Florida Regional Partnership.

Trends and Future Needs

To remain economically competitive, South Florida should become as disaster resilient and disaster ready as possible. An important regional goal is to ensure that the greatest number of workers and businesses are prepared for hurricanes as possible and to ensure that the appropriate support services and policies are in place to aid them. Programs and policies should be considered or enhanced that help worker wages keep

⁷⁸ The three work groups were the Built Environment, Transportation, and Land & Natural Systems.



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⁷⁶ "Southeast Florida" for purposes of the Compact is defined as Monroe, Miami-Dade, Broward, and Palm Beach counties.

⁷⁷ http://www.southeastfloridaclimatecompact.org/

pace with the rising cost of property insurance, that reduce property insurance costs and minimize poststorm disruption and that focus on business disaster preparedness.

The South Florida Region needs to define its path forward in regard to how it will respond to global climate change and sea level rise, including what areas it will protect; how it will protect those areas; how much it will cost to protect those areas; and how it will fund this protection. The U.S. Environmental Protection Agency has identified three potential community adaptation techniques that the South Florida Region could explore: shoreline armoring to hold back the water; elevation of community structures and land; or allowing the natural retreat of tidal wetlands and beaches to inland areas⁷⁹.

Strategic Findings/Policy Implications

Advance preparation and adaptation for global climate change impacts and the development of mitigation measures to minimize greenhouse gas emissions are important policy and planning priorities for all vulnerable communities, especially the South Florida Region. The region's communities need to prepare for the impacts of sea level rise and other global climate change impacts. Without these measures, global climate change and its associated sea level rise impacts will diminish the Region's economic appeal, especially to investors.

To continue to create, recruit, retain and expand businesses as well as to maintain an attractive regional quality of life for the Region's workers, additional strategic investments are needed in natural disaster planning, mitigation and preparedness activities, including funding of the technology to support these efforts.

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⁷⁹Titus, Jim. *In press*. US Environmental Protection Agency. "An Overview of the Likelihood of Shore Protection along the Atlantic Coast of the United States."

4. Business Climate & Competitiveness

Significance

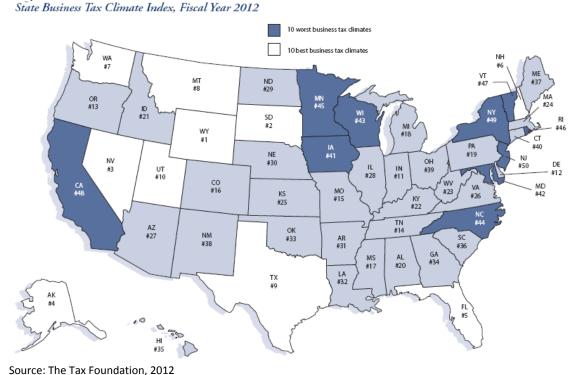
When it comes to the corporate process of choosing the optimal location for a new business investment, factors such as taxes and incentives, regulatory climate, proximity to raw materials and customers, adequacy of infrastructure and public services, availability of skilled labor, the quality of the education system, etc. are a few of the factors that play an important role in the decision-making process. A business friendly tax system and incentives⁸⁰ can make the Region a more attractive choice for new and existing businesses that bring desired economic and employment growth.

An easy to understand permitting system and regulatory climate are important aspects of an attractive business environment. By impacting the bottom line, a region's permitting and regulatory climate often determines whether a business will expand and thrive, or fail. A collaborative, seamless, consistent, and timely customer service provided by state, regional, and local agencies to businesses is important. The State and the Region's business climate must be healthy, competitive, and fair for all existing and new businesses.

Current Situation

Florida is a tax friendly state for businesses and residents. With no personal income tax, 5.5% corporate income tax, and 6.0% retail sales tax, Florida ranks high when compared to other states in the U.S. According to the 2012 State Business Tax Climate Index published by the Tax Foundation, Florida ranks No. 5 on the overall tax environment, with No. 1 being the best, and does well across almost all of the component tax ranks – No.1 for income tax, No. 5 on unemployment insurance tax, No. 12 on corporate tax, No. 19 on sales tax, and No. 24 on property tax. Below is the State Index map for the U.S.

Graph 9: State Business Tax Climate Index, Fiscal Year 2012



80 Incentives should be used strategically with care taken to not hurt existing businesses.

The State of Florida and South Florida's counties have various incentive and grant programs for business recruitment and expansion. At the state level⁸¹, the **Qualified Target Industry Tax Refund (QTI)**⁸², incentive is available to companies that create high wage jobs in targeted high value-added industries. This incentive includes refunds on corporate income, sales, ad valorem, intangible personal property, insurance premium, and other taxes. The **Qualified Defense and Space Contractor Tax Refund (QDSC)** gives Florida defense, homeland security, and space business contractors a competitive edge in consolidating contracts or subcontracts, acquiring new contracts, or converting contracts to commercial production. The **Capital Investment Tax Credit (CITC)** is used to attract and grow capital-intensive industries in Florida. The **High Impact Performance Incentive Grant (HIPI)** is a negotiated grant used to attract and grow major high impact facilities in Florida. In addition, Florida offers incentives that encourage investment and job creation in targeted locations (Enterprise Zones, Brownfield Sites, Local Government Targeted Urban Areas) and communities (Jobs for the Unemployed Tax Credit). **Governor's Quick Action Closing Fund** is an incentive to companies to offset the costs of location, employee training, and infrastructure.

There are also workforce training incentives⁸³ at the state level. The **Quick Response Training (QRT)** program is an employer-driven training program designed to encourage and support new value-added businesses. The QRT provides existing Florida businesses with technical assistance and training for expansion. The **Incumbent Worker Training (IWT)** program is available to all Florida businesses that have been in operation for at least one year prior to application and require skills upgrade training for existing employees. Priority is given to businesses in targeted industries, Enterprise Zones, Historically Underutilized Business (HUB) Zones, Inner City Distressed areas, Rural Counties and areas, and Brownfield areas.

In addition to grants and incentives provided to businesses directly, the **Economic Development Transportation Fund (EDTF)** is an infrastructure incentive⁸⁴ fund accessible to local governments. This fund supports public transportation improvements which are needed to resolve transportation challenges that will positively impact a specific company's location or expansion decision. The award amount is based on the number of new and retained jobs and the eligible transportation project costs, up to \$3 million.

At the local level, Miami-Dade County offers the **Targeted Jobs Incentive Fund (TJIF)**⁸⁵. The value of this grant program for a particular eligible company is based on real and personal property investment and wage rates within Miami-Dade County. Broward County offers the **Broward County Job Growth Incentive (JG)**⁸⁶, which is direct cash incentive designed to encourage the growth of high-skill/high-wage qualified jobs in Broward County. Local support is required from both the municipality and Broward County.

Recently analysis by the Florida Department of Economic Opportunity (DEO) indicated that the requirements involved in opening businesses and receiving licenses and permits change frequently and are increasingly complex. Many businesses now operate at a regional scale, but still must navigate licensing and permitting processes of multiple counties and cities, in addition to multiple state agencies. Business climate issues often are magnified for small and minority-owned businesses that do not have the resources to devote to completing paperwork, learning new processes or recruiting staff.

⁸⁶ Broward County, http://www.broward.org/econdev/business/pages/businessattractionrecruitment.aspx



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⁸¹ Enterprise Florida, http://www.eflorida.com/Why_Florida.aspx?id=472

⁸² 20% match is required by local governments.

⁸³ Workforce Florida, http://www.workforceflorida.com/PrioritiesInitiatives/FundingOpportunities/QRT.php http://www.workforceflorida.com/PrioritiesInitiatives/FundingOpportunities/IWT.php

⁸⁴ Enterprise Florida, http://www.eflorida.com/Why_Florida.aspx?id=472

⁸⁵ Miami-Dade County, http://www.miamidade.gov/housing/business/targeted-jobs.asp

Trends and Future Needs

Designing grants and incentives with a clear understanding of the changing needs and challenges faced by businesses is key to attracting additional business investment while leveraging and maximizing returns on state and local investment. Enterprise Florida's 2011 Incentive Report, ⁸⁷ indicates that demand for assistance with non-transportation infrastructure such as water and sewer, a transferable tax credits program, and financing programs are increasing. Changing business needs and conditions require that economic development professionals continually evaluate the mix, effectiveness and flexibility of the business incentive programs offered to ensure that the needs of the entrepreneurs and businesses they hope to attract are met. Variations in tax system will have impact on the type of industry that a state or region attracts. For example, capital intensive industries prefer a community with low property taxes while labor intensive firms with highwage workers prefer low or no personal income tax.

Tax credit programs are attractive to businesses but not all projects are eligible. According to Enterprise Florida's 2011 Incentive Report, businesses often find that "...their State corporate income tax liability will be minimal; therefore tax credits are not meaningful. However, if the credits were able to be sold or transferred to another entity, it would mean significant value."

Various initiatives are underway to find way to streamline licensing, permitting, development review and other regulatory process at the local level. Economic development agencies in the Region have been promoting simplified, timely, customer focused services to businesses. For example, Broward County and its municipalities are engaged in developing a streamlined development review process for high-impact, targeted industry businesses that are relocating or expanding in Broward County. Greater Fort Lauderdale Alliance launches a "Platinum Cities" program to recognize the communities that adopted a streamlined permitting ordinance or resolution, have an online permit tracking system, and have designated a staff representative as a "concierge" to businesses who are going through the permitting process. In Miami-Dade County, reduction and consolidation of county offices which are involved in regulation has taken place to simplify and improve permitting.

Strategic Findings/Policy Implications

As capital markets tighten as a result of the weakened global economy, start-ups and small businesses find it harder and harder to access the capital they need to translate their ideas into usable technology. The need for financing programs has grown in recent years. If Florida is to retain these talented entrepreneurs, the State must continue to support financing tools which provide access to needed capital for diverse needs while protecting the State's investment.

On one hand, a business friendly tax system, incentive program, and an easy to understand permitting and regulatory climate can enhance the Region's ability to attract new businesses that will generate new economic and employment growth. On the other hand, adequate investment in infrastructure and public services rely upon the taxes collected from businesses and households. A virtuous circle of taxation and growth forms a solid base for a sustainable competitiveness of a region. The phrases we often hear that "higher taxes hurt growth" and that "lower taxes stimulate growth," may be oversimplifications of taxation and growth literature⁸⁸. There is a fine balance between taxation and provision of public services in order to optimize the long-term business environment of a community.

In addition, as identified at the Statewide 5-Year Strategic Plan by DEO, we need to "...reform and streamline licensing, permitting, development review and other regulatory processes to make them simple, efficient,

⁸⁸ Public Services Positively Impact Growth: A Review of Taxation and Growth Literature, Alberta H. Charney, Ph.D., 2010. http://ebr.eller.arizona.edu/arizona_fiscal_issues/public_services_positively_impact_growth.aspx



⁸⁷ Enterprise Florida, http://www.eflorida.com/ContentSubpage.aspx?id=206

predictable and, where appropriate, consistent across agencies and jurisdictions as well as provide simplified, timely, customer focused services to businesses at the state, regional and local levels."

5. Civic & Governance Systems

<u>Significance</u>

Even the most ardent supporters of free markets recognize the role of structures in place to deliver services, set rules that organize business and society, and provide vehicles for the public to engage in, influence, and change the way society works. These include things like constitutional integrity, ethics and elections, transformational leadership and more.

In a democratic society, public, private, non-profit and civic institutions and processes contribute to the stability and prosperity of a region. While diversity is one of the Region's greatest strengths, it also creates challenges as groups feel disconnected from each other. Regional leadership development must focus on engaging the full population spectrum that is South Florida and building the social capital needed to transcend differences and work for the common good on issues of regional and local importance. As the Region's demographics change and population grows, there is a need to identify, train, and engage new and representative leaders.

Efficient and effective governance of the Region's primary systems is needed to support and sustain the Region's partnerships to accomplish South Florida's economic and quality of life goals. With limited public resources available to meet multiple public needs and priorities, the Region will need stable and forward looking regional institutions to stay competitive in a world economy.

Current Situation

In some respects, South Florida is an accidental region defined by geography and common environmental concerns. The region's cities have literally grown to meet each other. Communities that have long thought of themselves as a unique oasis are finding that their economic fortunes are intertwined with those of the city next door or down the coast.

Unlike most major metropolitan regions, South Florida did not grow around a central city. Instead growth has spread from east to west, from the Atlantic to the Everglades. Most of this region's residents came to it from somewhere else; historically from the urban centers of the Northeast and Midwest. That has changed; in the last five years, 8 of every 10 new residents came to South Florida from other countries.

This pattern of regional evolution and growth has contributed to a duplication of effort and fragmentation as county-based organizations work on similar missions.

Government Sector

The South Florida Region represents approximately 10% of the geography of the state of Florida and 30% of its population. Within the Region, there are myriad governmental entities that often provide vast and sometimes overlapping services to residents, businesses, and visitors. The Region consists of:

- Three counties:
- Seventy-one municipalities;
- Two of the Florida Department of Transportation's Seven Districts as well as part of the Turnpike System;
- Three School Districts, including the nation's fourth (Miami-Dade) and sixth (Broward) largest Districts;
- One of the five Water Management Districts;
- Two of Florida's 15 Metropolitan Planning Organizations; and
- One of the 11 Regional Planning Councils.

It is not anticipated that the listed set of governmental organizations will expand in the future, with the exception of the number of municipalities. Since 2000, there have been nine municipal incorporations in Florida. Seven of the nine incorporations occurred in South Florida (five in Miami-Dade County and two Broward County).

Non-Profit Sector

The needs of residents, businesses, and visitors are not met solely by the public sector. Non-profit organizations provide an array of services that complement and supplement public sector activities. The following is a summary of the non-profit organizations operating in the Region as of March 2012.

Table 4: Summary of the Non-profit Organizations Operating in the Region as of March 2012

COUNTY	# OF REGISTERED NON-PROFITS	% OF STATE TOTAL	TOTAL REVENUE REPORTED	% OF STATE TOTAL	TOTAL ASSETS REPORTED	% OF STATE TOTAL
BROWARD	6,597	8.60%	\$4,570,689,097	6.20%	\$7,164,700,533	4.40%
MIAMI-DADE	7,763	10.10%	\$11,537,249,532	15.60%	\$19,478,831,794	11.80%
MONROE	566	0.70%	\$302,328,831	0.40%	\$581,446,866	0.40%
REGION	14,926	19.35%	16,410,267,460	22.23%	27,224,979,193	16.54%

Source: Internal Revenue Service, Exempt Organizations Business Master File (2012, Mar) and The Urban Institute, National Center for Charitable Statistics, http://nccsdataweb.urban.org/, 2012

Voter Participation

Another indicator of the civic commitment of an area is the level of participation by register voters. The Florida Department of State's Division of Elections maintains data regarding voter turnout. The following table illustrates general election voting behavior in the Region, every two years, beginning with the 2004.

Table 5: General Election Voting from 2004 to 2010

ELECTION	BROWARD	MIAMI-DADE	MONROE	REGION	FLORIDA
2004 GENERAL					
REGISTERED VOTERS	1,058,069	1,058,801	51,377	2,168,247	10,301,290
TURNOUT	709,724	778,953	39,629	1,528,306	7,640,319
PERCENT	67.10%	73.60%	77.10%	70.49%	74.20%
2006 GENERAL					
REGISTERED VOTERS	923,647	1,090,048	47,175	2,060,870	10,433,148
TURNOUT	411,489	410,985	24,235	846,709	4,884,544
PERCENT	44.60%	37.70%	51.40%	41.09%	46.80%
2008 GENERAL					
REGISTERED VOTERS	1,008,656	1,243,315	50,136	2,302,107	11,247,634
TURNOUT	739,873	872,260	40,690	1,652,823	8,456,329
PERCENT	73.40%	70.20%	81.20%	71.80%	75.20%
2010 GENERAL					
REGISTERED VOTERS	1,041,641	1,205,770	51,261	2,298,672	11,217,384
TURNOUT	426,973	499,853	26,540	953,366	5,460,573
PERCENT	41.00%	41.50%	51.80%	41.47%	48.68%

Source: Florida Department of State's Division of Elections

In recent years, private, public, nonprofit entities and engaged residents have begun the process of working together as evidenced by the development of organizations and partnerships such as the Southeast Florida Regional Partnership, the South Florida Regional Business Alliance and the South Florida Regional Transportation Authority. The Miami-Dade, Broward, and Palm Beach County MPOs work together through the Southeast Florida Transportation Council to discuss and enhance the coordination of regional transportation. In the past, the Miami-Dade, Broward, and Palm Beach county commissions have met together periodically as do the South Florida and Treasure Coast Regional Planning Councils and the leadership of the three county-based economic development organizations. State agencies such as the South Florida Water Management District and the Florida Department of Transportation typically cover more than one county.

As discussed above, South Florida has numerous public entities, general governments, special districts, and special authorities in place that focus on municipal and county level issues. Multi-county organizations such as the South Florida Regional Planning Council and the South Florida Regional Transportation Authority have limited scope of responsibility and strive to work closely with existing county level organizations. Privately created organizations such as the South Florida Regional Business Alliance and the Urban Land Institute Southeast Florida / Caribbean Chapter strive to work regionally with existing county level economic development organizations, transportation partners and others to impact public policy in South Florida, Tallahassee and Washington, D. C.

Trends and Future Needs

In other regions of Florida organizations such as the Central Florida Partnership and the Tampa Bay Partnership have evolved to facilitate county level economic development activities and to impact state and federal policy. Local governments in Southeast Florida have taken the initiative to create the Southeast Florida Regional Climate Change Compact (Monroe, Miami Dade, Broward and Palm Beach) to provide leadership on climate resilience issues in the Region. The seven-county Southeast Florida Regional Partnership, a public, private, nonprofit partnership which developed and secured a US HUD Sustainable Communities Regional Planning Grant in 2010, is a promising sign that greater regional collaboration is possible.

Strategic Findings/Policy Implications

Management reviews of how to make South Florida's existing governance structures more effective and efficient should be undertaken. Existing regional organizations or multi-county collaborations should be the first options to improve regional civic and governance.

Existing and future plans should be organized under a unifying regional vision, building on the strong planning history at the local and sub-regional levels and providing a planning framework to align local and subregional plans with overarching regional goals.

A culture of planning and investment that integrates economic development, land use, transportation, water supply, environmental restoration and conservation, urban planning and design, and human systems planning supported by budget allocation processes to create a more sustainable and prosperous South Florida needs to be encouraged, developed and supported.

A regional social capital asset mapping and survey project should be undertaken to identify community engagement and leadership assets and gaps and measure the community's social fabric. This analysis will assist in the development of effective communication mechanisms to inform and receive input, understand how people connect to each and social institutions in the Region, and create non-traditional leadership development and engagement techniques.

