



2017-2022 South Florida Comprehensive Economic Development Strategy

Approved by the South Florida Regional Planning Council, November 27, 2017

CONTENTS

SUMMARY BACKGROUND	3
Economic Development District.....	3
Comprehensive Economic Development Strategy (CEDS)	3
Defining the Region.....	3
Geography	3
South Florida CEDS: Visualized	4
SWOT ANALYSIS	9
ACTION PLAN	10
STRATEGIC DIRECTION	11
Florida Chamber Six Pillars Matrix of Congruence	11
Innovation & Competitiveness	13
Goals	13
Objectives	13
Performance Measures	13
Opportunity & Prosperity	14
Goals	14
Objectives	14
Performance Measures	14
Vitality & Sustainability	15
Goals	15
Objectives	15
Performance Measures	15
EVALUATION FRAMEWORK	15
ECONOMIC RESILIENCE.....	17
RESILIENCY IN SOUTH FLORIDA	19
DATA TABLES AND REGIONAL FACTS	20
Population Trends	20
Continued Growth	20
Diversity and Mobility.....	21
Place of Birth	21
Age & Diversity	22
Education	23

Educational Attainment.....	23
Institutions of Higher Learning	23
Industry Location Quotient and Brain Drain	24
Employment.....	25
Equity	26
Income	26
Poverty.....	28
Housing and Vehicle Access.....	29
ALICE Index	30
Health Insurance.....	31
County Health Rankings.....	31
Development and Density	32
Economic Conditions.....	32
Energy	33
Regional Industry Clusters	34
Innovation and Technology.....	35
Innovation Index 2.0 – Innovation Index for US Regions.....	35
Bloomberg US Innovation Index	36
The Kauffman Index of Startup Activity	36
Transportation Networks.....	37
Commuting in South Florida	37
Tri-Rail	38
Ridership.....	38
Tri-Rail Coastal Link	38
Trade and Travel.....	39
Foreign Trade	39
Seaports.....	39
Import and Export Trade Value	40
Environmental Profile.....	40
Coral Reef Decline	41
Community Participation: The CEDS Steering Committee	42

SUMMARY BACKGROUND

Economic Development District

The South Florida Regional Planning Council (Council) is one of ten regional councils within Florida created to address issues and plan solutions that are greater than local scope, as well as providing input into state policy development, the Council also serves as the only multipurpose regional entity that is in position to plan for intergovernmental solutions to growth related problems, and meet other needs of communities in each region. The Council serves as the Economic Development District (EDD) for three counties: Broward, Miami-Dade, and Monroe Counties residents. EDDs serve as geographic districts for the US Economic Development Administration (EDA) to deploy various programs.

Comprehensive Economic Development Strategy (CEDS)

EDA directs each designated Economic Development District to develop and maintain a Comprehensive Economic Development Strategy (CEDS) with the assistance of public involvement. A CEDS is a strategy-driven plan for regional economic development. A CEDS is the result of a regionally-owned planning process designed to build capacity and guide the economic prosperity and resiliency of an area or region. Economic Development Districts are required to fully update the CEDS every five years and can update the CEDS on an annual basis. This update includes five main sections:

- Summary Background of the economic conditions in the region;
- SWOT Analysis to identify strengths, weaknesses, opportunities, and threats;
- Strategic Action Plan incorporating tactics identified through the planning process, other regional plans, and stakeholder feedback to develop priority strategies for the region;
- Evaluation Framework to identify and monitor performance measures associated with the plan;
- and Economic Resilience.

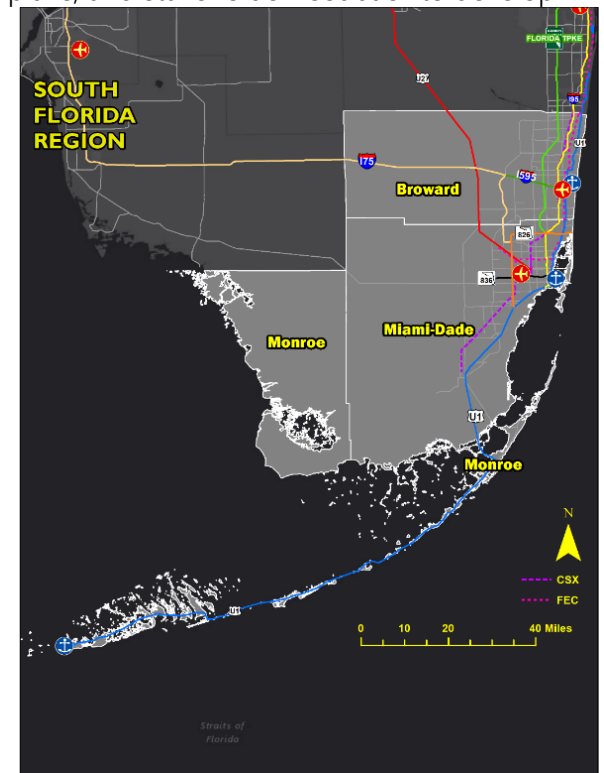
Defining the Region

The South Florida EDD Region is comprised of Broward, Miami-Dade and Monroe Counties. "South Florida" often refers to the Metropolitan Statistical Area of Miami, Broward, and Palm Beach Counties or "Miami-Fort Lauderdale-West Palm Beach." Palm Beach County is part of the Treasure Coast Regional Planning Council.

South Florida may also be defined by commuting patterns as the Greater Miami Area or the Miami-Fort Lauderdale-Port St Lucie Combined Statistical Area.

Geography

The South Florida Region is approximately 7,500 square miles, of which approximately 45% (3,338 square miles) is water.¹ The region is bordered by the Atlantic Ocean to the east, the Everglades and the Gulf of Mexico to the west, and Florida Bay and the convergence of the Atlantic Ocean and the Gulf of Mexico to the south.