6. Quality of Life & Quality Places

Communities for a Lifetime

Significance

Changing market conditions have resulted in development shifts from suburban communities to urban, pedestrian friendly neighborhoods with rentals, live-work spaces, restaurants and other quality of life amenities. The natural advantages of warm weather, accessibility to water bodies, and plentiful open space that South Florida historically touted, by themselves are no longer enough to attract and retain residents. Significant demographic shifts will affect the Regions ability to provide housing, transit, medical care and social services. Adaptations to sidewalk, roadway, and building design will also have to be considered as affordable rentals, generational housing, and other housing mixes in vibrant, walk-able neighborhoods filled with amenities; have emerged as the communities of choice. By not quickly responding to changing development patterns and community preferences, the Region is primed to lose talent, tax bases, and economic development drivers. The loss of important economic contributors can be stemmed by providing vibrant communities for all ages.

Current Situation

The 1990 and 2000 Census showed continuous population growth of over 20% every ten years, which was inline with overall growth within the state. The promise of warm weather, beaches, large lots, and inexpensive homes made the Southeast Florida region an attractive destination to people of all ages. The economic downturn of 2007 resulted in high unemployment, lower property values, and high foreclosure rates. Concurrently, high fuel costs have resulted in higher prices of consumer goods. Residents of the Southeast are paying more than the national average price for food and beverages, housing, and transportation. While medical care costs are less than the national consumer price index the high cost of other essential items may be a deterrent in attracting new residents to the Region.

Table 6: Annual Average Consumer Price Index, December 2010

,					
DECEMBER 2010 ANNUAL AVERAGE CONSUMER PRICE INDEX					
	Miami CMSA	U.S.			
Food & Beverage	228.328	219.984			
Housing	224.086	216.256			
Transportation	202.080	193.396			
Medical Care	372.588	388.436			

Source: U.S. Department of Labor, Bureau of Labor Statistics

Reduced economic opportunities, underwater mortgages, low property values, decreased savings, and increasing taxes have negatively impacted population growth, which was only 9.1% between 2000 and 2010. Overall growth within Florida was 17.6% for the same timeframe. During the past decade both Broward and Miami-Dade Counties have seen population growth but at much lower rates that in the previous ten years. Monroe County lost 8.2% of their population between 2000 and 2010, to out-migration. Miami-Dade is the only county in the Region that experienced an increase in population.

The scarcity of well-paying jobs and affordable housing units is believed to have contributed to many educated residents aged 24-35 leaving the Region. According to the Beacon Council, 27.8% of South Florida's

young professionals have a Bachelors degree which is low in comparison to Seattle's at 37.4%.⁸⁹ Adults aged 24-35 are seeking cities with good quality of life and high paying jobs, affordable housing and colleges and universities, according to the Brookings Institution. American Community Survey Data shows that on average the Region annually lost 5,724 of its population aged 24-35 to other better positioned regions.⁹⁰ The loss of this young, professional cohort is significant because this age group is closely linked to innovation and talent.

Seniors along with other age groups want the ability to walk to supermarkets, restaurants, cultural attractions, entertainment and other activities. The national population aged 65 and over will experience a 55% increase by 2030. In South Florida the population 65 and older is expected to increase from 613,906 to over 1 million by 2030, mirroring national growth trends for this population. Florida AARP estimated 18 million boomers will relocate to areas that provide vibrant, pedestrian-friendly lifestyles. South Florida is poised to lose this important tax base and local economic driver if the housing and community amenities this age cohort desires, is not provided. Greater social and financial burdens will be placed on local governments to provide supportive services if the appropriate infrastructure is not available to allow aging in place.

Traditional housing progressions have been interrupted as economic conditions have prevented people from choosing housing that reflects their "life stage." Unable to trade-up, many homeowners and renters are choosing to stay in their current housing situation, consider co-housing or perhaps downsizing. While there was a reduction of home ownership throughout the U.S. from 66.15% in 2000 to 65.10% in 2010 (1.64% change), the decline was more significant in South Florida from 63.15% to 60.47% or 4.2% reduction. Home ownership rates within Florida experienced a 3.88% decline from 70.08% to 67.36% for the same time period. Inversely, rental demand increased nationwide from 33.81% to 34.90% or (3.22% increase) between 2000 and 2010. South Florida experienced a greater demand for renter-occupied housing with a 36.85% renter-occupied rate in 2000 and a 39.53% rate or 7.27% increase, in 2010. The overall demand for renter occupied housing in Florida increased by 9.09% from 29.92% to 32.64% in the same period. Educated young professionals, retirees, and other potential new residents are choosing communities with access to a variety of housing types, cultural attractions, educational institutions of higher learning, critical health care facilities, efficient public transportation systems, safe pedestrian networks, open space, recreational waterways, and other quality of life amenities.

Trends and Future Needs

Several intergenerational community models have emerged such as Communities for a Lifetime, Naturally Occurring Retirement Communities (NORC) and Aging in Place. These models ensure residents can remain active and engaged from cradle to grave by offering features such as easy access to healthcare, close proximity to colleges and universities to promote lifelong learning, a mix of housing types and prices including affordable housing rentals and live-work spaces. The Florida Department of Elder Affairs and the AARP have partnered to promote a statewide initiative that assists municipalities in planning and implementing physical and social improvements that benefit residents of all ages. Program components include intergenerational housing, transportation, employment, health and social/community services. There are currently nineteen State designated "Communities for a Lifetime" within the Region; twelve are in Broward County and seven are located in Miami-Dade County.

Strategic Findings/Policy Implications

Neighborhood amenities continue to be a driving factor when residential location decisions are made. Intergenerational communities that sustain healthy lifestyles and provide access to cultural and social

⁹² Florida Department of Elder Affairs. Communities for a Lifetime. http://www.communitiesforalifetime.org/



⁸⁹ The Miami Herald. Brain Drain? Many young South Floridians seek brighter economic prospects elsewhere. Tuesday, December 13, 2011. Deborah Acosta.

⁹⁰ The Brookings Institution. Up Front. Young Adults Choose "Cool Cities" During Recession. October, 28. 2011. William H. Frey.

⁹¹ BEBR/EDR (April 1, 2011 base)

amenities will be desirable to existing South Floridian and will be important in attracting new businesses to the Region; by positively addressing the quality of life issues about housing, education, transportation and amenities of concern to relocating employers and their employers.

Health and Built Environment

Significance

Increasing health disparities (such as obesity, diabetes, and hypertension) in the Region have prompted assessments of the correlations among race, income, and location and factors such as housing, education, transportation choices, environmental conditions or the ability to access easily recreation opportunities and healthy foods that allow us to live healthier lives. There is a greater understanding and acknowledgment of how the places that we plan and build can inadvertently affect their occupants in a negative manner. The lack of fully integrated planning across issue areas such as mobility, recreation, and access to healthy foods has resulted in higher heath care costs for employers and their employees and reduced productivity due to illness. These health disparities have created a disproportionate social burden that has a deleterious effect on our communities. South Florida's economic health can be improved with modifications to the physical environment to promote more active and healthy lifestyles.

Current Situation

Limited access to healthy foods in poor and minority neighborhoods has been thought to contribute to the prevalence of diet-related health disparities such as obesity and diabetes. Many communities in the Region are considered food deserts because there are no or limited healthy food retail options in the communities, available stores may not be accessible by walking or transit and many residents do not have the means to travel outside of their communities to purchase healthy food items. The Center for Disease Control's (CDC) Division of Nutrition, Physical Activity and Obesity measures the healthfulness of the food environment by calculating the number of healthy and less healthy food retailers within census tracts across each state. ⁹³ The resulting Modified Retail Food Environment Index (mREFI) represents the percentage of healthy food retail establishments. While the mREFI score for Florida and the Nation is 10 (meaning that 10 out of 100 (10%) of food retail stores offer healthy food items such as fruits and vegetables), a mREFI map of Florida highlights areas in the Region with lower scores. The U.S. Department of Agriculture's (USDA) Food Atlas identifies several neighborhoods in the Region as food deserts.

Regular physical activity is beneficial to overall health; controls weight and reduces risk of cardiovascular diseases and diabetes. He natural and built environments of South Florida present several challenges to ensuring physical activity. Many residents are unable and unwilling to walk during the summer months because of the heat and inclement weather. Pedestrian and bike mobility is further encumbered by missing and insufficient sidewalks and limited bike path availability. Pedestrian traffic signals are often too short in duration to ensure the safe crossing for all residents across roadways especially youth, seniors and physically disabled populations. In



⁹³ Centers for Disease Control and Prevention (CDC). National Center for Chronic Disease Prevention and Health Promotion. Division of Nutrition, Physical Activity, and Obesity. Census Tract Level State Maps of the Modified Retail Food Environment.

95 http://t4america.org/docs/dbd2011/Dangerous-by-Design-2011.pdf

⁹⁴ CDC. Physical Activity for Everyone. http://www.cdc.gov/physicalactivity/everyone/health/index.html

2011, the Miami-Fort Lauderdale-Pompano Beach MSA was ranked the fourth "Most Dangerous Large Metro Area" based on pedestrian deaths and a "pedestrian danger index" by Transportation for America, a diverse coalition of organizations working on transportation reform. Most communities have parks but the location of the parks may not be convenient to residents. Existing parks may be more suited for passive pursuits because they do not have fitness stations, outdoor gym equipment or formal sports areas.

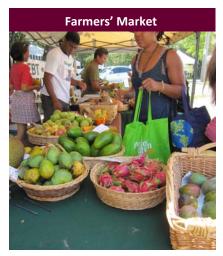
<u>Trends and Future Needs</u>

The Miami-Dade County Health Department (MDCHD) received funding from the Center for Disease Control and Prevention (CDC) to address obesity reduction and prevention through increased community access to healthy foods by facilitating system, environmental, and policy changes. Some of the strategies employed included establishing a farm-to-school program that incorporates locally grown produce into school cafeterias; installing healthy vending machines in schools and parks; building the organizational capacity of the South Florida Food Policy Council; assessing the nutritional environment of priority areas; identifying policies and incentives that improve healthy food access; and facilitating the implementation of Farmers' Markets and Community Gardens within Miami-Dade County.

The Broward Regional Health Planning Council (BRHPC) is using funding from the CDC to establish a local food distribution system. The CDC's Community Transformation Grant supports public health efforts to reduce chronic diseases, promote healthier lifestyles, reduce health disparities and control health care spending. The BRHPC is working with various community partners to ensure increased access to healthy foods and physical activity by improving nutrition quality and increasing physical activity opportunities throughout the

community; improving the quality and amount of physical education and physical activity during the school day and after school programs through the YMCA SPARK (Sports, Play, and Active Recreation for Kids) Program; increasing access to healthy foods through urban farms, farmers markets and community gardens; and identifying incentive programs that can support small store initiatives, new grocery store development, and farmers markets.

Transit-Oriented Development and national programs such as "Safe Routes to School" and "Complete Streets" promote pedestrian and non-automobile accessibility in neighborhoods. Through the Complete Streets program community design standards are developed to make streets safe for all users, including those who walk, ride bikes, and use public transportation. The Trust for Public Lands is partnering with Miami-Dade County to fund outdoor "Fitness Zones" (private gym equipment in an outdoor setting) in parks county-wide. Miami-Dade



County seeks to create parks in vacant strip malls as redevelopment catalyst through its "Redfields to Greenfields" initiative. Ensuring that parks are accessible by transit is another Miami-Dade County priority. "Pop-up" parks or temporary recreational installations are a form of tactical urbanism designed to bring organized physical activities to communities with limited park access.

Strategic Findings/Policy Implications

Healthy communities that allow for regular physical activity and a variety of healthy food options are socially desirable. The social and economic attractiveness of the Region can be improved by planning and implementing policies and projects that ensure and sustain safe and efficient mobility, and equitable access to healthy foods and recreational activity.

Food Systems Planning

<u>Significance</u>

According to the United States Department of Agriculture, "empirical studies suggest that local foods can have a positive impact on local economic activity through import substitution and localization of processing activities." Anecdotal information suggests most of the food grown within the Region is not consumed by its residents but is instead shipped to other states. While this practice may benefit local, large-scale food growers it creates an increased reliance on out-of state food production. Higher food production and transportation costs have been passed on to consumers. There has been an increased interest in local food production and distribution in response to rising food costs and food safety issues. Some municipalities in the Region have amended zoning laws and permitting practices to allow community gardens, small urban farms, and farmers markets in residential areas. The creation of Regional Food Hubs would provide an opportunity to facilitate the various local food production and distribution efforts, provide employment opportunities and have a positive and significant impact economically, socially and environmentally.

<u>Current Situation</u>

The term food system is used to describe the inputs, process and outputs "involved in feeding a population: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items. A food system operates within, and is influenced by, social, political, economic and environmental contexts. It also requires human resources that provide labor, research and education." ⁹⁷

Within the past year five years, the Region has seen an increase in the number of community and municipal-based farmers markets and community gardens to facilitate local food distribution and consumption. Federal funding made the creation of five new markets that served communities with limited access to fresh produce possible. Many "urban" municipalities have assessed the feasibility of allowing small-scale agriculture within their jurisdictions.

The U.S. Department of Agriculture defines "Regional Food Hubs" as "businesses or organizations that actively manage the aggregation, distribution, and marketing of source-identified food products primarily from local land regional producers to strengthen their ability to satisfy wholesale, retail and institutional demand." Two regional food hubs have emerged. A Broward County municipality has supported a local not-for-profit's efforts to operate an open-air market on a former farm site. The Batten's Farmers Market and Davie Agri-Tourism Center currently offers fresh produce (some of which is grown within the county, plants, baked goods and other prepared foods, a petting zoo, and community social events. Future plans include a community garden and community commercial kitchen making the site an important location for production, processing, distribution and consumption. The Homestead Harvest Market at Verde Gardens similarly combines regional growing, distribution, consumption activities in Miami-Dade County. Some of the produce sold at the market is grown on site by residents and the remainder of the fruits and vegetables is supplied by local farms. Locally grown plants and prepared foods are also available.

Trends and Future Needs

Two annual "Greater Everglades Food Summits" have been held to introduce the concepts of regional food sovereignty and resiliency. Regional issues and responses identified at the summits reflect national concerns and activities. Some of the trends that attempt to address local food access and sustainability include edible landscaping, vertical gardens, food policy councils, mobile food pantries, and food trucks. Individuals

⁹⁶ USDA. "Local Food Systems: Concepts, Impacts, and Issues. http://agmarketing.extension.psu.edu/ComFarmMkt/PDFs/local_food_system.pdf

⁹⁷ A Primer on Community Food Systems: Linking Food, Nutrition and Agriculture. www.discoverfoodsys.cornell.edu/pdfs/Primer.pdf

⁹⁸ USDA Agriculture Marketing Service. Regional Food Hub Resource Food Guide. Page 4.

concerned with the food delivery system in South Florida came together to create the South Florida Food Policy Council (FPC). The FPC was formed to explore options to supplement residents' access to healthy foods. The group seeks to identify and remove impediments to healthy food access and the creation of farmers' markets and community gardens. The FPC serves as a policy forum to identify and redress impediments to healthy food in all communities and enhance citizens' awareness and consumption of healthy foods. The FPC is also interested in positively affecting local and regional food systems. Examples of local food systems that FPC members seek to better understand, assess, and influence include community-supported



agriculture, community gardens, farmers markets and farm to school programs.

Entrepreneurial activity related to regional food production, processing, and distribution has emerged to ensure equal access to healthy, local, sustainable, and affordable food for all people by reducing barriers to the production, distribution and consumption of such food. Relevant training and technical assistance programs should be developed and made available to small businesses that emerge to address food systems issues. The region's community colleges along with the University of Florida Extension Center would be ideal purveyors of needed information.

Strategic Findings/Policy Implications

As the changing climate impacts crops nationwide, local and regional production is important in ensuring food security within South Florida. The development of regional food processing hubs and food distribution systems can create employment opportunities and economic growth.

Diversity and Culture

<u>Significance</u>

South Florida is ethnically, culturally, and linguistically diverse. Several ethnic enclaves have formed around shared cultural and culinary experiences. Ethnic economies have emerged as a result of entrepreneurial activity among recent immigrant groups. More affluent immigrants have helped drive economic growth by starting businesses, buying real estate, shopping and dining and investing in economic development projects that create or preserve jobs for an opportunity to qualify for permanent residency. The sharing of culture experiences through music, art and performance has lead to a vibrant and diverse arts and cultural industry. The South Florida Region is home to several cultural assets; including museums, zoos, botanical gardens, historical societies, planetariums, performing arts, visual arts, design, film, radio, and television. The Region's diverse populations and nonprofit arts/cultural amenities are important to economic and social development because of their potential to create job opportunities; attract residential development, tourist interest, and businesses investment; and generate municipal revenue.

Current Situation

Little Havana and Little Haiti remain as two important ethnic enclaves within Miami-Dade County. Both communities have business that cater to their immediate residents as well as regional residents and visitors who want to experience authentic cultural and culinary experiences. Bahamian culture has been preserved in the Keys and Broward County has become home to several immigrant groups including West Indians,

Asians, and French Canadians. Business along State Road 7/U.S. 441 in Broward County and northern Miami-Dade County also reflect the Regions' diversity.

Miami has been recognized as a Global City by the Brookings Institution in part because "it has the largest foreign-born population among the top 100 metros and remains at the vanguard of attracting and assimilating immigrants." The international markets represented by the Region's diverse population provide manufacturing and trade opportunities. The EB-5 Immigrant Investor Visa program facilitates economic development through foreign investment and advances diversity by allocating green cards for successful



projects. "The EB-5 program was developed as part of the Immigration Act of 1990 and allocated 10,000 green cards per year to foreigners who invest \$1 million (or \$500,000 in a target employment area) to qualifying businesses that create or preserve at least ten jobs. The program has created 43,300 full-time jobs in the US and attracted more than \$2.2 billion dollars in investment." This visa program has been instrumental in fueling development projects in several cities such as New York, Philadelphia and Miami during the recent economic downturn. "According to the US Citizenship and Immigration Services, 2,608 petitions were filed during the first three quarters of fiscal 2011 nationwide, up from 1,955 filings during fiscal 2010." Area developers are actively pursuing EB-5 dollars as part of their funding portfolios.

The Americans for the Arts has developed a Local Arts and Economic Prosperity Index to illustrate the economic impact of nonprofit arts and cultural organizations. The chart below shows that more that \$25 is spent by those attending art and culture events on meals, refreshments, souvenirs, transportation, in addition to the cost of the event.

Table 7: 2010 – Economic Impact of Nonprofit Arts and Culture Organizations and Their Audiences

ECONOMIC ACTIVITY	Broward	Miami-Dade
Average Event Attendees Spending Per Person *	\$26.00	\$29.61
Total Event-Related Expenditures *	\$126,877,854	\$402,224,700
Full Time Jobs Supported by the Arts	6,402	29,792
Household Income Paid to Residents	\$157,263,000	\$936,293,000
Revenue Generated to Local Government	\$10,889,000	\$39,212,000
Revenue Generated to State Government	\$11,011,000	65,731,000
Total Industry Expenditure	\$229,868,082	\$1,076,183,558

^{*}Amount does not include cost of admission

Over \$500 million has been expended by arts and culture audiences in the Region, not including the cost of admission. More than 35,000 fulltime jobs have been supported by the arts and culture industry; providing over \$1 billion in income to residents and generating approximately \$50 million in revenue to local governments.

Trends and Future Needs

Ethnic enclaves have historically provided houses of worship, social gathering places, affordable housing, and culturally relevant amenities to immigrant groups. Ethnic groups that move away from their respective

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 $^{^{99}}$ The Miami Herald. Seizing Miami's Global Moment. July 15, 2012

¹⁰⁰ Brookings Institution. EB-5 Visas: A Smarter, Cleaner Plan for Regional Economic Development. April 5, 2012.

¹⁰¹ Miami Today. 2,608 petitions this year seek foreign investment via EB-5 visas.

http://www.miamitodaynews.com/news/111013/story1.shtml

enclaves may still visit to purchase food and imported goods. While the cultural distinctiveness of many urban ethnic enclaves has attracted interest from outside groups, the proximity to these communities to urban centers have prompted the relocation of "majority" groups priced out of the downtown areas. Gentrification of these areas may become a concern. Newer ethnic enclaves have emerged in suburban areas, as more affluent immigrants choose to live in more traditionally residential neighborhoods.

Interest in the EB-5 Immigrant Investor Visa program is expected to increase as more international residents seek permanent resident status for themselves or family members. EB5 Regional Centers models like the North Country center in Upstate, New York, has the potential to revitalize economically depressed areas with the creation of "healthcare, transportation, manufacturing & trade and technology hubs." New immigrant groups seeking economic opportunity are expected to have a positive impact on the Region's cuisine and culture.

South Florida's creative industries are quite strong and are receiving national and international attention for arts and cultural excellence Several movies, television shows (Burn Notice, The Glades, and Magic City), and commercials are filmed in the Region and facilitate the familiarity of the South Florida brand with national and international audiences. Miami and Broward Counties have been host to several annual international events including: the Miami-Dade College Book Fair International, Art Basal, South Beach Wine and Food Festival, Winter Music Conference, Ultra Music Festival, Miami International Film Festival, Women's International Film and Arts Festival, American Black Film Festival.

The artist as pioneer and entrepreneur has been a successful revitalization strategy to stimulate neighborhood redevelopment. Soho, Tribeca, and Williamsburg in New York City were transformed because artist communities were formed and created interesting places for people to live. Miami's Wynwood and the Design District neighborhoods were previously economically depressed areas that attracted artists with cheap rents. Monthly "Art Walks" have been effective in introducing area residents and the community-atlarge to the art scene. The grassroots collaboration of art practitioners has attracted restaurants, boutiques, suppliers, and live-work housing projects.

Each of the counties has organizations that promote art and cultural activities, supports public art installation, secure private sponsors, and provide funding opportunities and technical assistance to local artists. The Broward County Arts Council offers business skill classes so artists can start their own businesses and a cooperative marketing program that allows several organizations to share advertisement and marketing costs. Broward County also developed a 10-year Community Cultural Plan. The Miami-Dade County Department of Cultural Affairs provides capacity building opportunities for Emerging Art Leaders; pursues international cultural exchange opportunities; and provides discounted tickets to cultural events for students and seniors. The Florida Keys Council of the Arts maintains a historic Works Progress Administration (WPA) art collection and runs an "Artists in School" program.

Strategic Findings/Policy Implications

Diversity is an important aspect of the South Florida social, political, and economic landscape. With the Region positioned to be a Global Leader, cultural competency is imperative to preserve our unique cultural contributions and define a common cultural experience. As new shared-cultural identities are shaped the Arts will become essential in preserving various ethnic experiences.

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¹⁰² North Country EB5 Regional Center. http://www.northcountryeb5.com/

Development and Redevelopment ¹⁰³

Significance

As discussed earlier in this report, the Atlantic Ocean to the east and the Everglades system to the west create natural boundaries for the Region. Much of the Region's land area is either not suitable for development or has been developed in some form, so future growth will increasingly take the form of infill development and redevelopment. South Florida grew more slowly than the nation as a whole during the last decade – the Region's population grew by 9.1%, compared to 9.7% for the U.S. South Florida is projected to add about 82 new residents each day, leading to an increase of almost 600,000 people in the next two decades. South Florida's economic competitiveness could be challenged if public investment and private building practices are not re-tooled to accommodate infill development as the predominant new growth industry in Southeast Florida.

The traditional large tract lower density detached single story family unit subdivisions are no longer a long-term viable development pattern option. Future housing and jobs will need to be accommodated on smaller infill sites at higher densities and intensities. Accommodating the Region's future growth in an environmentally and economically sustainable manner requires that South Florida take a leadership role in incorporating "green building" strategies and resource efficient technologies in future development and redevelopment plans.

Current Situation

In five short years, South Florida has gone from being a hot real estate epicenter to a foreclosure capital. In terms of sheer numbers, the Miami-Fort Lauderdale-Pompano Beach MSA (Miami-Dade, Broward and Palm Beach Counties) led all other regions in the country with 94,466 homes in some stage of foreclosure during the first six months of 2010. Miami-Dade and Broward counties led the state with the highest number of foreclosures with one of every 26 and 21, respectively, received a foreclosure notice. In addition to pervasive foreclosures, the Region's housing and transportation cost burden is very high¹⁰⁴, with 74.9% of the Region's households paying more than 45% of their income for housing and transportation expenses (72% at the national level). In 2010, among the Region's very low and extremely low income households, 72% spent more than 30% of their income on housing (up from 71% in 2000).

After decades of traditional low density sprawl development which consumed land in South Florida at a rapid pace, many local and state elected officials and policymakers realize that "business as usual" is not a practical development model for the future. Factors such as limited land, the high cost of providing services and maintaining



infrastructure, growing traffic congestion, and the need to revitalize existing communities through continued

Urban Land Institute State Road 7/US 441 Corridor Advisory Services Report, 2004 Miami-Dade County Comprehensive Development Master Plan, 2006

Broward County Comprehensive Plan, 2006

Florida Department of Transportation, District IV, Office of Modal Development, 2006

Miami Dade County Water and Sewer Department, 2007

South Florida Regional Planning Council, 2007

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 $^{^{103}}$ Sources for this section:

¹⁰⁴ Center for Neighborhood Technology's Affordability Index

reinvestment, point to the creation of transit-oriented developments along transportation corridors and nodes. This development model, which relies on moderately higher densities and mixed uses to be successful, can lead to more livable communities while providing economic efficiencies and improved transportation, employment, housing, and recreational opportunities. The functionality of transit-oriented developments encourages people to congregate in public spaces for long periods of time, and expands on transit options, mobility, and enhances community conditions that are linked to economic prosperity, health, affordable housing and educational opportunities.

For nearly thirty years in the State of Florida, statutory provisions have existed to allow the establishment of Community Redevelopment Agencies (CRA's). CRA's have evolved to represent comprehensive local mechanisms for the planning and implementing of local projects and programs that serve to: 1) eradicate conditions of blight; 2) expand local commercial activities; 3) stabilize and expand the local tax base; and to 4) create jobs. Often this work is done in collaboration with other government or non-profit entities and in partnership with private investors to leverage private investment. In South Florida, the thirty established CRA's in the Region have captured in excess of \$112,950,000 in annual, reoccurring, dedicated Tax Increment Finance (TIF) revenues for investment back into designated target areas. Target areas must meet statutory conditions of blight in order to be established and TIF investments are made over a thirty to forty year period to stabilize and/or improve the physical and economic conditions of designated target areas. South Florida has the most intense geographic concentration of CRA's within the state and these agencies are available, onthe-ground, and ready partners for the Regional effort to achieve sustainable economic redevelopment.

Today, the State Road 7 / U.S. 441 Collaborative (Collaborative) is a regional, yet locally driven, initiative leading the way in the development of an improved built environment and more vibrant economy for South Florida. The Collaborative is a partnership of Broward and Miami-Dade Counties, the Seminole Nation, and 17 municipalities which abut 41 miles of State Road 7 beginning in the City of Miami in Miami-Dade County and extending north through the City of Parkland in north Broward County. Partnership has developed a strategic redevelopment master plan in Broward County. Using this plan, corridor communities have implemented significant redevelopment projects that have improved economic conditions and the quality of life along the 26-mile Corridor in Broward County.



Trends and Future Needs

Long-term redevelopment efforts are focused on locating new residential and employment areas at or near existing rail corridors such as the FEC and CSX/Tri-Rail corridors or along designated high capacity bus corridors such as the State Road 7/U.S. 441 and U.S. 1 Busway corridors. These four north/south corridors run parallel to each other and are located within four to five miles of each other. Together they have the potential to accommodate nearly two-thirds of all expected growth within the Region. In addition to these north/south corridors, east/west transportation linkages¹⁰⁵ are critical to regional livability and mobility.

⁷⁷ The Miami-Herald Article, Repair bill over \$1 billion to fix crumbling Miami-Dade water, sewage system, report says. July 2012.



¹⁰⁵ E.g., Sample Road, Oakland Park Road, Broward Boulevard, and Pines/Hollywood Boulevard etc. in Broward County; State Road 826, 79th Street Corridor, and North Kendall Drive/SW 88th Street etc. in Miami-Dade County.

Analysis of the State Road 7/U.S. 441 Corridor Redevelopment area in Broward County indicates that nearly 53,200 new residential units and 58,188 new jobs could be accommodated along the corridor by 2030. Since 2004, nearly 23,000 new residential units along the State Road 7/U.S. 441 Corridor have been approved. This represents an increase in property values of over \$5.75 billion. Currently, nearly \$200 million in roadway widening, transit investments, water and waste water improvements have been made along the State Road 7/U.S. 441 Corridor. Major investments of over \$100 million in water and wastewater improvements are still needed to support additional growth along the State Road 7/U.S. 441 Corridor. Recent efforts of the Collaborative have been focused in Miami-Dade County, to replicate and apply the planning process that led to the development of a transit supportive land use and redevelopment master plan for State Road 7 in Broward County. A Corridor Master Plan in Miami-Dade County will detail specific opportunities and action steps to shared use issues needed to achieve redevelopment and revitalization objectives for all communities and municipalities along the State Road 7 Corridor.

Analysis of the South Miami-Dade Watershed¹⁰⁶ area indicates that nearly 101,703 new residential units and 111,238 new jobs could be accommodated by 2030. The South Dade Watershed study area is a 400 square mile area located in the southeastern portion of Miami-Dade County, between the Everglades and Biscayne National Parks. Redevelopment of these areas will only be possible with transit and infrastructure investments and supporting land uses. Nearly \$7.623 billion in wastewater improvements alone are needed to accommodate growth in the South Miami-Dade Watershed area. As an example, the Miami-Dade Water and Sewer Department has estimated that nearly 14,000 miles of pipelines are outdated and initial fixes will exceed \$736 million and take three to eight years to repair. In addition, \$185 million will be needed to construct a new 20 MGD Water Treatment Plant in South Miami Heights. Another \$505 million is estimated for wastewater treatment capacity to the County's fifty-six year old water treatment facility in Hialeah. Water and sewer treatment departments are faced with the challenge of keeping up with the growing and changing demands of the Region.

There are significant benefits and cost savings that can be gained by accommodating redevelopment to existing urban areas including the saving of 30,157 or more acres of prime agricultural lands in South Miami-Dade County, preserving aquifer recharge areas, and maximizing existing infrastructure investments in roads, water and wastewater plants, and schools, when capacity exists. The infill scenario projected in the South Miami-Dade Watershed area projects a savings of over \$7.67 billion in infrastructure cost by promoting a more compact growth pattern.

Rapid population growth in South Florida over the past four decades led to significant infrastructure investment in new facilities in largely suburbanizing western communities. The Eastward Ho! Initiative, spearheaded by the South Florida and Treasure Coast Regional Planning Councils from 1995 – 2001 called attention to the need to reinvest in the Region's urban core communities located along the coastal ridge to accommodate and redirect a portion of regional growth back toward traditionally urban communities and away from wetlands and other lands needed for Everglades restoration, ecosystem preservation, and recharge of the Region's aquifers. Today's growing demand for, and interest in, urban living and communities, as well as aging infrastructure, underscores the need for continued infrastructure investment and financing strategies to support projected growth, employment and redevelopment in South Florida's historic communities and the Region.

Redevelopment and infill development have been premised to some extent on the idea of the efficiency of using existing infrastructure. We are now seeing that we cannot rely on the old infrastructure serving South

South Miami-Dade Watershed Study, 2007
 Miami Dade County Water and Sewer Department, 2012
 Miami-Dade County Water and Sewer Department, Comprehensive Annual Financial Report, 2011



Florida's earliest communities either from a reliability perspective or from a capacity perspective to accommodate the level of growth that has been seen in these communities. At least two problems exist: 1) the traditional financing mechanism for local collection and distribution systems has been developer donations where the developer finances and constructs to utility standards the necessary infrastructure and donates it to the utility; the utility then uses connection charges (impact fees) to pay for the regional transmission system capacity and the treatment capacity needed by the development. This model does not work well for redevelopment and infill development because no single developer wants to absorb the cost of financing the needed upgrades and wait to be reimbursed as additional development in the area occurs. Alternative, probably public, financing systems are needed. 2) The cost of upgrading infrastructure in heavily urbanized corridors is extremely high by comparison with Greenfield development. Land is typically much more expensive, subsurface areas are crowded with infrastructure, maintenance of traffic is difficult, and impacts to businesses and residents can be significant. To summarize, retrofitting to higher densities to achieve a variety of genuine benefits can be very expensive¹⁰⁷.

South Florida's transportation infrastructure oftentimes approaches gridlock. Future regional population growth will generate additional pressure on the transportation network at the same time that the Region's ability or desire to widen its roadways is limited. As discussed in Section 3 of this report, significant investments are being made by state, regional and local partners to increase capacity and mobility. These investments need to be complemented with increased transportation and land use planning to provide opportunities for transit supportive land uses and employment centers along transit corridors.

As discussed in the previous section, despite the Region's abundance of rainfall, future water supply has become one of the Region's most limiting constraints to facilitating growth. Water withdrawals from traditional, less expensive, regional water supply sources have reached permitted limits. Traditional water treatment facilities are not capable of sufficiently treating alternative water supply sources. State-of-the-art and more costly reverse osmosis water treatment facilities will be needed to obtain increased water supply.

Climate change and sea level rise are expected to pose serious challenges to Southeast Florida's economy, environment, and communities. Florida's public and private leaders are moving aggressively to develop and implement strategies and new technologies that will reduce Florida's dependence on foreign fuels, reduce greenhouse gas emissions, improve energy efficiency, encourage water reuse, and promote the use of alternative, low carbon energy sources. Leading companies recognize that there are compelling business reasons for reducing greenhouse gas emissions and embracing low carbon, energy and material efficient practices. Research has shown that "green" is "green" creating new businesses, employment opportunities, and significant savings for businesses and residents who reduce their energy and material costs.

Strategic Findings/Policy Implications

Southeast Florida's economic competitiveness and quality of life is linked to its ability to promote urban infill development and provide the necessary infrastructure to support it. "Green Building" strategies and energy efficient technologies should be incorporated into future development and redevelopment plans to create a more economically and environmentally sustainable region. The region's Community Redevelopment Agencies (CRAs) encourage investment in existing communities across South Florida and are in position to leverage sizeable investment in redevelopment planning and implementation efforts. CRA's establish strategies for community and economic renewal are based on priorities determined through dialogue with the citizens of the community and provide a stable source of economic development resources.

Providing regional transit systems and water supply to redevelopment areas will help to ensure a more sustainable economy in Southeast Florida. While there are many infrastructure needs, the need for new

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¹⁰⁷ Dr. Douglas Yoder, Deputy Director, Miami-Dade Water and Sewer Department, August 15^{t,} 2012 correspondence

water treatment facilities and other infrastructure has reached a critical level. Without significant investments in alternative water supply systems the Region will be unable to support future growth. These investments are necessary to continued economic development in the South Florida Region.

Affordable Housing

Significance

South Florida's housing supply should provide residents with a diverse mix of styles, locations, and prices. Providing housing that is affordable, attractive, and located near employment centers, transportation and transit, daycare opportunities and other services remains a continuing challenge. The issue of affordable housing is impacting a greater proportion of South Floridians, ranging from those with very-low incomes to those of the "middle class" who have become unemployed or underemployed during these challenging economic times.

While the need for affordable and workforce housing is significant, the housing industry itself also has a significant impact on the Region's economy.

Current Situation

The burst of the nation's "housing bubble" has resulted in a significant alteration in affordable housing supply and demand relationships. What was once accessible for hundreds of thousands of families, home ownership has become the unrealized dream to families displaced by foreclosure and short-sales. In addition to the "housing bubble" calamity, access to credit and traditional lending instruments for families with homeowner aspirations have been seriously diminished. Current market conditions have also impacted the ability of credit challenged families to access affordable housing, due to contributing factors that include loss of equity, prolonged job loss and increasing rental rates.

Housing affordability is generally defined as the capacity of households to consume housing services and, specifically, the relationship between household incomes and prevailing housing prices and rents. The terms "affordable housing" and "workforce housing" are often used interchangeably. However, the Florida Legislature has adopted specific definitions for these terms. "Affordable Housing," as defined by Section 420.0004, Florida Statutes (F.S.), means housing for which monthly rents or monthly mortgage payments, including taxes, insurance, and utilities, do not exceed 30%¹⁰⁸ of that amount which represents the percentage of the median adjusted gross annual income for households making no more than 120% of the County median income. As defined in Chapter No. 2007-198, Laws of Florida "workforce housing" means housing that is affordable to natural persons or families whose total household income does not exceed 140% percent of the area median income, adjusted for household size. Irrespective of the term utilized, despite the drop in housing values, the cost of housing, combined with the economic downturn and loss of employment or underemployment, means that the purchase of a home is out of reach to many South Floridians.