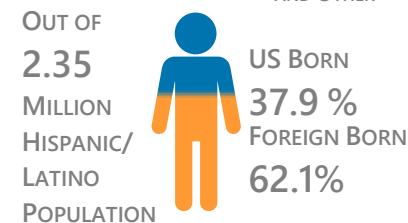
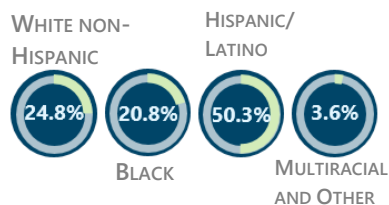
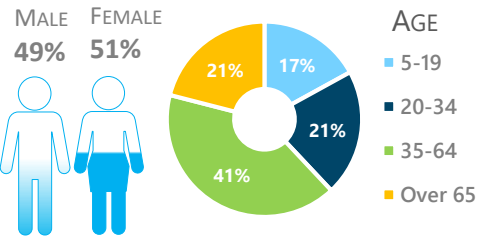
¹ <https://factfinder.census.gov/>

REGIONAL FACT SHEET

Includes Broward, Miami-Dade, and Monroe Counties

POPULATION

3 COUNTIES, 71 MUNICIPALITIES
2010/2016 ESTIMATE
4.32/4.63 MILLION
2030 ESTIMATE
5.41 MILLION
GROWTH RATE 2000-2015/2015-2030
15.14%/18.85%
MEDIAN AGE
40



EDUCATIONAL ATTAINMENT, POPULATION OVER 25



SYSTEMS

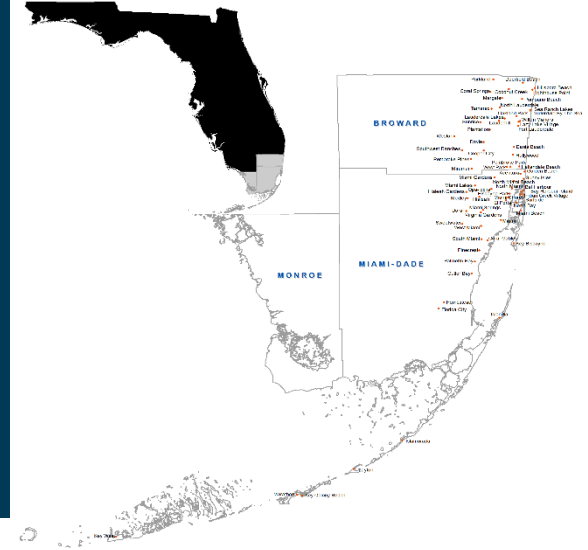
3 PUBLIC SCHOOL SYSTEMS
2 PUBLIC UNIVERSITIES/3 STATE COLLEGES
3 RELIGIOUS AND MAJOR PRIVATE UNIVERSITIES
3 INTERNATIONAL AIRPORTS
2 SEAPORTS
2 COUNTY TRANSIT SYSTEMS
1 REGIONAL RAIL
7 MAJOR HIGHWAYS
3 PERFORMING ARTS CENTERS
16 STATE PARKS/3 NATIONAL PARKS

ECONOMIC

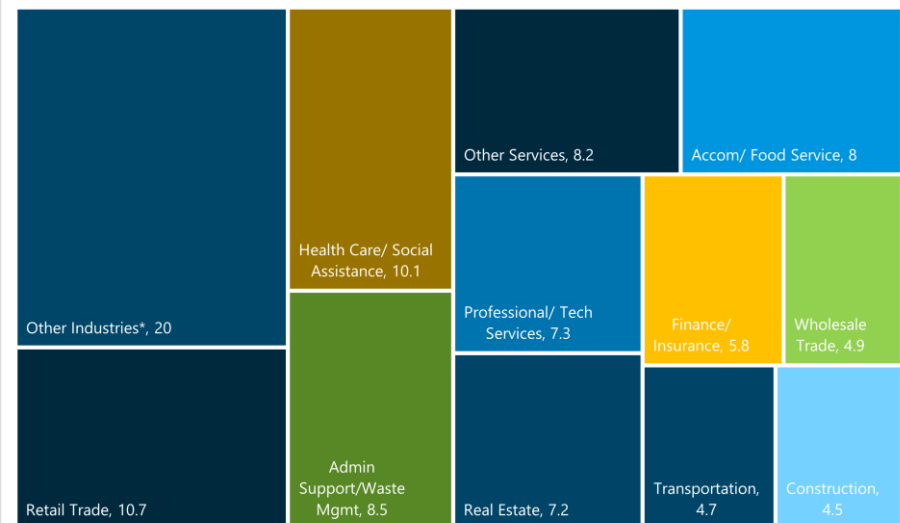
GROSS DOMESTIC PRODUCT- GDP
\$226 BILLION
THAT IS
26%
OF THE STATE OF FLORIDA'S OUTPUT AND
1.4%
OF US'S GDP IN 2014
SOUTH FLORIDA'S EMPLOYMENT EXPECTED
GROWTH (2014-2022)
1.4%
UNEMPLOYMENT RATE
5.5%

HOUSING

HOUSING UNITS
2010/2016
1.85/1.90
MILLION
HOMEOWNER RATE
56%
RENTER OCCUPIED
44%
HOUSEHOLDS LIVING
BELOW ALICE
THRESHOLD
>50%



INDUSTRY STRUCTURE %, 2014



The region's eleven private non-farm sectors with the highest levels of employment in 2014 accounted for 80% of regional employment. Other Industries: Mining, Forestry, Fishing, Utilities, Manufacturing, Information Management of Co, Enterprises, Educational Services, Arts and Entertainment.

REGIONAL FACT SHEET

Broward County

POPULATION

31 MUNICIPALITIES

2016 ESTIMATE

1.85 MILLION

2030 ESTIMATE

2.1 MILLION

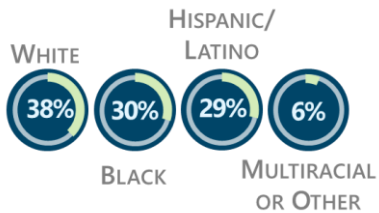
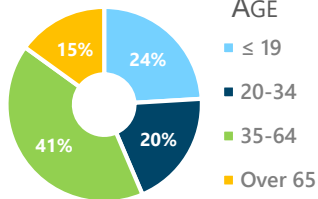
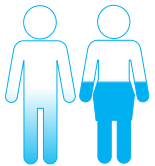
GROWTH RATE 2000-2015/2015-2030

12.6%/15.9%

MEDIAN AGE

40.3

MALE 49% FEMALE 51%



OUT OF

497

THOUSAND

HISPANIC/

LATINO

POPULATION



US BORN

49.1%

FOREIGN BORN

50.9%

SYSTEMS

BROWARD COUNTY SCHOOL BOARD

BROWARD COLLEGE, FLORIDA ATLANTIC

UNIVERSITY, NOVA SOUTHEASTERN

UNIVERSITY

HOLLYWOOD/FT LAUDERDALE

INTERNATIONAL AIRPORT

PORT EVERGLADES

BROWARD COUNTY TRANSIT, TRI-RAIL

SAWGRASS EXPRESSWAY

INTERSTATE 75, INTERSTATE 595

BROWARD CENTER FOR THE PERFORMING

ARTS, HOLLYWOOD CENTRAL PERFORMING

ARTS CENTER

HUGH TAYLOR BIRCH & DR. VON D.