Wages are not keeping pace with the cost of housing in the Region, and housing is becoming less affordable for many low- and moderate-income households. According to U.S. Department of Housing and Urban Development (HUD), between 2010 and 2011 the average median family income increased 1.6% while the national average rose by 1.8%. South Florida ranked in the bottom third for economic growth among the nation's major metropolitan areas in the U.S. According to the Census Bureau's American Community Survey,

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⁷⁸ According to the U.S. Department of Housing and Urban Development (HUD) standards, a unit is considered affordable if it costs no more than 30% of the household's income. Households that spend more than 30% of their gross income on housing expense are considered to have a cost burden.

the proportion of households that are cost-burdened (spending 30% or more of their household income on housing) has grown over the last decade. In 2000, approximately 36% of owners and 50% of renters were cost-burdened. Ten years later, those proportions had increased to 48% and 64% respectively. In 2010, three years into the recession that reduced housing values across the Region, more than half of the Region's 1.44 million households spent 30% or more of their income on housing. Simply, families are spending a higher amount of their incomes on housing costs and less income available for spending on other goods and services, including discretionary spending.

Housing and gas prices are driving up the cost of living in South Florida faster than in the rest of the nation according to the recently published 2011 Broward County Housing Needs Assessment. The Center of Neighborhood Technology (CNT), developed the Housing and Transportation Affordability Index, which calculates the inadequacy of traditional measure of house burden and transportation costs. The Index limits the combined costs of transportation and house consuming to no more than 45 percent of household income. According to CNT, a typical household's transportation costs can range from twelve percent of household income in communities with compact development and access to transit options, to more than thirty-two percent in the far exurbs. Broward County concluded that linkages between housing and transportation costs are further compounded to cost of gas (high of \$4.00) over the last year and the large ratio of "extreme commuters" in the Region. According to the U.S. Census Bureau, between 1990 and 2010, the number of "extreme commuters," those who travel more than ninety minutes or more to work, has more than doubled in South Florida.

Trends and Future Needs

The provision of affordable and workforce housing is as basic to the Region's economic, environmental, and community prosperity as its transportation, educational, and water and wastewater infrastructure systems. As such, affordable and workforce housing should be planned and accounted for, subsidized, and provided with the same or greater level of importance as other infrastructure in the Region in order to ensure a prosperous economy and improved quality of life for all of the Region's residents.

The need for affordable and workforce housing and need to locate workforce housing near employment centers was recognized by the Florida Legislature with the adoption of Chapter No. 2007-198, Laws of Florida, on May 2, 2007. This law requires all local governments to identify in their comprehensive plans adequate sites for workforce housing as well as affordable housing. Local governments and developers are encouraged to provide for workforce housing in close proximity to employment centers. In addition, most counties must adopt a plan to provide for ensuring adequate workforce housing by July 1, 2008, or risk the loss of state assistance for housing projects.

The housing industry historically has had a profound impact on the Region's economy. According to the Florida Housing Coalition, for every \$1 million in state funding for housing, \$10.36 million of economic activity is generated. In other words, when housing is built or sold, the total economic impact is much greater than simply the cost of construction or the sales price of the house. The construction of housing involves the purchase of land and construction materials, payment of wages to construction workers and fees to professionals (engineers, architects, environmental and soil testing companies, realtors and may others) and the earning of profit builders, contractors and developers. The flow of money in payment for goods and services creates disposable income. Additionally, when families buy a house, particularly their first home, they purchase appliances, furniture and other household necessities. All of this economic activity takes the same dollar and passes it through the economy more than once creating a multiplier effect.

Strategic Findings/Policy Implications

The issue of affordability and housing is a complex issue that transcends mere provision of affordable units. According to the 2011 Broward County Housing Needs Assessment, the basic premise of all housing markets

is the need to create and maintain a full range of housing choices and opportunities for all residents. This axiom establishes that housing choice and needs differ in most communities due to a variety of factors including: household income, population age, proximity to employment and preference. The ability of our residents to earn wages that keep pace with housing costs and provide a broader choice of housing within the Region is a critical component to addressing the affordable housing challenge.

Other Analysis

Regional Economic Clusters

Cluster strategy is an effective industry development strategy currently practiced in many regions and nations around the world. It is a strategy whereby industry, government, and education work cooperatively. This approach offers the Region the ability to use public and private resources more efficiently and effectively. It can foster innovation activity and productivity gain by having research centers, universities, and businesses working collaboratively, especially in Bio-tech, Aviation, and other cutting-edge clusters. It can also help a region address critical issues such as human capital and workforce development, infrastructure planning and development and community development.

Industry clusters refer to geographic concentrations of competing, complementary, or interdependent firms and industries that conduct business with each other and/or have common needs for talent, technology and infrastructure. In addition, clusters usually include government, nonprofit organizations, educational institutions, and other infrastructure and service providers whose presence is critical to the strength of the cluster.

Both Broward and Miami-Dade Counties have recently updated their targeted industry studies (2009 and 2012, respectively). In April 2008, the Broward County Board of County Commissioners authorized a review of its targeted industries for economic development. A new group of ten (10) industries/clusters was developed in the *Targeted Industries Study (TIS)*. Finished in late 2009, the TIS addressed opportunities for new growth and further development among high- wage/high- skill industries already established in Broward County. ¹⁰⁹

Miami-Dade County finished the update of its *One Community One Goal (OCOG)* Target Industry Strategic Plan in May of 2012. The report, titled Target Industry Strategies, provides Miami-Dade County with a recommended blueprint for sustained economic development orchestrated holistically across a broad spectrum of industries and organizations. The report identified seven (7) target industries and niche sectors and offered detailed strategic recommendations that represent long-term global growth potential.¹¹⁰

A table containing all target industries indentified in the TIS and OCOG is provided below. Green background indicates that the industry was targeted in both studies (with slightly different names); blue background indicates that the industry was targeted in the TIS (Broward County only) and yellow for the OCOG (Miami-Dade County only). The common targeted industries are Aviation/Aerospace, Creative Design/International Media & Production, International Banking & Finance/Global Business Services, Life Sciences & Health Care, Trade & Logistics. A detail analysis of these five (5) regional clusters and other traditional clusters follows.

Table 8: Target Industry in the Region

TARGET INDUSTRY	Broward (TIS, 2009)	Miami-Dade (OCOG,2012)
Aviation/Aerospace	х	Х
Advanced Materials & Hi-Tech Mfg.	Х	
Alternative Energy & Renewable Resources	Х	
Creative Design/International Media & Production	Х	Х
Hospitality & Tourism		Х

¹⁰⁹ http://www.broward.org/econdev/Pages/TargetedIndustries.aspx

http://www.onecommunityonegoal.com/

TARGET INDUSTRY	Broward (TIS, 2009)	Miami-Dade (OCOG,2012)
HQ & Management Operations	Х	
Human Resources Development & Higher Education	Х	
Information Technology		Х
International Banking & Finance/Global Business Services	Х	Х
Life Sciences & Health Care	Х	Х
Marine	Х	
Trade & Logistics/International Trade & Logistics	х	х

Source: Targeted Industries Study and One Community One Goal Target Industry Strategic Plan

Regional Clusters

Aviation/Aerospace

The aviation cluster includes the airlines, general aviation, pilot training, airports, airframe and engine manufacturers, component parts suppliers, and maintenance, repair, overhaul. This cluster has significant representation both in Miami-Dade and Broward County. The advantageous central location of Miami in the Americas makes it one of the world's aviation hubs, connecting North and South America. Miami International Airport (MIA) is the primary US gateway to Latin America and the Caribbean, with more flights to the Region than any other US airport. It is a major gateway to Europe as well.

Approximately 38.3 million passengers flew through MIA in 2011. MIA is ranked as the No. 1 airport in the United States and No.9 in the world in international freight. Fort Lauderdale-Hollywood International Airport (FLL) is located 27 miles north of MIA and an origin/destination airport primarily serving domestic passengers. Most recent data indicates that only 9% of total passenger traffic connects to other flights. In 2011, 23.4 million passengers used this airport, including a significant volume of cruise ship passengers connecting to Port Everglades. FLL is also a major air cargo hub, with more than 95,000 tons passing through the airport in 2010. Key West International Airport (EYW) is a major airport in Monroe County. Its new Passenger Terminal Complex has been in full operation since late 2009. As demand went up, AirTran Airlines stepped up their operations from four flights a week to daily departures. American Eagle, UsAir and Delta also responded to the increased market demand by adding more flight frequency. As a result, a total of 566,889 passengers flew through EYW in 2010,up 22.2% over calendar year 2009.

The Aviation cluster is a powerful economic engine in South Florida. With over six billion dollars in recent upgrades, Miami International Airport's (MIA) annual impact on local tourism, cruise, international banking, trade and commerce is \$26.7 billion. MIA and related aviation industries contribute 282,043 jobs directly and indirectly to the South Florida economy. That equates to one out of 4.1 jobs. ¹¹² Fort Lauderdale-Hollywood International Airport (FLL) has an economic impact to the Region of \$2.6 billion and 39,500 direct and indirect jobs ¹¹³.

The world's third largest aircraft manufacturer, Brazil's Embraer, recently added a new maintenance and overhaul facility to its North American headquarters, customer service and support complex in Fort Lauderdale to serve the executive jet and commercial jet sectors. The leading European manufacturer of passenger jets, Airbus, also expanded its Miami operations by opening its first US corporate jetliner sales and marketing center.

¹¹¹ Airports Council International, 2011

¹¹² Miami International Airport

¹¹³ Fort Lauderdale International Airport

South Florida is also one of the world's foremost centers for aviation training and education. For example, Airbus has operated one of their three worldwide state-of-the-art training simulators near MIA since 1999, which trains flight crews and maintenance personnel from throughout the Americas. Broward Community College's Aviation Institute offers associate degrees in flight training, aviation maintenance and aviation administration in the most modern aircraft maintenance training facility in the State of Florida. Miami-Dade College Eig-Wastson School of Aviation offers Associate in Science Degrees and professional certifications to students interested in aviation career. The Department of Aviation & Safety at Florida Memorial University offer rigorous programs designed to educate the future aviators, managers and air traffic controllers of the aerospace industry. George T. Baker Aviation School is a public, tax-supported institution authorized by the Florida Department of Education and operated by the Miami-Dade County Public School System.

The cluster is also identified as one of the key industry clusters in the State of Florida.

Creative Design/International Media & Production

The creative cluster is recognized as one of the drivers of the US's success in the global marketplace in the 21st century. Its products, i.e., music, film, books, and computer software, etc., are the No.1 US export today. This cluster mainly consists of the Information and Arts, Entertainment, and Recreation sectors. Specifically, its varied components include: advertising, architecture & engineering, cultural tourism, dance, design, fashion/lifestyle, entertainment services, fashion, film, television and video, fine arts, museums, music, photography, printing and publishing, theater.

Broward County has more than 6,000 arts-related businesses employing more than 23,000 people, according to Dun and Bradstreet. In the last five years, the number of arts-related businesses has grown by 45 percent despite the national economic downturn, while employment increased by 24 percent. ¹¹⁴ Creative industry is a growing segment of the local economy and supports a global trend that will continue as this knowledge-based economy expands.

Film and television program production is an important part of the creative economy in this region. More than 2,400 motion picture and video businesses are located in Miami-Dade County, along with still photography companies, modeling agencies, talent scouts and other service companies. As the Spanish-language television market becomes one of the fastest growing segments, the high concentration of Hispanic population and uniquely diverse culture makes South Florida an ideal place to produce Spanish-language television programs. Since its 1994 launch, Discovery Networks Latin America has been headquartered in Miami-Dade County. For many years, Miami-Dade has been the key hub for Spanish-language media companies such as Telemundo and Univision, which recently announced a major expansion of its production facilities. Led by President Luis Fernández, Univision Studios will produce telenovelas, reality shows, dramatic series, entertainment specials and other programming formats for the company's three television networks — Univision, TeleFutura and Galavisión — as well as Univision.com and Univision Móvil. ¹¹⁵

Created in 1986, the South Florida Cultural Consortium is an alliance of the local arts agencies of Martin, Palm Beach, Broward, Dade and Monroe counties. The Consortium's mission is to develop cultural excellence and accessibility through collaboration among our counties.



¹¹⁴ Broward County 2012 Economic Sourcebook.

¹¹⁵ Miami Business Profile & Relocation Guide 2011.

International Banking & Finance/Global Business Services

The International Banking & Finance/Global Business Services Cluster includes companies directly participating in international trade, multinational corporation headquarters, and their supportive legal and financial services firms. It is a subset of Finance and Insurance Sector comprising establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. In 2009, nearly 140,000 employees, representing 6% of the Region's total employment, were engaged in the larger Finance and Insurance sector activities in South Florida. The average wage and benefit is \$55,250, which is 9% higher than the State of Florida's average of \$52,530, but 12% lower than the national average of \$59,768. Financial services (together with Professional Services) are identified as key industry clusters in the State of Florida.

The flourish of the **Global Business Services Cluster** results from the fact that the Region is an ideal location for regional headquarters serving Latin American or the North American markets. Its proximity to the Caribbean and Latin America also makes it an ideal connecting point for North American, European and Asian companies serving the Western Hemisphere. A recent study conducted by WorldCity and co-sponsored by The Beacon Council found that more than 1,100 multinationals employ 125,000 workers in Miami-Dade, Broward and Palm Beach counties, and oversee more than \$236 billion in annual revenues. 116

This cluster is supported by strong and fast growing professional and financial services sectors; a diverse, multilingual workforce; convenient office and warehouse facilities; and fast and convenient connections to world markets via its world-renowned PortMiami, Port Everglades, Miami International Airport, and Fort Lauderdale-Hollywood International Airport.

Miami is known as the unofficial financial capital of Latin America. The region has been home to the largest concentration of domestic and international banks on the East Coast south of New York City for the past 25 years. More than 100 commercial banks, thrift institutions, foreign bank agencies and Edge Act banks have facilities in Miami-Dade County, along with hundreds of other wealth management, investment, brokerage and other financial services companies in the Region. Broward County also offers a number of financial incentives to enhance international trade, and is home to many organizations that assist importers, exporters, and international service providers. ¹¹⁷ International financial and legal support from related industries is critical to this cluster. Besides very sophisticated bankers, the Region also has attorneys and tax advisors who can assist clients regardless of the complexity of their financial needs.

The cluster is identified as one of the key industry sectors in the State of Florida.

Life Sciences/ Biomedical Sector

The Life Sciences industry cluster includes three related but distinct industry sub-clusters – Medical Products and Pharmaceuticals in the Manufacturing sector; Research and Development in the Physical, Engineering and Life Sciences in the Professional and Technical Services sector; and Medical Laboratories and Diagnostic Imaging Centers in the Health Care sector.

South Florida has a long history of leadership in the biomedical, medical device, and pharmaceutical industries since the 1950s. It is home to many successful companies including Coulter, Cordis, Key Pharmaceuticals, Noven, Ivax, Watson Pharmaceuticals, Micrus Endovascular, Florida Supplement, Aveva Drug Delivery Systems, Goodwin Biotechnology, Inc., Sunrise-based Bioheart, Inc., Fort Lauderdale-based

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¹¹⁶ Miami Business Profile & Relocation Guide 2011.

¹¹⁷ Broward County 2012 Economic Sourcebook.

OmniComm Systems, Inc., Mako Surgical Corp.. Today, more industry leaders call the Region home such as Beckman Coulter, BD Biosciences, Cordis (a Johnson & Johnson Company) and Merck as well as multinational companies such as Israel-based Teva Pharmaceutical Industries, Australian-based CROMA Pharmaceuticals, and Japanese-based Nipro Diagnostics. According to recent ICoast¹¹⁸ surveys, the tri-county Metropolitan Statistics Area (Miami-Dade, Broward, and Palm Beach) is home to more than 1,500 bioscience businesses and institutions that employ over 26,000 people and generate over \$4 billion in sales.¹¹⁹

This cluster is strongly supported by a vast array of academic resources such as the University of Miami's Miller School of Medicine; Florida International University's biomedical engineering program and new medical school; various programs at Miami Dade College; and numerous biomedical research facilities in Nova Southeastern University.

The Life Science and Technology Park in the University of Miami— which has been pre-certified as a LEED Gold (Leadership in Energy and Environmental Design) facility — will serve as a catalyst that brings faculty, scientists, students and entrepreneurs together to encourage collaboration and innovation. Phase one of the park is projected to create more than 1,150 direct and indirect jobs, with an additional 2,700-plus direct and indirect positions created by ongoing operations, according to a recent study by the Washington Economics Group. ¹²⁰

Nova Southeastern University has a 208,000-square-foot Center for Collaborative Research (CCR) for medical, pharmaceutical, dental, and oceanographic research. The CCR will also house one of the largest wetlab research facilities in Florida that will be a home-base for applied health-care research and medical informatics. More than 150 research projects are now underway, including anti-cancer therapies, coral reef restoration, stem cells, and wildlife DNA forensics.

In addition, industry coalitions like BioFlorida¹²¹, Life Sciences South Florida (LSSF)¹²² and ICoast also formed to further support this cluster. With the arrival of Scripps Florida in 2005, and a growing array of university research programs focused on the life sciences, the Region is expecting to see considerable growth in this sector in coming years. (see more discussion on innovation & Economic Development section).

The cluster is identified as one of the key industry sectors in the State of Florida.

Health Care

The Health Care and Social Assistance Services sector is the largest sector in the South Florida economy as of 2009. It accounts for 11% of total employment in the Region, with around 257,600 workers providing health care services to the population. With a location quotient that is slightly less than one, the significance of the Health Care and Social Services sector in South Florida's economy mirrors its importance in the national economy. The need for health care is expected to grow rapidly in the next five years, as a result of both population growth and the increasing share of health care in consumer expenses. In addition, the largest group of health care consumers, the elderly, is more concentrated in South Florida than in the nation.

¹²² A South Florida work group convened by Florida International University to establish a Life Sciences Corridor beyond the 3-County Region. Its executive Committee members include leaders of 16 educational, economic development and research institutions: Florida International University, University of Miami, Florida Atlantic University, Florida Gulf Coast University, Nova Southeastern University, Miami-Dade College, Broward College, Palm Beach State College, Indian River State College, the Beacon Council, the Businesses Development Board of Palm Beach County, Greater Fort Lauderdale Alliance, Florida Atlantic Research Park, University of Miami Life Sciences and Technology Park, Max Planck Florida Institute, and Scripps Florida.



¹¹⁸ ICoast is an alliance of technology companies and organizations operating in Southeast Florida, encompassing Palm Beach, Broward and Miami-Dade counties. Its mission is to help transform South Florida into a global science and technology hub.

¹¹⁹ Broward County 2012 Economic Sourcebook.

¹²⁰ Miami Business Profile & Relocation Guide 2011.

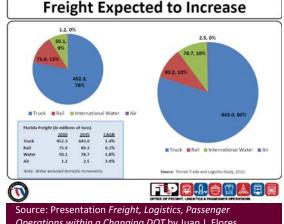
 $^{^{\}rm 121}$ BioFlorida is the statewide industry organization representing life science industry in Florida.

The North Broward Hospital District, the largest public healthcare system in the nation, together with three large non-profit healthcare systems, the Jackson Health System and Baptist Health South Florida in Miami-Dade County as well as the Memorial Healthcare System in Broward County, provide a comprehensive and complex scope of services. For example, the University of Miami/Jackson Memorial Medical Center is among the largest and busiest medical centers in the United States, treating patients in primary care and 30 specialties. Cleveland Clinic Florida has more than 100 physicians with expertise in approximately 35 specialties. Patients from all over Latin America and the United States come to the South Florida Region seeking the best healthcare. The 268-bed Miami Children's Hospital is the largest pediatric teaching hospital in the southeastern United States. Thousands of children are referred to this hospital each year from all over the United States and internationally, particularly for pediatric cardiac care, cancer treatment, neurological and neurosurgical care and orthopedic treatment.

Trade/Logistic Transportation Activities

Trade/Logistics cluster is big and growing business in South Florida. The Miami Customs District, which includes South Florida airports and seaports from Palm Beach to Key West, has its trade climbed to \$113 billion in 2011, up from \$95 billion in 2010. It has the fourth highest growth (18.3%) in total trade among the top 15 U.S. Customs Districts. A recent World Cities study indicated that it also broke into the top 10 ranks of customs districts nationwide for the first time 123. Merchandise trade for the entire state of Florida is \$149 billion; most exports and imports came through the Miami Customs District. With a surplus of \$26 billion in 2011, Miami is still the largest trade surplus of any Customs District in the United States.

The region's top five trade partners were Brazil, Colombia, Switzerland, Venezuela and China. Much of the cargo



Operations within a Changing DOT by Juan J. Flores, Florida Freight and Logistics Administrator, at the Urban Land Institute Conference in May, 2012

entering the South Florida Region is transported by sea through PortMiami and Port Everglades. Total cargo volume at Port Everglades was 22.1 million tons in 2011¹²⁴, and 7.4 million tons at PortMiami in 2010.¹²⁵ Foreign trade accounts for more than half the cargo volume for each port. In 2012, Miami's top five exports by value through April were aircraft; gold; landline, cellular phone equipment; computers; and scrap of precious metal, in that order. Those accounted for 33 percent of its total outbound trade. The value of the district's top five imports, gold; oil, not crude; electronic integrated circuits; imports of returned exports; and landline, cellular phone equipment. These accounted for 37 percent of all inbound shipments. 126

As the gateway to Latin America and the Caribbean, South Florida is poised to grow further in the Trade and Logistics cluster with the Panama Canal expansion in 2014 and the numerous infrastructure developments and upgrades underway. PortMiami is undertaking more than \$2 billion in infrastructure improvements over the decade to remain competitive in the global marketplace. With an expansion plan that includes deepening and widening Port Everglades' waterways, adding five new cargo berths and bringing in direct

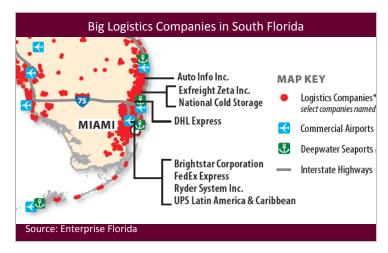


¹²³ The Top 10 customs districts in 2011 are New York City, Los Angeles, Houston, Detroit, Laredo, New Orleans, Chicago, Seattle, Atlanta/Savannah, and Miami.

Port Everglades Waterborne Commerce Report FY 2011 and Port Everglades FY 2011 Local and Regional Economic Impacts Report.

Port Business Statistics http://www.miamidade.gov/portofmiami/business-port-statistics.asp

¹²⁶ According to U.S. Census Bureau data and analyzed by WorldCity



freight rail connections, Port Everglades' plans will also accommodate the larger ships that will transit the expanded Panama Canal.

With the broader wholesale trade, transportation, and logistics industry, the Trade/logistics cluster is one of the biggest clusters in South Florida. Port Everglades provides more than 11,000 direct jobs and \$5.9 billion in personal income. Port Everglades generated approximately \$15.3 billion in business activity and approximately 161,000 jobs statewide in

2011.¹²⁷ During fiscal year 2009, PortMiami contributed approximately \$17 billion to the Regional economy and supported over 175,000 jobs. ¹²⁸

The cluster is identified as one of the key industry sectors in the State of Florida.

PortMiami http://www.miamidade.gov/portofmiami/information.asp



¹²⁷ Port Everglades Waterborne Commerce Report FY 2011 and Port Everglades FY 2011 Local and Regional Economic Impacts Report

Important Traditional Clusters

Tourism and Hospitality Industries

The Accommodation and Food Services, Performing Arts, Spectator Sports, Amusement, Gambling, and Recreation sectors are considered tourism and hospitality related industries. These are sectors in which South Florida traditionally has a competitive advantage.

For more than a century, Miami has been one of the most attractive vacation destinations in North America. The top five domestic markets of origin were New York, Philadelphia, Chicago, Boston and Atlanta. The top five international markets of origin were Canada, Brazil, Argentina, Colombia and Germany. The region expects even more Brazilian visitors if loosening visa regulations is successfully approved. In the meantime, there has been improvement in the visa application time for Brazilian. Tourism was down for a short period of time during the recession but has rebounded in recent years. According to Visit Florida, ¹²⁹ a record 86.5 million international and domestic tourists visited Florida in 2011.

The number of visitors per year exceeds five times the number of local residents in this Region. This huge influx of tourists strengthens the local economy. Overnight visitors to Greater Miami reached 12.6 million, and spent \$18.8 billion on lodging, food, shopping, transportation and entertainment, a significant increase since the recession begun. Greater Fort Lauderdale, on the other hand, welcomed more than 11 million visitors spending \$9.01 billion in 2011. During that year, hotel occupancy was 71.1 percent and tourist tax collections was \$40.4 million. In Monroe County, tourism and tourist related industries are the major industry. This sector accounted for 54% of Monroe County's employment with 23,616 direct and indirect jobs. It contributed \$2.2 billion to Monroe County's economy, with an estimated \$22.3 million in direct and indirect local option sales tax distributions alone. Florida Keys & Key West had a total of 3,786,100 visitors in 2010.

The **Accommodation and Food Services** sector is the largest sub-group in this cluster and the fifth largest private sector in the South Florida economy. In 2009, there were around 177,000 full-time and part-time workers in hotels, restaurants, and bars. Although hospitality industries usually pay lower salaries than other sectors (\$25,974 per year on average), this compensation rate in the Region is 28% higher than the national average.

Information Technology

The Information Technology industry consists of software production, internet services, telecommunication, digital media, computer systems design, data hosting, and consulting services. The rapid growth of this cluster in the Region is supported by fast-paced technological innovation and growing investment in telecom infrastructure.

 $^{^{129}\,\}text{Visit Florida}^{\text{\scriptsize IM}}$ is the official tourism marketing corporation for the State of Florida.

 $^{^{\}rm 130}$ the Greater Miami Convention & Visitors Bureau, 2010.

¹³¹ According to the Greater Fort Lauderdale Convention & Visitors Bureau, http://www.sunny.org.

¹³² Study of the Monroe County Tourism Workforce, Monroe County Tourist Development Council, August 2006.

¹³³ 2010 Florida Keys & Key West Visitor Estimates, Monroe County Tourist Development Council.

The region is 6th largest telecom hub in the world and home to NAP of the Americas®, one of the world's few Tier-1 network access points and a high-speed connection for data, voice and video traffic throughout the Americas, the Caribbean and Europe. Based in Miami and operated by Terremark, NAP of the Americas provides switching for the majority of South America, Central America and the Caribbean's traffic bound to more than 148 countries in the world, making this facility the unrivaled gateway to the Americas. Telefónica USA, Inc. is also based in Miami and provides services to US based multinational companies that have operations in Latin America and



Europe. Telefónica USA also operates the Key Center, a category 5 data center in Miami, from where the company supports Business Continuity and IT services for Enterprise customers in South Florida.

Another key IT asset in the Region will be a new system of submarine communications cable that will provide a direct route between the Unites States and Brazil in 2014. This new Seabras-1 submarine cable will offer 32 Tbps of capacity connecting Miami and Sao Paulo, with a branch that lands in Fortaleza, Brazil. The U.S. based Seaborn Networks service provider plans to open a landing station in Boca Raton and an operations center in the Miami area. The timing could not be better as the Brazilian government prepares to adopt a National Broadband Plan and the country is also preparing to host upcoming 2014 Soccer World Cup and 2016 Olympic Games, which will drive greater growth of voice, video and data services throughout Brazil. The major increase of U.S. oil and gas companies opening offices in Brazil due to the massive exploration of the deep water pre-salt O&G frontier off the Brazilian coast are also set to benefit from this high speed underwater cable. 134

The cluster is identified as one of the key industry sectors in the State of Florida.

Marine Industry Cluster

In South Florida, the marine economy is comprised of five key segments: port/seaport; boats, boating, and marinas; cruise and recreational marine activities; fishing; and marine science research. It is part of multiple sectors: Transportation; Fishing; Tourism; and the Professional and Technical Services sector. Specifically in the South Florida, the recreational marine industry is a significant sector of the economy, encompassing manufacturing; marine products; wholesale and retail; dockage; and every conceivable type of marine service for recreation purpose.

Known as the "Yachting Capital of the World," Greater Fort Lauderdale enjoys a thriving recreational marine industry, having more than 50,000 registered vessels cruising its 300 miles of navigable waterways and Atlantic shores. Approximately 1,500 megayachts (vessels measuring 80 feet or more) visit Broward County each year, and each visit generates an estimated \$400,000 economic impact through boatyard and marina expenditures, purchases and related services from businesses that serve the marine industry. The megayacht related business activity in Broward County accounted for more than 80% of the Region's marine industry's economic activity. It is one of Broward's largest industries and employment sectors, creating more than 134,000 jobs and representing \$3.7 billion in wages and earnings. Marine industry is also a crucial sector in

¹³⁴ http://news.seadiscovery.com/post/2012/04/13/US-to-Brazil-submarine-cable-to-be-laid.aspx

¹³⁵ According to the 2012 Economic Sourcebook published by the Greater Fort Lauderdale Alliance.

the Florida Keys (Monroe County). Beside tourism and hospitality sector, the \$60-\$100 million fishing industry is also vital to the County's economy and culture. ¹³⁶

Homeland Security and Defense (HSD) Cluster

The Homeland Security and Defense (HSD) Cluster mainly consists of firms who develop technologies and produce products related to homeland security and defense activities. Having military installations in a region is the basis for the development of the HSD Cluster. It is identified as one of the advantageous clusters in the State of Florida because of the strong presence of military installations and personnel, which include 20 major military installations and 3 unified combatant commands. ¹³⁷ It is also supported by the extensive network of universities, research parks, incubators and tech transfer programs across the state.

South Florida is home to 13% of the Florida's federal military personnel¹³⁸. Military facilities located in the Region include the Homestead Air Reserve Base, the U.S. Southcom (Department of Defense), the U.S. Coast Guard, the Veteran's Administration, and the National Guard, etc.. Another indicator of the significance of the installations is their federal defense expenditure. In 2010, Florida companies generated \$12.8 billion in Department of Defense Contract awards, ranking the state 4th in the nation. Defense related spending is estimated to be responsible for nearly \$60 billion of the state's gross domestic product.¹³⁹

According to a report by the Miami-Dade Defense Alliance¹⁴⁰, the number of direct and indirect jobs attributed to the military industry in Miami-Dade County is 25,409, which includes 13,470 direct military personnel. The average earnings per job is \$60,500 and the industry generates over 3.6 billion annual economic impact. Growing demand from expanding military activities is expected to provide greater opportunity for the HSD firms to locate and expand their businesses in the Region.

The cluster is identified as one of the key industry sectors in the State of Florida.

¹⁴⁰ A program of the Beacon Council has been engaged in the effort of protecting and enhancing local military industry in Miami-Dade County since 1998. http://www.beaconcouncil.com/mdda/_site/index.htm



Technical Report

¹³⁶ State of the County Report 2010-2011 Monroe County.

¹³⁷ Enterprise Florida, Inc.

¹³⁸ REMI Policy Insight Plus Version 1.3 data.

¹³⁹ Enterprise Florida, Inc.

State and Local Economic Development Plans Affecting the Region

Five-year Statewide Strategic Plan 141

Florida Department of Economic Opportunity (DEO)'s Division of Strategic Business Development, as outlined in Florida Statutes, 20.60, is required to create a five year statewide strategic plan designed to help guide the future of Florida's economy. During 2012, DEO is developing the strategic plan in close coordination with Enterprise Florida, Workforce Florida, local governments, local and regional economic development organizations, the business community, educational institutions as well as other local, state and federal entities.

Together the stakeholders will bring forth a plan that includes:

- Strategies for the promotion of business formation, expansion, recruitment and retention.
- The development of realistic policies and programs to further the economic diversity of the state, its regions and their associated industrial clusters.
- Specific provisions for the stimulation of economic development and job creation in rural areas and midsize cities and counties of the state, including strategies for rural marketing and the development of infrastructure in rural areas.
- Provisions for the promotion of the successful long-term economic development of the state with increased emphasis in market research and information.
- Plans for the generation of foreign investment in the state.
- The identification of business sectors that are of current or future importance to the state's economy and to the state's global business image, and development of specific strategies to promote the development of such sectors.
- Strategies for talent development necessary in the state to encourage economic development growth.

The framework adopted for the planning effort used the Six Pillars of Florida's Economy™ developed by the Florida Chamber Foundation under the leadership of Dr. Dale Brill.

Water Supply Planning

The Community Planning Act, Chapter 163, Part II, F.S. was amended to establish a process for local governments to address water supply planning in their Comprehensive Plans by: identifying water supply sources needed to meet existing and projected demands for the established planning period; base future land use plans and amendments on the availability of water supplies and associated public facilities; and identify alternative and traditional water supply projects, conservation, and reuse needed to meet the needs identified in the applicable regional water supply plan. To fulfill these water supply planning objectives, local governments in the Region over the past few years have successfully adopted their Ten-Year Water Supply Facilities Work Plans through coordination with the SFWMD, and applicable local jurisdictions and public utility providers. When the SFWMD adopts the 2011-2012 LECWSP Update, local governments will reassess and revise their water supply planning needs and policies. This mechanism for coordinated planning is to ensure the Region's growth can be accommodated.

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¹⁴¹ http://www.floridajobs.org/office-directory/division-of-strategic-business-development/fl5yrplan

Electric Vehicle Planning Grant

In September 2011, the Council and its Florida Gold Coast Clean Cities Coalition received a one-year \$500,000 grant from the U.S. Department of Energy to support the development of a plan to accelerate electric vehicle use and charging infrastructure in the Region. Partnering with FPL, the Council is:

- reaching out to public and private fleet operators interested in accelerating electric vehicle (EV)
 deployment,
- establishing criteria to select, site and prioritize public electrical vehicle charging infrastructure,
- developing an education and outreach plan,
- identifying opportunities to standardize and streamline local and state government policy, regulations and permitting to help overcome electrical vehicle adoption, and
- planning for a future demonstration project along the US-1 corridor in Miami-Dade County involving the deployment of self-serve rental/car share electrical vehicles, public charging stations, and opportunities for smart grid and renewable solar technologies.

Encompassing the seven counties of Southeast Florida, this planning effort will be a critical tool in preparing communities in Monroe, Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, and Indian River for the deployment of electrical vehicles. The project is expected to result in comprehensive plans and recommendations, which will be readily releasable to inform, facilitate, and expand the penetration of electrical vehicles and charging infrastructure in the Region and beyond.

Florida East Coast (FEC) Corridor Planning

Currently there are several studies underway to create fixed route rail systems in region and state. Until recently there was no dedicated funding source to help operate such systems. However, Florida East Coast (FEC) Industries has recently announced their plans to build a privately owned, maintained and operated intercity passenger rail service from Miami to Orlando. The FEC estimates that passengers will complete the entire route in three hours, providing a streamlined alternative to roadways and air flights for tourists, business travelers, university students and many other travelers who need to traverse between South and Central Florida. With four stops (Miami, Fort Lauderdale, West Palm Beach, and Orlando) the service will also be a fuel-efficient alternative for work commuters in the Miami Urbanized Area of Palm Beach, Broward, and Miami-Dade Counties. The FEC projects that as many as 3 million cars will be removed each year from the State's roadways, alleviating traffic congestion and air pollution from auto emissions. Because 200 of the 240 miles of infrastructure and right-of-way are already owned by the FEC, its plan is to complete the ambitious project by 2014¹⁴².

The South Florida Commuter Rail Authority's (SFRTA) role in providing Tri-Rail commuter transportation along the CSX corridor, west of the FEC corridor, will continue to be a principal means of transportation in the Region. The SFRTA is exploring funding sources for Tri-Rail locomotive replacements and is committed to feeder bus service from train stations to central business locations along the north-south corridor. Strategies are being employed to improve service levels by increasing passenger train frequency, double tracking the line, and assuming responsibility for train dispatching along the South Florida Rail Corridor.

Southeast Florida Regional Climate Change Compact

Local, regional and federal partners are collaborating to develop agreement around the issues and strategies to improve climate resilience. Leaders in this area include the Southeast Florida Regional Climate Change

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¹⁴² www.allaboardflorida.com

Compact and Florida Atlantic University's Center for Environment Studies (FAU CES). FAU CES is the home of the Integrative Collaborative on Climate and Energy (ICCE)¹⁴³. Launched in the summer of 2009, the ICCE is a cross-university program creating relevant linkages across disciplines in order to advance basic and applied research in the area of climate change and adaptation. FAU has made climate change a research priority focusing on issues of adaptation in Florida's very vulnerable urban and natural systems. Working with USGS and Florida Sea Grant, CES has developed a series of workshops examining the impact of current and future sea level rise on Florida's natural systems and the impact on Everglades Restoration. It has also sponsored a "summit" addressing the impact of sea level rise on Florida's transportation infrastructure. The ICCE focuses on issues of adaptation in Florida's very vulnerable urban and natural systems. University partnerships with the Florida Climate Institute and the University of South Florida provide a Florida-wide and Caribbean perspective. Cooperative work with USGS, SFWMD, USACE, Florida SeaGrant, the Southeast Florida Regional Climate Change Compact, and others provide a practical outreach for research findings. In addition, education and outreach at K-12, university, and community levels is an important component of FAU CES's work

The Southeast¹⁴⁴ Florida Regional Climate Change Compact (Compact¹⁴⁵) is a collaborative effort among Broward, Miami-Dade, Palm Beach and Monroe counties, their municipalities and partners, who are working together to mitigate the causes, and adapt to the consequences, of climate change. The Compact was formalized in January 2010 following the 2009 Southeast Florida Climate Leadership Summit, when elected officials came together to discuss challenges and strategies for responding to the impacts of climate change. At that time the Compact outlined a collaborative effort to participate in a Regional Climate Team toward the development of a Southeast Florida Regional Climate Change Action Plan.