MIZELL-EULA JOHNSON STATE PARKS

ECONOMIC

GROSS DOMESTIC PRODUCT- GDP

\$89 BILLION

THAT IS

10.3%

OF THE STATE OF FLORIDA'S OUTPUT AND

39.2%

OF THE REGION'S OUTPUT IN 2014

PER CAPITA INCOME IN 2015

\$28,381

UNEMPLOYMENT RATE, JUNE 2017

4.0%

HOUSING

HOUSING UNITS

2010/2016

810/823

THOUSAND

OWNER OCCUPIED

63.5%

RENTER OCCUPIED

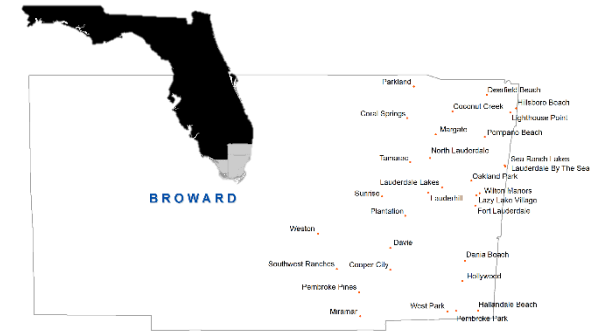
36.5%

HOUSEHOLDS LIVING

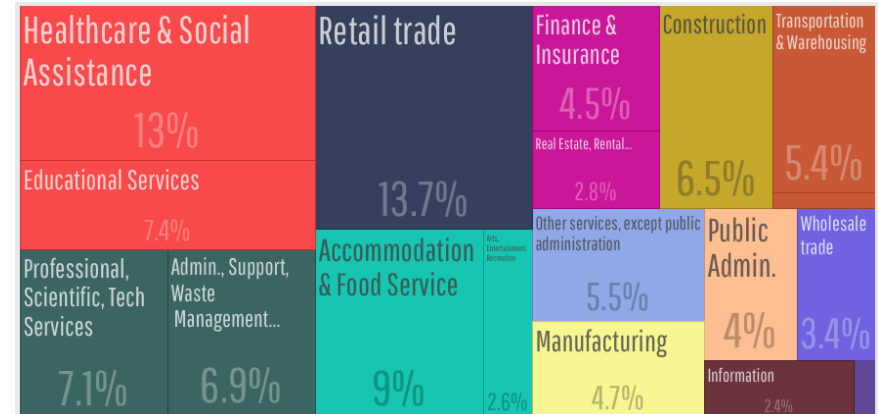
BELOW ALICE

THRESHOLD

44%



INDUSTRY STRUCTURE %, 2015



EDUCATIONAL ATTAINMENT, POPULATION OVER 25



LESS THAN HIGH SCHOOL DIPLOMA: 11.8%

HIGH SCHOOL DIPLOMA OR SOME COLLEGE: 57.4%

BACHELOR'S DEGREE OR HIGHER: 30.8%

REGIONAL FACT SHEET

Miami-Dade County

POPULATION

35 MUNICIPALITIES

2016 ESTIMATE

2.7 MILLION

2030 ESTIMATE

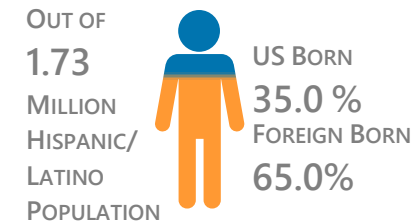
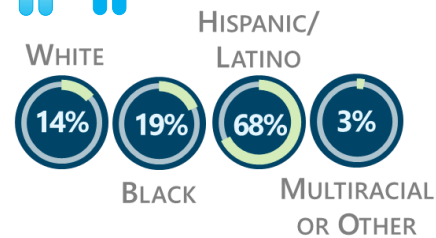
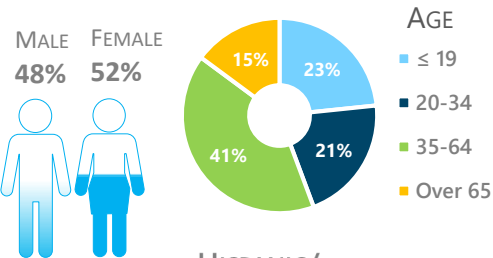
3.2 MILLION