In subsequent years the Compact has worked to unite, organize, and assess the Region through the lens of climate change in setting the stage for action. Specific accomplishments include the development of regionally-consistent methodologies for mapping sea-level rise impacts, assessing vulnerability, and understanding the sources of greenhouse gas emissions. Collectively these work products provided the foundation for the draft "Regional Climate Action Plan," released for public comment in December 2011. The Action Plan calls for concerted action in reducing greenhouse gas emissions and anticipating and adapting to regional and local impacts of a changing climate to protect the assets of the Region's unique quality of life and economy, guide future investments, and foster livable, sustainable and resilient communities.

The State Road 7 / U.S. 441 Collaborative

Today, The State Road 7 / U.S. 441 Collaborative (Collaborative) is one of the community-based initiatives leading the way in the development of an improved built environment and more vibrant economy for South Florida. The Collaborative is a partnership of Broward County, the Seminole Nation, and 14 municipalities which abut 31 miles of State Road 7 beginning in the City of Miami Gardens in Miami-Dade and extending north through the City of Parkland in north Broward. The Partnership has developed a strategic redevelopment master plan. Using this plan, corridor communities have implemented significant redevelopment projects that have improved economic conditions and the quality of life along the 41-mile Corridor.

¹⁴⁵ http://www.southeastfloridaclimatecompact.org/



¹⁴³ http://www.ces.fau.edu/climate_change

[&]quot;Southeast Florida" for purposes of the Compact is defined as Monroe, Miami-Dade, Broward, and Palm Beach counties.

Strategic Airport Master Planning Study (SMP 2015-2050)

The Miami-Dade Aviation Department will be finalizing its new Strategic Airport Master Planning Study (SMP 2015-2050) for the County's System of Airports early next year. The SMP will identify and assess the future air transportation needs for Miami-Dade County, and will balance the needs related to infrastructure and facility preservation and modernization, capacity, customer-service enhancements, financial affordability, cost control, and environmental stewardship.

One Community, One Goal¹⁴⁶

The final report of the four-report series of *One Community One Goal* (OCOG) Target Industry Strategic Plan was released on May 7, 2012 by the Beacon Council and The Beacon Council Economic Development Foundation. The report, titled Target Industry Strategies, provides Miami-Dade County with a recommended blueprint for sustained economic development orchestrated holistically across a broad spectrum of industries and organizations.

The One Community One Goal Coordinating Council, comprised of business and community leaders, will facilitate the implementation of the plan with close collaboration among private industry, the public sector, community organizations and academia, and spearhead fundraising for a \$15 million five-year global economic development marketing campaign.

The Target Industry Strategies report identifies themes that intersect all strategic recommendations and provide a unifying thread across a complex set of initiatives designed to create an ecosystem for economic growth in Miami-Dade County. These themes include: a single shared vision, the importance of cooperation across industries and sectors, alignment around a single set of target industries, education as the foundation for growth, and the value of economic diversification. The report offers detailed strategic recommendations for seven target industries and niche sectors that represent long-term global growth potential.

With education as the foundation of the strategic plan, the report identifies more than 80 recommendations for seven target industries—Aviation, Creative Design, Hospitality & Tourism, Information Technology, International Banking & Finance, Life Sciences and Health Care, and Trade & Logistics.

Broward County Six Pillars 147

Broward County business, civic and government leaders announced the launch of the Six Pillars™ Strategic Planning process for Broward County in March 2012. The Six Pillars process is being led by The Florida Chamber Foundation at the state level, and is meant to help communities throughout the state of Florida prosper and create high paying jobs by creating a visioning process which looks to a 20-year horizon. Six Pillars will be addressing these topics which have been deemed critical to economic success in the future:

- (1) Talent Supply & Education
- (2) Innovation & Economic Development
- (3) Infrastructure & Growth Leadership
- (4) Business Climate & Competitiveness
- (5) Civic & Governance Systems
- (6) Quality of Life & Quality Places

 $^{^{146}\,}http://beaconcouncilfoundation.org/2012/05/08/press-release-about-ocog-plan/$

http://www.broward.org/Commission/District4/Newsletter/Pages/March2012.aspx

Named as co-chairs of Broward County's Six Pillars process are: J. David Armstrong, Jr., president of Broward College and chairman of the Greater Fort Lauderdale Alliance; Charles Caulkins, managing partner of the Fort Lauderdale office of Fisher and Phillips LLP and vice chair of The Broward Workshop; Lori Chevy, Broward market president of Bank of America Merrill Lynch; Broward County Commissioner Chip LaMarca; and James Murley, executive director of the South Florida Regional Planning Council.

Past, Present, and Projected Future Economic Development Investments

PortMiami - There are three major Port Miami projects noted in the Miami-Dade MPO's Transportation Improvement Program (TIP). The first is Phase III of a multi-billion dollar Miami Harbor Dredging project which will enable the Port to double its cargo capacity. Port Miami is one of three ports on the along the nation's east coast that will be dredged to 50' when the Panama Canal expansion opens in 2014. ¹⁴⁸ Second, the \$1.5 billion Port Miami Tunnel project will directly connect the Port to I-395 and the MacArthur Causeway, eliminating the need for semi-trucks transporting cargo to traverse through downtown Miami in order to reach the Port. Scheduled for completion in 2014, this massive project will result in alleviating congestion and greatly facilitating mobility in and out of the Port. This added efficiency in freight mobility will have a significant and positive economic impact on the Region. The third improvement is the intermodal and rail reconnection project which includes the rehabilitation of the rail bridge, construction of additional onport rail lines and gantry system, and construction of an on-port intermodal apron. These dredging, tunnel, and rail improvements are critical to PortMiami's continued economic growth and viability in international trade and will help to address the challenge of the limited available land in which the Port is situated.

Port Everglades has initiated a \$2.4 billion expansion plan designed to address the anticipated increase in seaport trade over the next 20 years, as described in the 2009 update of the Port Everglades Master/Vision Plan.

Miami International Airport (MIA) is in the process of finalizing their \$6.4 billion Capital Improvement Program (CIP), including new passenger terminals and air cargo facilities. Completion of the North Terminal Development Program which includes the American Airlines hub is part of the CIP.

Fort Lauderdale – Hollywood International Airport (FLL) has begun construction on the expansion of its South runway, a major project that is expected to be completed in the fall of 2014. The project will generate 11,000 jobs and contribute \$1.4 billion to the Regional economy. Other projects include the expansion and redevelopment of the airport's Terminal 4 which will double its international capacity; a complete modernization of Terminals 1, 2, and 3; and the development of an additional 5-gate Concourse A in Terminal 1.

Two major intermodal projects which are completed or in progress are improvements to the **Miami Intermodal Center (MIC)** and the **NW 25th Street reconstruction and viaduct construction**. The MIC includes a Rental Car Center, the MIC Central Station, and the Miami Airport (MIA) Mover .The Rental Car Center and the MIA Mover were completed and began operations in July 2010 and September 2011, respectively. Construction of the MIC has been underway since 2011 with anticipated completion in 2013. Once open, the MIC will provide connectivity between various transportation modes including Tri-Rail, Metrobus, taxis, intercity buses and the airport.

The NW 25th Street project includes widening and reconstruction of the roadway and the construction of a viaduct to separate truck traffic bound for the airport from NW 25th Street. Upon completion, heavy truck

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¹⁴⁸ One Community One Goal: Competitive Assessment

volumes will be alleviated and traffic flow will be improved. Planned improvements to the Strategic Intermodal System in Miami-Dade County include the PortMiami Tunnel construction (described in the Seaports and Airports section of this document), State Road 826/Palmetto Expressway, SR 826 to Interstate 95, the Krome Avenue corridor, and I-395.

Created in 1994 the **Miami-Dade Expressway Authority (MDX)** serves as "... an innovative transportation agency dedicated to the enhancement of mobility in Miami-Dade County." MDX is funded with toll revenues from its system of 34 centerlane roadway miles which include the Dolphin Expressway (SR 836), the Airport Expressway (SR 112), Don Shula Expressway (SR 874), Gratigny Parkway (SR 924), and the Snapper Creek Expressway (SR 878). Improvements that will enhance mobility include existing system improvements, system expansion, and facility improvements. Feasibility studies to create the US 1 Express are underway and may result in incorporating managed lanes within the South Miami-Dade Busway along U.S. 1 and project development of a transportation corridor from the MIC to Dadeland along an existing Florida East Coast railway right-of-way.¹⁴⁹

In order to address east-west congestion in Broward County, the major project in this part of the Region is a \$1.2 billion package of improvements on the **I-595 corridor**. A public-private partnership agreement that was signed early in 2009 by the State and a private concessionaire enabled the massive project to be expedited. Extending from I-75 east to I-95, project construction commenced in late 2010 and is to be completed in 2014. Improvements will include major ramp upgrades and a 3-lane median that will enable tolled, reversible managed lanes. These lanes, known as the 595 Express, will operate eastbound in the mornings and westbound in the afternoons. ¹⁵⁰

Other significant improvements in Broward County include recent completion of mainline widening by Florida's Turnpike Enterprise from Atlantic Boulevard to south of Sunrise Boulevard and continued emphasis on public transit including plans for implementing transit-oriented corridors and hubs. "The Wave," an environmentally friendly streetcar system that is to be built in downtown Fort Lauderdale, is an example of promoting livable communities by integrating land use, transportation and economic development. In June 2012, the Fort Lauderdale Downtown Development Authority received notification of their award of an \$18 million TIGER grant from the Federal Transit Administration to undertake the first phase of "The Wave" Streetcar Project.

The **U.S. 1 South improvement project from Florida City to north Key Largo**, spanning both Miami-Dade and Monroe Counties, was completed in September 2011. The project has greatly improved safety and mobility to the Florida Keys. Upcoming projects over the next few years will involve resurfacing and bridge maintenance¹⁵¹.

Express toll lanes on Interstate 95 became operational in Miami-Dade County from north of Interstate 395 to just north of Golden Glades with electronic toll collection commencing in January 2010. Construction is underway to develop Phase 2 of these express lanes from north of the Golden Glades in Miami-Dade County to Broward Boulevard in central Broward County. At a cost of \$106 million, the project is scheduled for completion in late 2014. Express Bus service between Miami-Dade and Broward Counties began in January 2010. Studies are underway to determine the feasibility of extending the I-95 Express Lanes northward. ¹⁵²



¹⁴⁹ Miami –Dade MPO Transportation Improvement Program, Citizen's Version, FYs 2-012/13 to 2016/17

¹⁵⁰ i-595.com

¹⁵¹ Florida Department of Transportation, District 6

www.95express.com

PERFORMANCE MEASURES AND SIX PILLARS INDICATORS

Performance Measures

- 1. Number of Jobs Created After Implementation of the CEDS
 - a. Total Employment in Initial Year
 - b. Total Employment in Subsequent Years
- 2. Number and Types of Public Sector Investments Undertaken in the Region
 - a. EDA Sponsored Investments
 - b. Significant State and Local Investments
- 3. Number of Jobs Retained in the Region
 - a. Number of Jobs Retained as a Result of Federal Investments
 - b. Number of Jobs Retained as a Result of Select State and Local Investments
- 4. Private Sector Investment in the Region After Implementation of the CEDS
- 5. Changes in the Economic Environment of the Region (Changes to Taxes & Fees, New Incentive Programs, etc.)

Six Pillars Indicators

- 1. Talent Supply & Education
 - a. Average Annual Wage
 - b. High School Graduation Rates
 - c. 8th Grade Math Performance
 - d......% of Higher Education Attainment
- 2. Innovation & Economic Development
 - a. Gross Domestic Product
 - b. Bed Tax Collections
 - c. Trade Exports and Imports
- 3. Infrastructure & Growth Leadership
 - a. Population Counts, Estimates and Projections
 - b. Building Permits
 - c. Vehicle Miles Traveled per Lane Mile
- 4. Business Climate & Competitiveness
 - a. Average Annual Unemployment Rates
 - b. Employment by Industry
 - c. Wages by Industry
- 5. Civic & Governance Systems
 - a. Millage Rates



Comprehensive Economic Development Strategy

 $b. \ \dots \dots \ Registered \ Nonprofit \ Organizations$

c. Voter Participation

6. Quality of Life & Quality Places

a. Per Capita Income

b. House Purchase Price and Cost of Living Index

c. Persons Living in Poverty



COMMUNITY AND PRIVATE SECTOR PARTICIPATION

The Six Pillars Caucus System, CEDS Development, and the Seven50: SE Florida Prosperity Plan Development

The *CEDS* must include a section discussing the relationship between the community in general and the private sector in the development and implementation of the CEDS. Public and private sector partnerships are critical to the implementation of the CEDS.

The members of the CEDS Committee and Regional Planning Council will perform the policy guidance function of a Six Pillars Caucus.

What is the Southeast Florida Regional Partnership?

The Southeast Florida Regional Partnership (Partnership) is a partnership of more than 200 public, private, non-profit organizations and supporters from the Region consisting of Monroe, Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, and Indian River counties. The Partnership was established as a voluntary membership organization separate from, but supported by, the South Florida and Treasure Coast Regional Planning Councils. The Partnership is committed to working together to ensure that the Southeast Florida region enjoys a prosperous economy, livable and equitable communities, and a sustainable environment through their individual actions and the development of the "Seven50," a seven county, 50 year Southeast Florida Prosperity Plan.

What is the Sustainable Communities Initiative and Sustainable Communities Regional Planning Grants Program?

On June 16 2009, the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, and U.S. Environmental Protection Agency announced an Interagency Partnership for Sustainable Communities. The goal of this interagency partnership is to regionally coordinate federal housing, environmental protection, and transportation planning and investment. Federal funding to support this effort is being provided under HUD's Sustainable Communities Regional Planning Grants Program.

The goal of the Sustainable Communities Planning Grants Program is to support multi-jurisdictional regional planning efforts that integrate housing, economic development, and transportation decision-making in a manner that empowers jurisdictions to consider the interdependent challenges of economic growth, social equity and environmental impact simultaneously. The Program places a priority in investing in partnerships that translate the Livability Principles which follow below into "strategies that direct long-term development and reinvestment, demonstrate a commitment to addressing issues of regional significance, utilize data to set and monitor progress toward performance goals, and engage stakeholders and citizens in meaningful decision-making roles."

Why was the Partnership created?

In January 2010, regional leaders came together and began to build upon existing working relationships and partnerships to establish the Partnership and develop an application to the HUD Sustainable Communities Regional Planning Grants Program. At that time, Partnership members signed "Memorandums of Understanding" adopting the Livability Principles and committed to work collaboratively to support the sustainable development and redevelopment of Southeast Florida:



Livability Principles

- 1. Provide more transportation choices;
- 2. Promote equitable, affordable housing;
- 3. Enhance economic competitiveness;
- 4. Support existing communities;
- 5. Coordinate policies and leverage investment;
- 6. Value communities and neighborhoods; and
- 7. Enhance community resiliency to the impacts of climate change.

Additionally, HUD identified a subset of Partnership member categories as especially critical to successful implementation of the grant if awarded. These "Consortium Members" include the Region's metropolitan planning organizations, counties, educational institutions and non-profit organizations. Partnership members from these categories formed the initial Partnership Consortium which continues to expand today.

In October 2010, the Southeast Florida Regional Partnership secured a \$4.25 million regional planning (Category 1) grant from HUD. HUD's grants under this program support metropolitan and multi-jurisdictional planning efforts that better integrate housing, land use, economic development, community development, social equity, water / environmental protection, transportation, energy conservation, and infrastructure. These resources are being used to develop the Region's Seven50 Plan by February 2013. Significant in-kind and other match has also been pledged by members of the Partnership to augment these resources.

Does the Southeast Florida Regional Partnership exist only for the purpose of implementing the Sustainable Communities Regional Planning Grant?

The opportunity presented by the HUD Sustainable Communities Regional Planning Grants Program provided renewed impetus for bringing together and expanding existing local and regional partnerships under the umbrella of a new "Southeast Florida Regional Partnership." Just as other regions in the state and country have proactively organized themselves to effectively address the opportunities and challenges facing their regions, the Partnership has the opportunity to mature and evolve into a long lasting collaboration where discussion and consensus building on issues of regional importance and action can occur. The Sustainable Communities Regional Planning Grant and the development of the Seven50 Plan are an important focus for the Partnership, but it is anticipated that the Partnership's scope and work program will evolve over time.

What is the Seven50 Plan?

The Partnership is developing the Seven50, a seven county, 50-year Southeast Florida Prosperity Plan that will reflect regional agreement around priority investments in key areas of importance to Southeast Florida's future. When considered together, these issues will coalesce into a coherent strategy and investment plan in support of the future sustainability and economic prosperity of our communities and region. Seven initial work groups have been identified along issue areas:

- Education, Workforce & Economic Development
- Development Patterns (Housing, Transportation, Healthy Communities)
- Environment, Natural Resources, and Agriculture
- Climate Resiliency
- Community Assets and Culture
- Inclusive Regional Leadership and Equity



Outcomes

The HUD Sustainable Communities Initiative is the Region's best opportunity to develop consensus around a strategic vision and investment plan that will chart the course to a brighter and more prosperous future for Southeast Florida's residents and in turn, Florida. It is expected that this strategic vision and the Seven 50 will:

- 1. serve as the framework for future federal, state and local investment;
- 2. support and advance the efforts of individual counties, municipalities and other regional partners whose plans and projects further the implementation of the Seven50 Plan; and
- 3. enhance the ability of the Southeast Florida region to secure resources needed for critical infrastructure projects that further regional sustainability and economic prosperity.

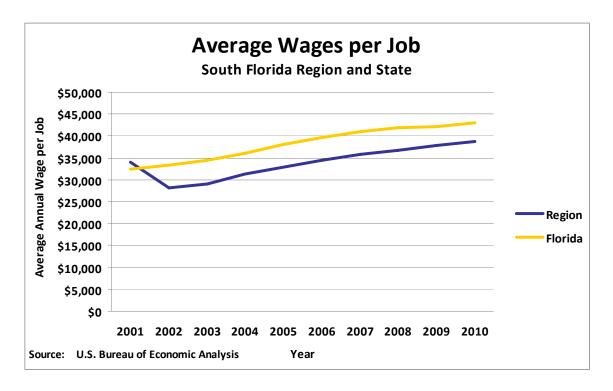
"Preferred Sustainability Status" for certain federal grant programs has already resulted in millions of dollars in additional investment in Southeast Florida through its Partnership member organizations.



APPENDIX - SIX PILLARS INDICATORS

1. Talent Supply & Education

a. Average Annual Wage



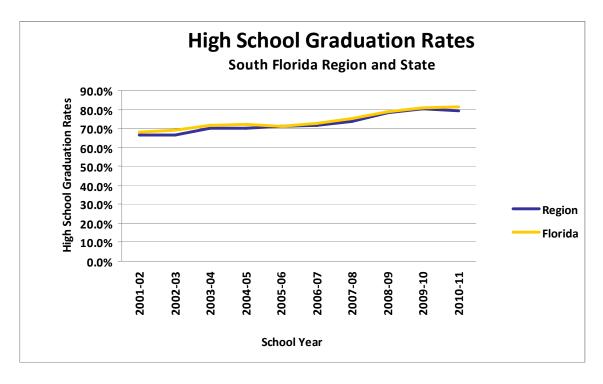
		Year												
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010				
Broward	\$34,523	\$28,445	\$29,216	\$31,690	\$33,439	\$35,056	\$36,468	\$37,469	\$38,745	\$39,517				
Miami-Dade	\$35,036	\$28,244	\$29,022	\$30,370	\$31,114	\$31,204	\$32,138	\$32,889	\$33,051	\$33,075				
Monroe	\$28,075	\$27,019	\$27,739	\$29,139	\$30,718	\$31,787	\$32,818	\$33,375	\$34,296	\$35,511				
Region	\$33,953	\$28,243	\$29,003	\$31,277	\$32,940	\$34,404	\$35,727	\$36,663	\$37,835	\$38,647				
Florida	\$32,416	\$33,406	\$34,534	\$36,148	\$37,951	\$39,663	\$41,029	\$41,818	\$42,228	\$43,033				

Source: U.S. Bureau of Economic Analysis

Note: The employment estimates used to compute the average wage are a job, not person, count. People holding more than one job are counted in the employment estimates for each job they hold. All state and local area dollar estimates are in current dollars (not adjusted for inflation).



b. High School Graduation Rates

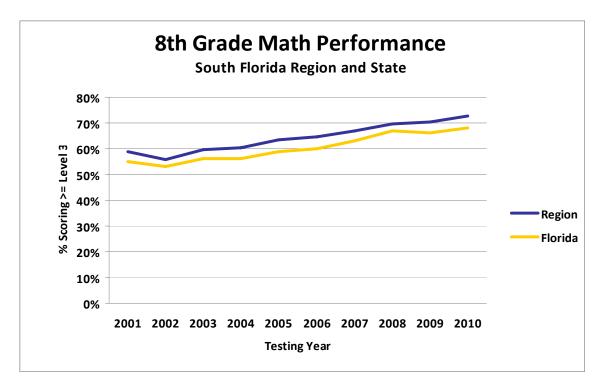


					Schoo	l Year				
Area	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Broward	65.2%	62.7%	66.2%	67.1%	67.8%	66.3%	68.8%	74.2%	77.9%	76.9%
Miami-Dade	84.4%	85.1%	86.8%	84.9%	93.2%	91.2%	91.9%	93.9%	90.4%	95.7%
Monroe	74.2%	73.9%	75.2%	76.7%	75.5%	83.6%	85.5%	87.4%	86.3%	82.2%
Region	66.6%	66.7%	69.8%	70.2%	71.1%	71.5%	73.6%	78.3%	80.4%	79.3%
Florida	67.9%	69.0%	71.6%	71.9%	71.0%	72.4%	75.4%	78.6%	80.7%	81.2%

Source: Florida Department of Education, Data Publications and Reports: Students



c. 8th Grade Math Performance



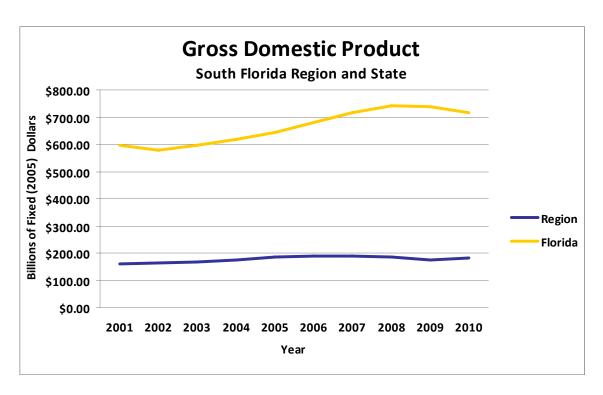
					Υe	ear				
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Broward	58%	55%	59%	60%	63%	64%	66%	69%	70%	72%
Miami-Dade	72%	63%	68%	67%	70%	71%	77%	77%	77%	80%
Monroe	64%	62%	61%	61%	63%	67%	71%	74%	72%	75%
Region	59%	56%	60%	60%	63%	65%	67%	70%	70%	73%
Florida	55%	53%	56%	56%	59%	60%	63%	67%	66%	68%

Source: Florida Department of Education, Florida Comprehensive Assessment Test



2. Innovation & Economic Development

a. Gross Domestic Product

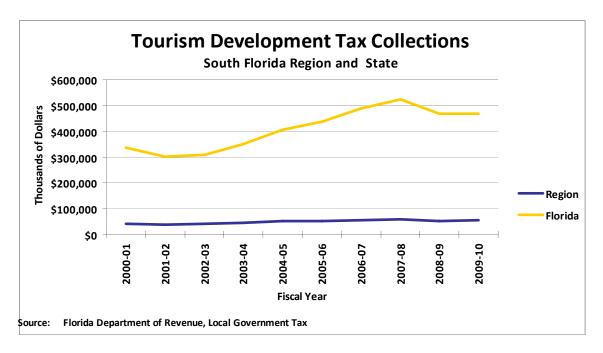


					Ye	ar				
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Broward	\$64.02	\$67.00	\$69.97	\$73.46	\$77.18	\$79.38	\$78.40	\$75.68	\$72.24	\$75.44
Miami-Dade	\$91.44	\$93.16	\$94.72	\$99.77	\$103.65	\$106.58	\$107.20	\$105.27	\$100.20	\$104.44
Monroe	\$2.86	\$2.98	\$3.08	\$3.11	\$3.30	\$3.34	\$3.35	\$3.38	\$3.20	\$3.27
Region	\$158.31	\$163.14	\$167.76	\$176.33	\$184.12	\$189.29	\$188.95	\$184.34	\$175.64	\$183.15
Florida	\$596.72	\$579.57	\$596.72	\$616.75	\$644.25	\$680.00	\$717.59	\$742.52	\$737.83	\$716.05

Source: Regional Economic Modeling, Inc. Policy Insight Plus, Florida Counties v1.3.5, Historical Data



b. Bed Tax Collections



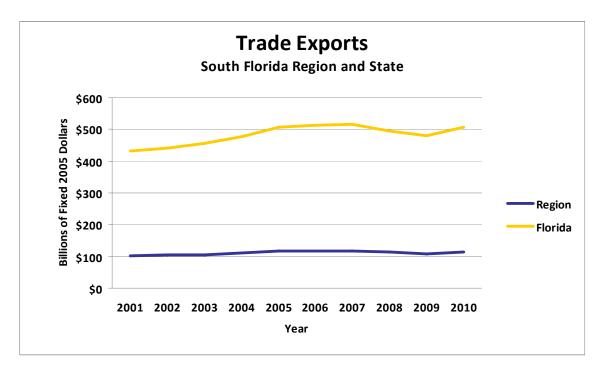
					Fiscal	Year				_
Area	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Broward Miami-	\$27,561	\$25,159	\$27,850	\$30,673	\$35,261	\$38,855	\$40,109	\$42,015	\$35,895	\$34,973
Dade	\$0	\$0	\$447	\$579	\$653	\$686	\$624	\$613	\$1,019	\$1,042
Monroe	\$12,493	\$12,248	\$12,591	\$13,841	\$14,393	\$14,179	\$14,597	\$16,205	\$14,481	\$19,448
Region	\$40,053	\$37,407	\$40,888	\$45,093	\$50,307	\$53,720	\$55,330	\$58,832	\$51,394	\$55,462
Florida	\$335,845	\$300,594	\$310,386	\$350,471	\$405,155	\$436,165	\$489,307	\$524,341	\$466,657	\$466,707

 $Source: \ Florida \ Department \ of \ Revenue \ website, \ Local \ Government \ Tax \ Receipts \ by \ County.$

Note: Values presented in thousands of dollars.



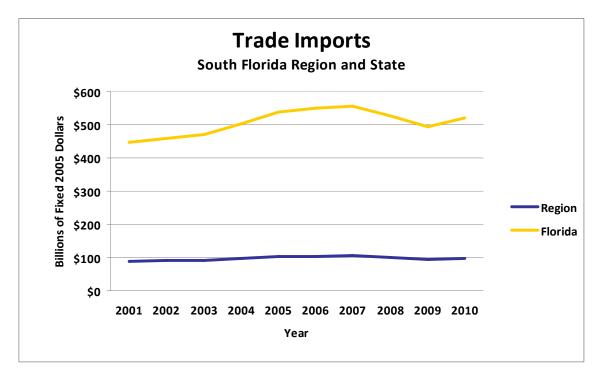
c. Trade Exports and Imports



Exports					Ye	ar				
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Broward	\$41.64	\$43.24	\$44.78	\$46.95	\$48.75	\$49.51	\$49.19	\$46.99	\$45.25	\$48.09
Miami-Dade	\$59.53	\$59.44	\$59.25	\$62.70	\$64.98	\$65.00	\$66.44	\$64.05	\$60.15	\$63.43
Monroe	\$1.78	\$1.89	\$1.92	\$1.95	\$2.04	\$1.95	\$1.94	\$2.03	\$1.92	\$1.98
Region	\$102.95	\$104.58	\$105.95	\$111.60	\$115.76	\$116.46	\$117.58	\$113.07	\$107.32	\$113.50
Florida	\$431.06	\$440.19	\$454.90	\$477.68	\$507.90	\$513.80	\$517.27	\$494.13	\$478.74	\$507.02

Source: Regional Economic Modeling, Inc. Policy Insight Plus, Florida Counties v1.3.5, Historical Data





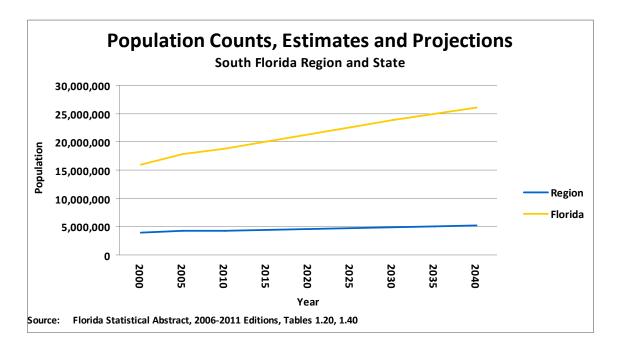
Imports		Year													
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010					
Broward	\$40.10	\$40.67	\$41.10	\$43.12	\$46.32	\$46.60	\$47.21	\$44.51	\$40.93	\$43.10					
Miami-Dade	\$45.39	\$46.30	\$47.18	\$49.74	\$52.44	\$53.57	\$54.80	\$52.06	\$49.00	\$51.84					
Monroe	\$3.03	\$3.03	\$3.11	\$3.40	\$3.58	\$3.72	\$3.77	\$3.69	\$3.48	\$3.58					
Region	\$88.51	\$90.00	\$91.40	\$96.26	\$102.33	\$103.89	\$105.78	\$100.26	\$93.41	\$98.52					
Florida	\$447.40	\$458.37	\$470.73	\$503.30	\$537.11	\$550.05	\$555.19	\$526.57	\$493.46	\$520.94					

Source: Regional Economic Modeling, Inc. Policy Insight Plus, Florida Counties v1.3.5, Historical Data



3. Infrastructure & Growth Leadership

a. Population Counts, Estimates and Projections

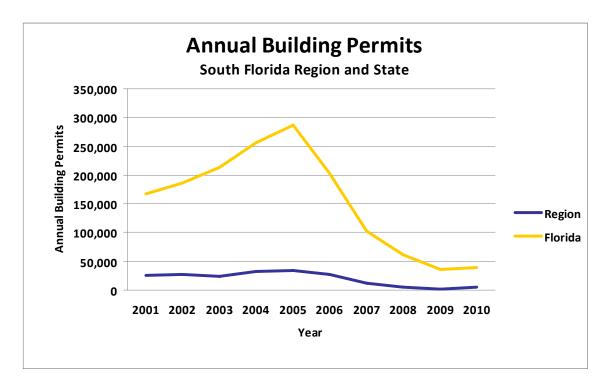


	Census	Estimate	Census			Proje	ctions		
	2000	2005	2010	2015	2020	2025	2030	2035	2040
Broward Miami-	1,623,018	1,740,987	1,748,066	1,788,200	1,834,500	1,877,700	1,916,200	1,949,700	1,982,500
Dade	2,253,362	2,422,075	2,496,435	2,600,900	2,722,900	2,841,400	2,952,800	3,055,100	3,150,200
Monroe	79,589	82,413	73,090	72,200	71,200	70,200	69,300	68,500	67,700
Region	3,955,969	4,245,475	4,317,591	4,461,300	4,628,600	4,789,300	4,938,300	5,073,300	5,200,400
Florida	15,982,400	17,865,737	18,801,310	19,974,400	21,326,800	22,641,300	23,877,900	25,017,100	26,081,800

Source: Florida Statistical Abstract, 2006-2011 Editions, Tables 1.20, 1.40



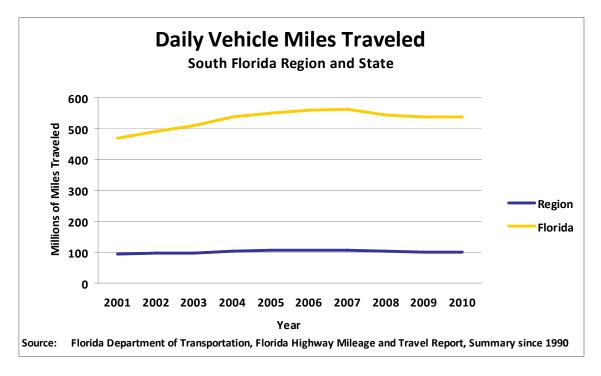
b. Building Permits



					Year					
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Broward Miami-	10,761	12,028	8,218	8,709	6,951	6,716	3,933	2,164	1,049	1,168
Dade	13,996	14,606	15,533	22,856	26,120	20,017	8,082	3,474	1,395	3,203
Monroe	232	335	430	383	538	457	269	260	116	271
Region	24,989	26,969	24,181	31,948	33,609	27,190	12,284	5,898	2,560	4,642
Florida	167,035	185,431	213,567	255,893	287,250	203,238	102,551	61,042	35,329	38,679

Source: U.S. Census Bureau, Annual New Privately-Owned Residential Building Permits, Total Units, for Counties in Florida.

c. Vehicle Miles Traveled per Lane Mile



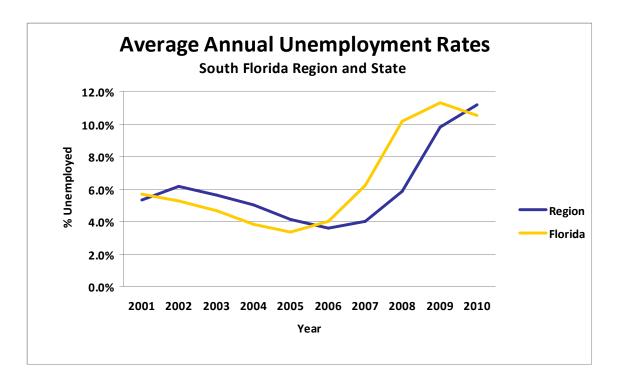
					Ye	ar				
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Broward	42.12	43.06	43.70	44.29	45.77	45.81	46.57	45.01	44.00	43.26
Miami-Dade	48.96	51.61	51.64	56.00	56.33	57.23	55.90	53.83	53.49	53.57
Monroe	2.88	2.90	3.02	2.97	3.08	3.28	3.25	2.97	3.19	2.92
Region	93.96	97.57	98.36	103.26	105.18	106.31	105.72	101.80	100.69	99.75
Florida	468.57	489.54	508.61	537.49	550.61	558.31	562.80	542.33	538.09	536.32

Source: Florida Department of Transportation, Florida Highway Mileage and Travel Report, Summary since 1990.