GROWTH RATE 2000-2015/2015-2030

17.7%/21.3%

MEDIAN AGE

39.9



SYSTEMS

MIAMI-DADE COUNTY SCHOOL BOARD

FLORIDA INTERNATIONAL UNIVERSITY,

MIAMI-DADE COLLEGE

UNIVERSITY OF MIAMI, BARRY UNIVERSITY,

ST THOMAS UNIVERSITY, MIAMI

INTERNATIONAL AIRPORT, PORT MIAMI

MIAMI-DADE COUNTY TRANSIT, TRI-RAIL

DOLPHIN EXPRESSWAY, INTERSTATE 95,

INTERSTATE 195, PALMETTO EXPRESSWAY

ADRIENNE ARSHT CENTER FOR THE

PERFORMING ARTS, NEW WORLD CENTER,

AND MANY MORE

OLETA RIVER, BILL BAGGS CAPE FLORIDA,

THE BARNACLE STATE PARKS

BISCAYNE & EVERGLADES NATIONAL PARKS

ECONOMIC

GROSS DOMESTIC PRODUCT- GDP

\$133 BILLION

THAT IS

15.4%

OF THE STATE OF FLORIDA'S OUTPUT AND

59.0%

OF THE REGION'S OUTPUT IN 2014

PER CAPITA INCOME IN 2015

\$23,850

UNEMPLOYMENT RATE, JUNE 2017

4.9%

HOUSING

HOUSING UNITS

2010/2016

989

THOUSAND/1.02

MILLION

OWNER OCCUPIED

53.8%

RENTER OCCUPIED

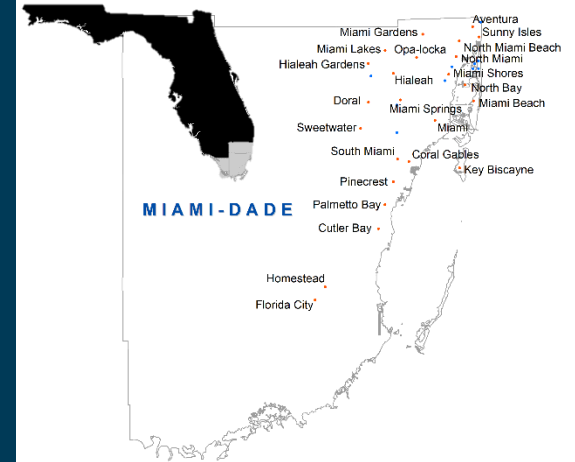
46.2%

HOUSEHOLDS LIVING

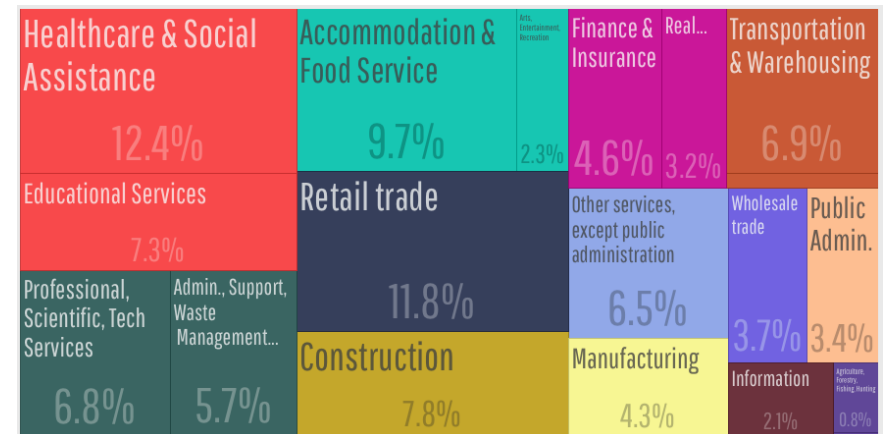
BELOW ALICE

THRESHOLD

55-61%



INDUSTRY STRUCTURE %, 2015



EDUCATIONAL ATTAINMENT, POPULATION OVER 25



LESS THAN HIGH SCHOOL DIPLOMA: 19.9%

HIGH SCHOOL DIPLOMA OR SOME COLLEGE: 53.2%

BACHELOR'S DEGREE OR HIGHER: 26.9%

REGIONAL FACT SHEET

Monroe County

POPULATION

5 MUNICIPALITIES

2016 ESTIMATE

76 THOUSAND

2030 ESTIMATE

77 THOUSAND

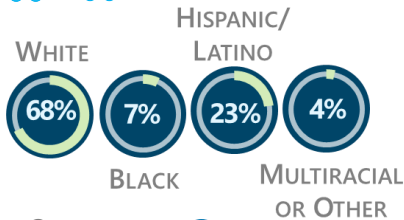
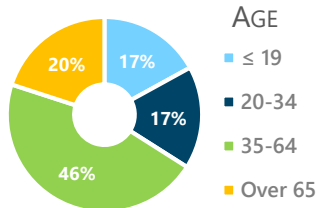
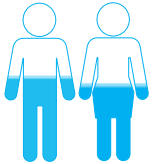
GROWTH RATE 2000-2015/2015-2030

-6.8%/3.6%

MEDIAN AGE

47.2

MALE **53%**
FEMALE **47%**



OUT OF **16.7** THOUSAND
HISPANIC/LATINO POPULATION

US BORN **52.6 %**
FOREIGN BORN **47.4%**

SYSTEMS

MONROE COUNTY SCHOOL BOARD

FLORIDA KEYS COMMUNITY COLLEGE

KEY WEST INTERNATIONAL AIRPORT

MONROE COUNTY TRANSIT

US1

THE KEY WEST THEATER, MARATHON COMMUNITY THEATRE AND MANY MORE

FORT ZACHARY TAYLOR, JOHN PENNEKAMP CORAL REEF, BAHIA HONDA, LIGNUMVITAE KEY

BOTANICAL, INDIAN KEY HISTORIC, FLORIDA KEYS OVERSEAS HERITAGE TRAIL, WINDLEY KEY FOSSIL REEF, DAGNEY JOHNSON KEY LARGO HAMMOCK

BOTANICAL, SAN PEDRO UNDERWATER

ARCHAEOLOGICAL PRESERVE, AND CURRY

HAMMOCK STATE PARKS

DRY TORTUGAS NATIONAL PARK

ECONOMIC

GROSS DOMESTIC PRODUCT- GDP

\$4 BILLION

THAT IS

0.5%

OF THE STATE OF FLORIDA'S OUTPUT AND

1.75%

OF THE REGION'S OUTPUT IN 2014

PER CAPITA INCOME IN 2015

\$36,208

UNEMPLOYMENT RATE, JUNE 2017

2.8%

HOUSING

HOUSING UNITS

2010/2016

52.7/53.1

THOUSAND

OWNER OCCUPIED

61.0%

RENTER OCCUPIED

39.0%

HOUSEHOLDS LIVING

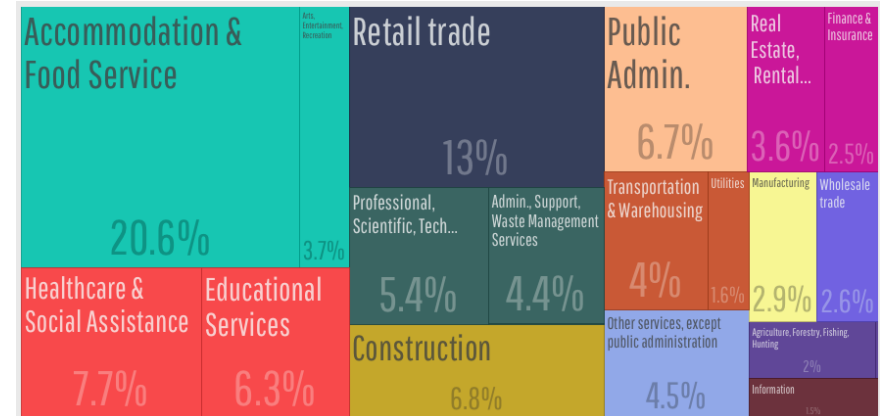
BELOW ALICE

THRESHOLD

46%



INDUSTRY STRUCTURE %, 2015



EDUCATIONAL ATTAINMENT, POPULATION OVER 25



LESS THAN HIGH SCHOOL DIPLOMA: 9.1%

HIGH SCHOOL DIPLOMA OR SOME COLLEGE: 59.5%

BACHELOR'S DEGREE OR HIGHER: 31.4%

SWOT ANALYSIS

In August 2017, the South Florida Regional Planning Council conducted a SWOT analysis of the region –strengths, weaknesses, opportunities, and threats- the analysis identifies what local government staff, elected officials, and community stakeholders believe to be important in each category. This helps guide the process to identify regional priorities for economic and community development. The 2017 SWOT Analysis had 21 respondents among the three counties of Broward, Miami-Dade, and Monroe. The results of the SWOT are shown below.