4. Business Climate & Competitiveness

a. Average Annual Unemployment Rates

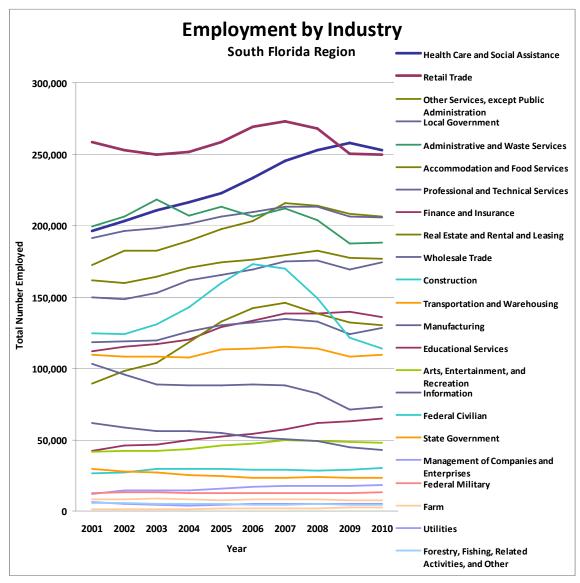


		Year												
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010				
Broward	4.5%	5.8%	5.4%	4.5%	3.6%	3.0%	3.4%	5.3%	8.9%	9.6%				
Miami-Dade	6.1%	6.5%	5.9%	5.5%	4.6%	4.1%	4.5%	6.4%	10.6%	12.5%				
Monroe	3.4%	3.9%	3.3%	3.0%	2.7%	2.4%	2.6%	4.0%	6.6%	7.1%				
Region	5.3%	6.2%	5.6%	5.0%	4.1%	3.6%	4.0%	5.9%	9.8%	11.1%				
Florida	5.7%	5.3%	4.7%	3.8%	3.3%	4.0%	6.2%	10.2%	11.3%	10.5%				

Source: Florida Department of Economic Opportunity Local Area Unemployment Statistics



b. Employment by Industry



Note: Data sorted by industry with highest level of employment in 2010



					Ye	ar				
Industry	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Health Care and Social										
Assistance	196,378	203,375	210,577	216,217	222,931	233,576	245,351	253,133	257,604	252,684
Retail Trade	258,705	252,935	249,751	251,806	258,604	268,905	272,670	267,639	250,264	249,475
Other Services, except										
Public Administration	172,101	182,273	182,424	189,147	197,594	202,853	215,439	213,991	208,046	206,565
Local Government	191,340	195,993	198,397	201,153	206,194	209,570	212,901	213,308	206,338	205,565
Administrative and Waste Services	199,573	206,449	218,383	206,861	213,103	206,272	211,861	203,789	187,593	188,362
Accommodation and Food	199,573	200,443	210,303	200,801	213,103	200,272	211,001	203,783	167,333	100,302
Services	161,524	160,056	164,457	170,526	173,903	175,861	179,517	182,278	177,221	176,611
Professional and Technical										
Services	149,581	148,144	152,927	161,522	165,227	168,972	174,617	175,558	169,087	174,208
Finance and Insurance	112,198	114,813	116,783	120,117	128,752	133,445	138,455	138,600	139,807	135,874
Real Estate and Rental and										
Leasing	89,371	98,351	103,628	118,001	132,525	142,364	145,842	138,461	131,999	130,176
Wholesale Trade	118,446	118,730	119,312	125,971	130,105	132,120	134,552	132,409	124,160	128,127
Construction	124,397	124,035	130,859	143,014	159,748	173,137	169,667	148,882	121,304	113,822
Transportation and	100 606	100 120	108,114	107,598	113,342	113,577	115 260	112 752	107 007	100 221
Warehousing	109,606	108,128	100,114	107,596	113,342	115,577	115,369	113,753	107,907	109,231
Manufacturing	103,303	95,340	88,857	87,761	88,072	88,782	88,097	82,148	71,286	73,210
Educational Services	42,435	45,815	46,750	49,682	52,024	54,280	57,218	61,623	63,016	65,033
Arts, Entertainment, and	,	,	,	,	,	,	,	,	,	,
Recreation	41,577	41,943	42,050	43,403	45,837	47,371	49,796	49,062	48,173	47,914
Information	61,718	58,727	55,723	55,687	54,739	51,440	50,353	48,989	44,911	43,033
Federal Civilian	26,480	26,987	29,663	29,560	29,628	29,029	28,661	28,559	28,968	30,352
State Government	29,424	27,666	27,070	25,094	24,544	23,016	23,404	24,004	23,578	23,512
Management of										
Companies and Enterprises	11,898	14,185	14,253	14,510	15,839	17,007	17,674	17,330	17,710	18,083
Federal Military	12,851	13,294	13,272	12,400	12,385	12,758	12,817	12,747	12,771	13,200
Farm	8,460	8,309	9,078	8,270	7,474	8,105	8,473	8,015	7,366	7,525
Utilities	6,079	5,046	4,371	3,912	4,601	4,800	5,024	5,179	5,311	5,144
Forestry, Fishing, Related	F 443	F 646	4.074	F 407	4.740	4.242	4.252	4.757	4.645	4.546
Activities, and Other	5,442	5,616	4,871	5,187	4,718	4,313	4,253	4,757	4,645	4,546
Mining Source: Regional Eco	1,381	1,562	1,544	1,448	1,607	1,792	2,140	2,180	2,740	2,401

Source: Regional Economic Modeling, Inc., Policy Insight+, Florida Counties v1.3, U.S. Bureau of Economic Analysis Data Note: Data sorted by industry with highest level of employment in 2010

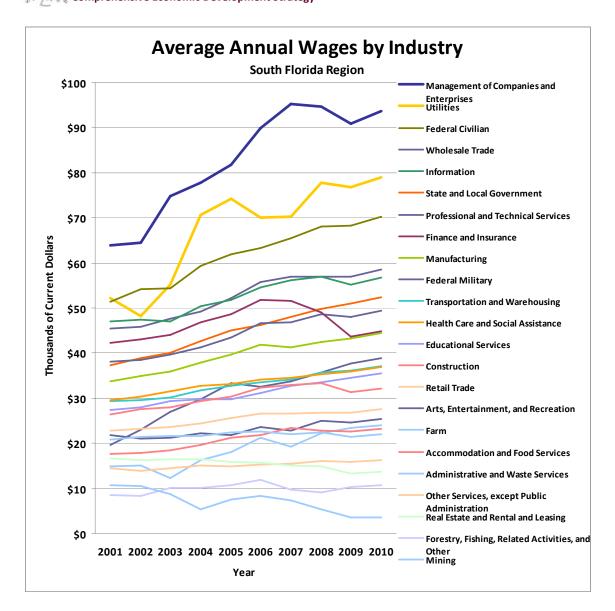


c. Wages by Industry

	Year										
Industry	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Management of Companies and											
Enterprises	\$63.9	\$64.5	\$74.9	\$77.7	\$81.7	\$90.0	\$95.2	\$94.7	\$90.9	\$93.6	
Utilities	\$52.1	\$48.1	\$55.2	\$70.7	\$74.2	\$70.0	\$70.2	\$77.8	\$76.9	\$79.0	
Othitics						770.0		777.0	770.5		
Federal Civilian	\$51.3	\$54.1	\$54.4	\$59.3	\$61.9	\$63.2	\$65.5	\$68.1	\$68.2	\$70.2	
Wholesale Trade	\$45.5	\$45.8	\$47.6	\$49.2	\$52.2	\$55.8	\$57.0	\$56.9	\$57.0	\$58.6	
Information	\$47.1	\$47.4	\$47.1	\$50.4	\$51.9	\$54.5	\$56.2	\$56.9	\$55.1	\$56.7	
State and Local Government	\$37.3	\$38.9	\$40.1	\$42.7	\$45.0	\$46.3	\$48.1	\$49.8	\$51.0	\$52.4	
Professional and Technical											
Services	\$38.0	\$38.4	\$39.6	\$41.2	\$43.4	\$46.7	\$46.8	\$48.6	\$47.9	\$49.3	
Finance and Insurance	\$42.3	\$43.0	\$44.1	\$46.8	\$48.5	\$51.7	\$51.6	\$49.1	\$43.7	\$44.9	
Manufacturing	\$33.8	\$34.9	\$35.9	\$37.8	\$39.7	\$41.9	\$41.4	\$42.4	\$43.2	\$44.5	
Federal Military	\$19.7	\$23.1	\$27.0	\$29.8	\$33.2	\$32.5	\$33.7	\$35.8	\$37.7	\$38.9	
Transportation and Warehousing	\$29.4	\$29.6	\$30.1	\$31.8	\$32.7	\$33.6	\$34.2	\$35.7	\$36.0	\$37.0	
Health Care and Social Assistance	\$29.5	\$30.3	\$31.6	\$32.7	\$33.1	\$34.2	\$34.6	\$35.3	\$35.8	\$37.0	
Educational Services	\$27.4	\$28.0	\$29.4	\$29.7	\$29.8	\$31.1	\$32.8	\$33.5	\$34.5	\$35.6	
Construction	\$26.5	\$27.5	\$27.9	\$29.4	\$30.5	\$32.3	\$33.0	\$33.3	\$31.4	\$32.2	
	\$22.9	\$23.2	\$23.7		\$25.5	\$26.5		\$26.7		\$27.5	
Retail Trade Arts, Entertainment, and	322.9	\$25.2	\$25.7	\$24.4	\$25.5	\$20.5	\$26.6	\$20.7	\$26.8	327.5	
Recreation	\$21.9	\$21.0	\$21.2	\$22.3	\$21.8	\$23.7	\$22.7	\$25.1	\$24.6	\$25.4	
necreation		Ψ21.0	Ψ 21.2	722. 3	Ψ21.0		ΥΖΖ. 7	Ψ23.1	724.0	723. ∓	
Farm	\$14.9	\$15.1	\$12.4	\$16.4	\$18.0	\$21.2	\$19.3	\$22.1	\$23.4	\$24.1	
Accommodation and Food	4	4			44.4		4	4		4	
Services	\$17.6	\$17.8	\$18.4	\$19.6	\$21.3	\$21.9	\$23.5	\$22.7	\$22.5	\$23.2	
Administrative and Waste	¢20.0	ć24 F	624.7	ć24.C	ć22.4	ć22.6	ć22.0	ć22.4	624.4	622.0	
Services Other Services asset Bublic	\$20.8	\$21.5	\$21.7	\$21.6	\$22.4	\$22.6	\$22.0	\$22.4	\$21.4	\$22.0	
Other Services, except Public Administration	\$14.5	\$14.0	\$14.5	\$15.0	\$14.8	\$15.4	\$15.6	\$16.1	\$15.9	\$16.4	
Real Estate and Rental and	Ş14.S	Ş14.U	Ş14.S	\$15.0	\$14.8	\$15.4	9.CI¢	\$10.1	\$12.9	\$10.4	
Leasing	\$16.7	\$16.4	\$16.5	\$16.5	\$15.9	\$15.7	\$15.1	\$14.9	\$13.3	\$13.7	
Forestry, Fishing, Related	710.7	710.7	710.5	710.5	710.0	713.7	710.1	717.7	715.5	713.7	
Activities, and Other	\$8.5	\$8.4	\$10.0	\$10.0	\$10.8	\$11.8	\$9.8	\$9.2	\$10.4	\$10.8	
Mining	\$10.7	\$10.5	\$8.8	\$5.4	\$7.6	\$8.4	\$7.4	\$5.3	\$3.6	\$3.6	

Source: Regional Economic Modeling, Inc., Policy Insight+, Florida Counties, v1.3, U.S. Bureau of Economic Analysis Data Note: Data sorted by industry with highest level of wages in 2010

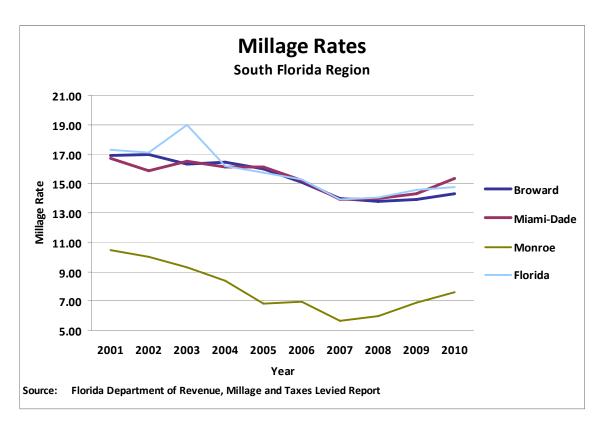






5. Civic & Governance Systems

a. Millage Rates

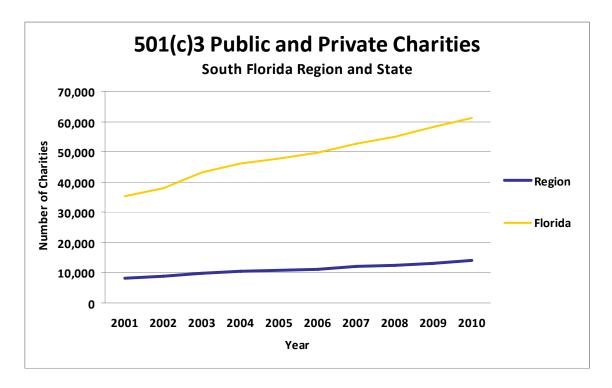


	Year												
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010			
Broward	16.89	16.94	16.30	16.45	16.00	15.08	13.95	13.77	13.90	14.31			
Miami-Dade	16.71	15.86	16.49	16.10	16.10	15.20	13.89	14.00	14.28	15.31			
Monroe	10.49	10.02	9.31	8.41	6.79	6.93	5.63	5.99	6.90	7.63			
Region	14.70	14.27	14.03	13.66	12.97	12.40	11.16	11.25	11.69	12.42			
Florida	17.31	17.12	18.96	16.20	15.75	15.25	13.93	14.05	14.53	14.77			

Source: Florida Department of Revenue, Property Tax Analysis, Millage, Levies and Collections; Florida Ad Valorem Valuation and Tax Data 2001 to 2010; Millage and Taxes Levied Report



b. Registered Nonprofit Organizations

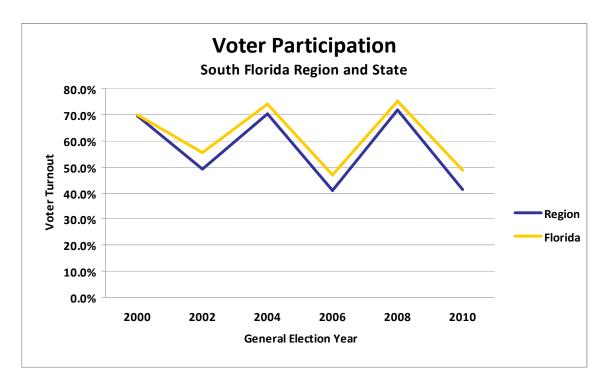


	Year											
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
Broward	3,148	3,369	3,881	4,092	4,254	4,458	4,759	4,951	5,300	5,935		
Miami-Dade	4,704	5,008	5,654	6,032	6,172	6,397	6,794	6,970	7,330	7,736		
Monroe	323	338	362	379	391	400	415	433	451	466		
Region	8,175	8,715	9,897	10,503	10,817	11,255	11,968	12,354	13,081	14,137		
Florida	35,368	37,894	43,176	46,191	47,690	49,817	52,756	55,048	58,209	61,047		

Source: Internal Revenue Service, Exempt Organizations Business Master File, (501(c)(3) Charities, The Urban Institute, National Center for Charitable Statistics



c. Voter Participation



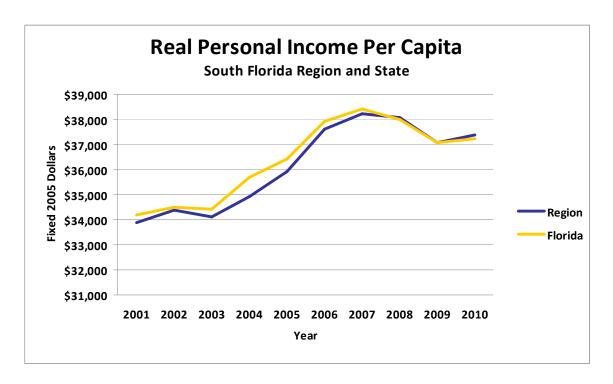
_		General Election Year											
Area	2000	2002	2004	2006	2008	2010							
Broward	66.2%	45.4%	67.1%	44.6%	73.4%	41.0%							
Miami-Dade	72.9%	52.9%	73.6%	37.7%	70.2%	41.5%							
Monroe	70.4%	52.1%	77.1%	51.4%	81.2%	51.8%							
Region	69.6%	49.2%	70.5%	41.1%	71.8%	41.5%							
Florida	70.1%	55.3%	74.2%	46.8%	75.2%	48.7%							

Source: Florida Department of State, Division of Elections



6. Quality of Life & Quality Places

a. Per Capita Income

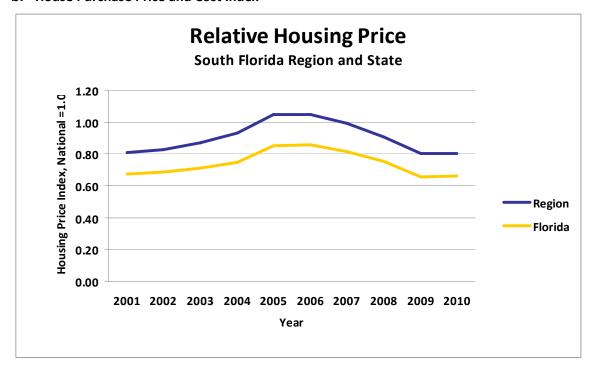


	Year												
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010			
Broward Miami-	\$37,424	\$37,980	\$37,425	\$38,166	\$39,484	\$40,932	\$41,985	\$41,572	\$39,820	\$40,192			
Dade	\$31,112	\$31,596	\$31,485	\$32,268	\$32,958	\$34,775	\$35,076	\$35,158	\$34,709	\$35,009			
Monroe	\$39,799	\$39,476	\$40,041	\$44,168	\$47,478	\$52,571	\$54,000	\$54,018	\$52,156	\$52,318			
Region	\$33,887	\$34,389	\$34,108	\$34,934	\$35,927	\$37,621	\$38,225	\$38,091	\$37,084	\$37,403			
Florida	\$34,195	\$34,509	\$34,416	\$35,708	\$36,408	\$37,905	\$38,413	\$38,016	\$37,063	\$37,235			

Source: Regional Economic Modeling, Inc., Policy Insight+, Florida Counties, v1.3, U.S. Bureau of Economic Analysis Data



b. House Purchase Price and Cost Index

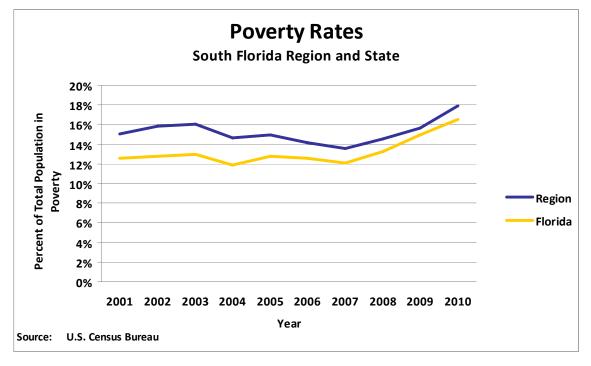


	Year											
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
Broward	0.75	0.80	0.87	0.96	1.09	1.03	1.02	0.93	0.77	0.77		
Miami-Dade	0.82	0.82	0.84	0.88	0.99	1.02	0.94	0.86	0.80	0.80		
Monroe	1.40	1.41	1.44	1.50	1.69	1.75	1.61	1.47	1.37	1.36		
Region	0.81	0.83	0.87	0.93	1.05	1.04	0.99	0.91	0.80	0.80		
Florida	0.68	0.69	0.71	0.75	0.85	0.86	0.81	0.75	0.66	0.66		

Source: Regional Economic Modeling, Inc., Policy Insight+, Florida Counties, v1.3



c. Persons Living in Poverty



Year											
Area	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Broward	11.0%	11.7%	12.5%	11.6%	11.2%	11.2%	11.4%	12.0%	13.0%	14.7%	
Miami-Dade	18.2%	19.2%	18.9%	17.1%	17.9%	16.4%	15.3%	16.5%	17.7%	20.3%	
Monroe	10.4%	9.6%	10.3%	9.2%	10.6%	11.5%	10.5%	10.4%	12.6%	12.6%	
Region	15.0%	15.9%	16.0%	14.6%	14.9%	14.1%	13.6%	14.5%	15.7%	17.9%	
Florida	12.6%	12.8%	13.0%	11.9%	12.8%	12.6%	12.1%	13.3%	15.0%	16.5%	

Source: U.S. Census Bureau.