<p style="text-align: center;">STRENGTHS</p> <ul style="list-style-type: none"> • Higher Education student population • #1 in startups • Number of STEM degrees awarded and STEM pipeline starting at youth • Gateway to Latin America • Good weather • Diversity of languages spoken diversity • Airports and seaports • NAP (Network Access Point) • Technology-friendly ecosystem • Regional natural resources • Global/international cultural acceptance (“glocal”) • Healthcare Partnerships (e.g. UMiami and Cleveland Clinic) • Tech/life science/aviation space 	<p style="text-align: center;">WEAKNESSES</p> <ul style="list-style-type: none"> • Housing affordability (affects ability to attract/ retain talent) • High inequality • Perception that the region is not a business destination • Perception that K-12 education is inadequate • Mass transit infrastructure and networks • Lack of access to capital (patient, venture, other) • Limited number of tech startups (no leadership commitment) • no commitment to coordinated environmental sustainability efforts • Lack of coordination to address interconnected issues • How do houses built/ purchased compare with occupancy rates? • Intergenerational job competition • Number of STEM degrees awarded is less than the number of STEM jobs available
<p style="text-align: center;">OPPORTUNITIES</p> <ul style="list-style-type: none"> • Anticipating and supporting millennials’ needs • Leadership in climate resiliency • Universities, use them to develop creative, problem-solving graduates • Partnerships with business community to create internships • Use certificates/vocational training to create jobs • Create blended four-year degree and trade/vocational/hands-on programs • Marine research hubs (R&D): four institutions in the region • Regionalism • Systems are in place to assist students in completing various certifications • Linking education to relevant regional issues • Options that create income jobs without requiring degrees, encouragement of entrepreneurship • Small business resiliency plans • Resiliency officers – 100 Resilient Cities 	<p style="text-align: center;">THREATS</p> <ul style="list-style-type: none"> • Weather • Examine development standards to meet emerging challenges • Brain drain • Number of STEM degrees is less than the number of STEM jobs available • Housing affordability/mass transit cost burden • Funding sources • Small businesses are not positioned to survive catastrophic events <ul style="list-style-type: none"> • Economic diversification - currently very small business reliant • Lack of fair share of federal and leveraged investment • Mindset changes needed, a more regional approach • Lack of infrastructure investment • Corruption, transparency, accountability

ACTION PLAN

Goal #1: Innovation and Competitiveness

- To support programs and strategies, including international trade, which assist in the attraction, retention, and expansion of businesses, and improve the capacity of small businesses to participate fully in South Florida's economic activities.
- To support complementary data collection and dissemination efforts among local jurisdictions, combining data on available "ready" sites and workforce characteristics. Encourage the development of a complete "ecosystem" of workforce training throughout the region
- To enhance the resilience of the South Florida economy in the face of natural disasters and changes to the national and state economies through increased awareness and preparation by businesses for environmental risks.

Goal #2: Opportunity and Prosperity

- To support the development of a diversified economy by expanding the quantity and quality of job opportunities.
- To prepare a skilled workforce that supports the business community through programs and tools that address education, training and the attraction/retention of qualified workers.
- To promote the retention and continued improvement of existing partnerships (intergovernmental, public-private, interagency, etc.), and the creation of new partnerships to meet South Florida's economic challenges.
- To ensure that there is a superior network of public infrastructure with supportive land use regulations to maintain the region as a competitive location for targeted industries and to provide for public safety and homeland security.
- To educate government and businesses on continuity and recovery plans and to support plan implementation in the event of natural or man-made disasters.
- To promote a regional perspective on multi-modal transportation system for people, goods, and services that includes transit, highway, seaport, airport, rail, broadband, and multi-use trail planning and development.

Goal #3: Vitality and Sustainability

- To promote a high quality of life and ensure a sustainable community offering an array of affordable housing, quality education and healthcare systems, historical and cultural facilities, tourist attractions and beaches, special events, festivals, and sports.
- To promote the sustainable use of the natural resources (especially water resources and green building through sound economic development activities consistent with environmental management goals.



STRATEGIC DIRECTION

As South Florida continues to emerge as a globally connected metropolitan area, the EDD continues to develop robust goals with implementation action tactics that address the CEDS goals for the next five years. While some of these threats cannot be changed -i.e. hurricanes or annual king tides-- current weaknesses threaten the quality of life of residents and business owners. These same weaknesses and threats impact the ability of these to bounce back if catastrophic events occur or a single South Florida-reliant industry falls into decline. , the South Florida CEDS provides a strategy for resilient regional development through the lens of the State of Florida's Six-Pillars framework, which includes Talent Supply and Education, Innovation and Economic Development, Infrastructure and Growth Leadership, Business Climate and Competitiveness, Civic and Governance Systems, and Quality of Life and Quality of Place. By using this framework and incorporating each of the three counties' comprehensive plans, the South Florida CEDS successfully identifies existing vulnerabilities—such as critical infrastructure in flood-prone areas along the coast—and provides a plan of action for lessening the regional economy's exposure to hazards.

Florida Chamber Six Pillars Matrix of Congruence

Innovation & Economic Development – Economic Leadership Business Climate & Competitiveness - Smart, Quality Growth

South Florida's prosperous economy continues to grow because of its trade infrastructure, access to global markets, business tax environment, culture and diversity, and its entrepreneurial and talented workforce. Even so, many of the region's residents are not fully employed or connected to the larger economy. The region has a long tradition of entrepreneurship and small business success. What are the benefits of attracting and retaining larger businesses and increasing interest and spending in sectors such as research and technological development? How do we define business size and what local characteristics attract larger businesses? How do we make sure that we continue to concurrently support smaller businesses in these efforts?

Talent Supply & Education – Education

Education serves as a firm foundation on which to expand access to opportunity for all members of our community. It provides a pathway to employment and economic opportunity, and allows individuals to explore their interests, potential, and purpose to create a higher quality of life. In addition to strong traditional primary, secondary, institutions of higher learning, and technical and vocational schools, the opportunity for continued education at all ages is critical in the development of quality communities and robust economies.

As a major business and tourist destination, South Florida is home to residents from all over the world who bring with them diverse skills, educational backgrounds, culture, and experiences that contribute to the regional economy. This diversity of culture and experience can be fully tapped when educational attainment and community engagement are priorities.

Infrastructure & Growth Leadership – Environment

Maintaining affordable housing and smart land use planning in South Florida's communities is essential in fostering thriving families and neighborhoods. As a primary building block of prosperity, these factors impact the entire population, from very low-income and middle-class residents, to upper-middle class and wealthy individuals and families, especially during times of unemployment to economic downturn. Affordable housing is particularly needed for families who pay more than 30 percent of their income for housing. In Palm Beach, Broward and Miami-Dade counties, 25 percent of households

spend more than half of their incomes on housing costs, giving the region the second highest cost burden in the country⁴. To cater to the array of needs within our communities, we must strive to provide a diverse mix of housing styles, locations, and costs.

Land use describes the ways in which we utilize, manage, and modify our built and natural environments, including urban development, agriculture, parks, and natural ecosystems, and has an overwhelming impact on a region's economy, sustainable growth, preservation of natural habitat, and quality of life. Through careful examination of existing conditions and thoughtful planning for the future, South Florida can continue to prosper without sacrificing natural resources or wastefully utilizing developed space.

Quality of Life & Quality of Place

Advancing the quality of life in South Florida's communities is paramount in maintaining the vibrancy and vitality of the region; with proper attention to this indicator, the region will flourish with exceptional economic development and growth opportunities. Quality of life is a broad category with many indicators; examples include access to parks and natural areas, walkability of communities, and presence of cultural attractions, among others. The health of our residents is equally important; recognizing the correlation between how we plan and build and the health of our communities is vital. Ensuring access to healthcare, recreation, and healthy food are all components of planning quality metropolitan areas. Recognizing and evaluating these factors can also assist in developing vulnerability assessments to determine areas that may need additional attention or funding.

Civic & Governance System – Fragmented Region

Demographics are statistical data about the characteristics of a population or segment of a larger population, including age, income, race, gender, etc. These metrics provide general information about a region or community that can then be used to answer more complex questions about a population. This section of the CEDS will serve to provide some baseline information about the communities in South Florida in generalized terms, allowing the user to apply the information as specifically needed.

The Greater Miami Metropolitan Area is one of the largest economic hubs in the country, and as a result, significant demand is put on the region's transportation networks. Unlike some metropolitan regions that emanate outwards from one or more central business districts, South Florida is bordered by the Everglades to the west and the Atlantic Ocean to the east. Interstate 95 and Florida's Turnpike are the two major north-south arteries, like legs of a ladder. Historically, development began along the coast and grown west over time. As population and developed areas grow, greater strain is put upon our transportation networks and there is a need for more connections.

At present, the Tri-Rail commuter line runs regularly between West Palm Beach and Miami, and county and municipal bus lines serve communities throughout the region. However, these systems are presently struggling to keep pace with increased population growth, traffic congestion, and a desire for alternative methods of transit.

⁴ <http://www.sun-sentinel.com/business/realestate/fl-housing-cost-burden-20160621-story.html>

Innovation & Competitiveness

Goals

- To support programs and strategies, including international trade, which assist in the retention, expansion and the attraction of businesses, and improve the capacity of small businesses to participate fully in South Florida's economic activities.
- To support complementary data collection and dissemination efforts among local jurisdictions, combining data on available "ready" sites and workforce characteristics. Encourage the development of a complete "ecosystem" of workforce training throughout the region
- To enhance the resilience of the South Florida economy in the face of natural disasters and changes to the national and state economies through increased awareness and preparation by businesses for environmental risks.

Objectives

- Support organizations that increase international trade, achieve a positive trade balance with partners
 - Provide technical assistance to organizations such as MIA, FLL, Key West Airport and Port Miami, Port Everglades, Port Miami.
- Invest in small business training and incubators
 - Support efforts by higher education institutions and others by providing technical support and support grant opportunities and the development of venture capital.
- Coordinate activities regarding all Goals to enhance the workforce and employment opportunities
 - Coordinate data sharing, communication with partners regularly to ensure that data needs are met
- Train government staff and disseminate information to the public on recovery plans and contingency actions before, during and after disasters
 - Maintain informational programs, update data and prepare studies to update future information

Performance Measures

Goal	Metrics	6 Pillars Correspondence	Source
Goal #1: Innovation and Competitiveness			
	Average wages per Job	Business Climate and Competitiveness	US Bureau of Economic Analysis
	Gross Domestic Product	Business Climate and Competitiveness	REMI PI+
	Employment by Industry	Business Climate and Competitiveness	REMI PI+
	Employment by Sector or Occupation	Business Climate and Competitiveness	REMI PI+
	Average Annual Wages by Industry	Business Climate and Competitiveness	REMI PI+
	Tourism Development Tax Collections	Innovation and Economic Development	FL Department of Revenue, Local Govt Tax Receipts by County
	Trade Imports and Exports	Innovation and Economic Development	REMI PI+
	Regional Purchase Coefficient	Innovation and Economic Development	REMI PI+
	Shift-Share	Innovation and Economic Development	REMI PI+
	Location Quotients	Innovation and Economic Development	REMI PI+
	Innovation Index	Innovation and Economic Development	http://statsamerica.org/ii2/overview.aspx

Opportunity & Prosperity

Goals

- To support the development of a diversified economy by expanding the quantity and quality of job opportunities.
- To prepare a skilled workforce that supports the business community through programs and tools that address education, training and the attraction/retention of qualified workers.
- To promote the retention and continued improvement of existing partnerships (intergovernmental, public-private, interagency, etc.), and the creation of new partnerships to meet South Florida's economic challenges.
- To ensure that there is a superior network of public infrastructure with supportive land use regulations to maintain the region as a competitive location for targeted industries and to provide for public safety and homeland security.
- To educate government and businesses on continuity and recovery plans and to support plan implementation in the event of natural or man-made disasters.
- To promote a regional perspective on multi-modal transportation system for people, goods, and services that includes transit, highway, seaport, airport, rail, broadband, and multi-use trail planning and development. (Pillar 3)

Objectives

- Invest in STEM education, showing gains in total graduates in each higher education class
 - Recruit top-notch faculty to higher education institutions, market the region to relocating firms
- Invest in apprenticeship programs to enhance the workforce
 - Support organizations such as AmSkills in identifying the program's impacts on the workforce
- Strengthen partnerships with existing regional organizations, look for opportunities for joint projects
 - Host regional roundtables around topics of mutual interest
- Invest in public infrastructure and retain industrial and developable parcels
 - Conduct regional land use inventories
- Train government staff and disseminate information on plans and contingency actions before, during and after disasters
 - Maintain informational programs, update data and prepare studies to update future information
- Consider alternatives to projects that discourage multi-modalism, accounting for all users of the system
 - Encourage widespread use of design charrettes and other venues for public input into project development

Performance Measures

Goal #2: Opportunity and Prosperity			
	High School Graduation Rates	Talent Supply and Education	FL Dept. of Education, Data Publications and Reports: Students
	Population Counts, Estimates, and Projections	Talent Supply and Education	BEER, FL Statistical Abstract
	Annual Building Permits	Infrastructure and Growth Leadership	
	Daily Vehicle Miles Traveled	Infrastructure and Growth Leadership	FDOT, FL Highway Mileage and Travel Report, Summary since 1990
	Average Annual Unemployment Rates	Talent Supply and Education	Florida Department of Economic Opportunity Local Area Unemployment Statistics
	Employment by Industry	Talent Supply and Education	REMI PI+

	Employment by Sector or Occupation	Talent Supply and Education	REMI PI+
	Average Annual Wages by Industry	Talent Supply and Education	REMI PI+

Vitality & Sustainability

Goals

- To promote a high quality of life and ensure a sustainable community offering an array of affordable housing, quality education and health care systems, historical and cultural facilities, tourist attractions and beaches, special events, festivals, and sports. (Pillar 6)
- To promote the sustainable use of the natural resources (especially water resources and green building through sound economic development activities consistent with environmental management goals. (Pillar 6)

Objectives

- Support local decision makers with regular data updates
 - Prepare annual data updates of the CEDS document, assist other organizations with data as needed
- Maintain best practices regarding the natural environment and its interactions with the built environment
 - Maintain ongoing monitoring programs and prepare studies that shed light on ongoing activities on regional natural resources

Performance Measures

Goal #3: Vitality and Sustainability			
	Registered 501©3 Organizations Public and Private Foundation Charities	Civic and Governance System Quality of Life and Quality of Places	Internal Revenue Service, Exempt Business Master File, 501c3 Charities, The Urban Institute, National Center for Charitable Statistics
	Real Personal Per Capita Income	Quality of Life and Quality of Places	REMI PI+
	Relative Housing Price	Quality of Life and Quality of Places	REMI PI+
	Percent of persons Living in Poverty	Quality of Life and Quality of Places	US Census

EVALUATION FRAMEWORK

Innovation and Competitiveness

- Innovation and Economic Development, Business Climate and Competitiveness

Opportunity and Prosperity

- Talent Supply and Education, Infrastructure and Growth Leadership

Vitality and Sustainability

- Quality of Life and Quality of Places' Civic and Governance System

The evaluation framework identifies the metrics used and which pillar the metric is related to. These metrics will be updated periodically to monitor progress on the goals and objectives they intend to ensure are being achieved.

Goal	Metrics	6 Pillars Correspondence	Source
Goal #1: Innovation and Competitiveness			
	Average wages per Job	Business Climate and Competitiveness	US Bureau of Economic Analysis
	Gross Domestic Product	Business Climate and Competitiveness	REMI PI+
	Employment by Industry	Business Climate and Competitiveness	REMI PI+
	Employment by Sector or Occupation	Business Climate and Competitiveness	REMI PI+
	Average Annual Wages by Industry	Business Climate and Competitiveness	REMI PI+
	Tourism Development Tax Collections	Innovation and Economic Development	FL Department of Revenue, Local Govt Tax Receipts by County
	Trade Imports and Exports	Innovation and Economic Development	REMI PI+
	Regional Purchase Coefficient	Innovation and Economic Development	REMI PI+
	Shift-Share	Innovation and Economic Development	REMI PI+
	Location Quotients	Innovation and Economic Development	REMI PI+
	Innovation Index	Innovation and Economic Development	http://statsamerica.org/ii2/overview.aspx
Goal #2: Opportunity and Prosperity			
	High School Graduation Rates	Talent Supply and Education	FL Dept. of Education, Data Publications and Reports: Students
	Population Counts, Estimates, and Projections	Talent Supply and Education	BEER, FL Statistical Abstract
	Annual Building Permits	Infrastructure and Growth Leadership	
	Daily Vehicle Miles Traveled	Infrastructure and Growth Leadership	FDOT, FL Highway Mileage and Travel Report, Summary since 1990
	Average Annual Unemployment Rates	Talent Supply and Education	Florida Department of Economic Opportunity Local Area Unemployment Statistics
	Employment by Industry	Talent Supply and Education	REMI PI+
	Employment by Sector or Occupation	Talent Supply and Education	REMI PI+
	Average Annual Wages by Industry	Talent Supply and Education	REMI PI+
Goal #3: Vitality and Sustainability			
	Registered 501©3 Organizations Public and Private Foundation Charities	Civic and Governance System Quality of Life and Quality of Places	Internal Revenue Service, Exempt Business Master File, 501c3 Charities, The Urban Institute, National Center for Charitable Statistics
	Real Personal Per Capita Income	Quality of Life and Quality of Places	REMI PI+
	Relative Housing Price	Quality of Life and Quality of Places	REMI PI+
	Percent of persons Living in Poverty	Quality of Life and Quality of Places	US Census

ECONOMIC RESILIENCE

EDA has expanded the range of topics that Districts must consider in their CEDS to include resiliency in the economy. Resiliency takes on many forms but its critical definition entails how flexible and 'tough' a region's economy is under adverse conditions. As with the relatively quick recovery from the 2008 recession, the South Florida economy produces a wide enough range of services and goods that any one event is unlikely to inflict unrecoverable damage in the event of an environmental disaster. However, there many potential risks that require more attention to the issue in the South Florida CEDS.

What is Economic Resiliency?

A resilient economy is one where pre-existing economic conditions or vulnerability to natural disasters does not create a situation where a major adverse event can cause irreversible damage. For example, New Orleans is a city that has not yet recovered from Hurricane Katrina and. The reasons why New Orleans has not returned to its pre-hurricane population are manifold, but an economy that is over-dependent upon tourism, where a significant share of its displaced population lacked transportation access, skills and personal resources to return to the city and rebuild are fundamental causes in the city's overall population decline since 2006. More recently, South Florida will take time to recover from Hurricane Irma. They Florida Keys are also heavily reliant on the tourism industry, therefore any displaced workforce with little or no safety net or resources will take time to return.

Facing the Atlantic Ocean and susceptible to hurricanes and flooding events, the South Florida Area shares some of the characteristics of an environmentally vulnerable region. As such, the region could face devastating damage should a powerful hurricane score a direct hit on the area. Regions reliant on a single industry are vulnerable to high stress when faced with changes.

A resilient economy is one that is based upon well managed infrastructure, functioning insurance markets and capable emergency response measures as key elements of a region's ability to recover from natural disaster. But there are specifically economic characteristics of resiliency. A resilient economy is one which can withstand long-term changes to industry, can manage the impacts of disaster through a combination of self-supply of key goods and with access to key goods when self-supply sources are limited by circumstances.

Generally, EDA identifies three primary attributes of a resilient economy: the ability to recover quickly from a shock, the ability to withstand a shock, and the ability to avoid the shock altogether.

As such, economic resiliency should be characterized by:

- Widespread knowledge of how to respond to emergency situations
- A flexible intellectual and creative economic base that can respond to long term economic trends
- A highly-trained workforce that can retrain to other industries
- A broad range of robust industries that are independent of each other
- Adequate transportation and communication infrastructure that can adapt to temporary changes in the supply chain

Supporting economic resiliency in a CEDS context

The CEDS establishes a process to bring public and private stakeholders together to plan for economic resilience by identifying the issues, setting goals and actionable responses. As EDA notes on its website⁵, these actionable responses include (regional responses are in blue):

1. Undertaking efforts to broaden the industrial base with diversification initiatives, such as targeting the development of emerging clusters or industries that (a) build on the region's unique assets and competitive strengths; and (b) provide stability during downturns that disproportionately impact any single cluster or industry;
 - a. Undertaken by South Florida Economic Development Organizations
2. Adapting business retention and expansion programs (e.g., economic gardening or other enterprise supports) to assist firms with economic recovery post-disruption;
 - a. Undertaken by South Florida Economic Development Organizations
3. Building a resilient workforce that can better shift between jobs or industries when their core employment is threatened through job-driven skills strategies and support organizations;
 - a. Undertaken by South Florida Economic Development Organizations
4. Maintaining geographic information systems (GIS) that link with municipal business licenses, tax information, and other business establishment data bases to track local and regional "churn" and available development sites. GIS can also be integrated with hazard information to make rapid post-incident impact assessments;
 - a. Partly undertaken by South Florida Economic Development Organizations and the South Florida Regional Planning Council
5. Ensuring redundancy in telecommunications and broadband networks to protect commerce and public safety in the event of natural or manmade disasters;
 - a. Emergency Services
6. Promoting business continuity and preparedness (i.e., ensuring businesses understand their vulnerabilities—including supply chains—in the face of disruptions and are prepared to take actions to resume operations after an event);
 - a. Promoted by utilities and the South Florida Regional Planning Council
7. Employing safe development practices in business districts and surrounding communities. Strategies may include locating structures outside of floodplains, preserving natural lands that act as buffers from storms, and protecting downtowns and other existing development from the impacts of extreme weather.
 - a. Local government responsibility, varying levels of success
8. Conducting pre-disaster recovery planning to define key stakeholders, roles, responsibilities, and key actions;
 - a. South Florida Regional Planning Council

⁵ <https://www.eda.gov/ceds/content/economic-resilience.htm>

RESILIENCY IN SOUTH FLORIDA

Key Strategies for Success:

- Continue to engage with local, state, and federal entities to advance regional adaptive capacity through climate change and sea-level rise planning initiatives, including the use of funding prioritization tools, vulnerability assessment trainings, and inter-agency and inter-governmental coordination.
- Improve communication and outreach with the general public and business communities via coordinated education campaigns that focus on environmental conservation, natural disaster emergency preparedness, and local sustainability initiatives.
- 3)Dissemination of current data, support for ongoing local monitoring, and incorporation of up-to-date projections

Climate Change and Natural Disasters: South Florida Regional Planning Council (South Florida Economic Development District)

Recognizing their heightened vulnerability to natural hazards and economic downturns, the South Florida Regional Planning Council (SFRPC) was one of the first organizations to effectively and comprehensively integrate resilience into their Comprehensive Economic Development Strategy (CEDS). For the three counties within the SFRPC region—Monroe, Miami-Dade, and Broward—long-term economic competitiveness is directly tied to their ability to balance growth and development with the opportunities and limitations posed by both natural and manmade hazards.

Southeast Florida is expected to experience 3–7 inches of sea level rise by 2030 and 9–24 inches by 2060.⁶ With an increasing frequency of flooding at high tide and salt water intrusion into the Biscayne Aquifer during droughts, the effects of rising sea levels are already being felt throughout the region.⁷ In addition to this looming threat, the danger of hurricanes also holds the potential for substantial economic disruption on an annual basis. When combined with the fact that the regional economy has been historically reliant on tourism and growth-related industries that are more susceptible to economic instability, there is a clear need to diversify the region's economy and institutionalize the concept of resiliency.

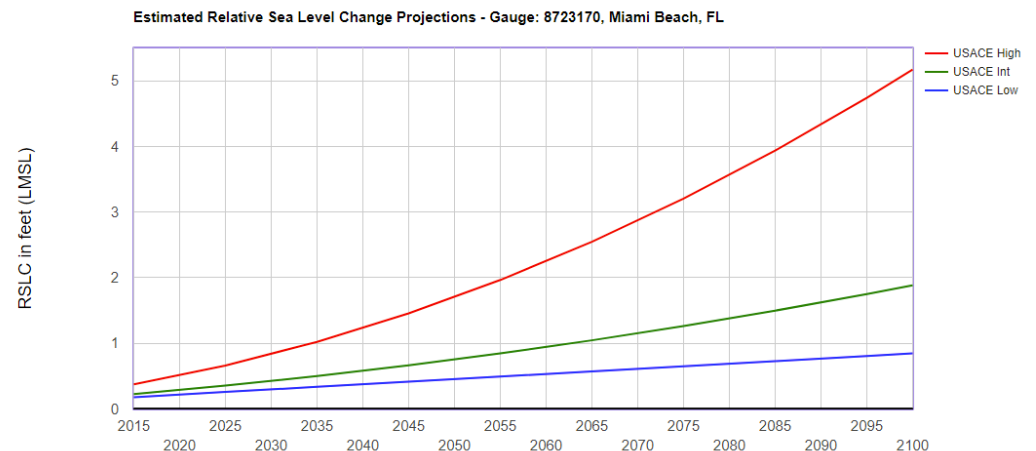


Figure 1: USACE relative sea-level change projections, Miami Beach. 1992 as baseline year.

To ease the burden that these risks place on residents, business owners, and potential private investors, the South Florida CEDS provides a strategy for resilient regional development through the lens of the State of Florida's Six-Pillars framework, which includes Talent Supply and Education, Innovation and Economic Development, Infrastructure and Growth Leadership, Business Climate and Competitiveness, Civic and Governance Systems, and Quality of Life and Quality of Place. By using this framework and incorporating each of the three counties' comprehensive plans, the South Florida CEDS successfully identifies existing vulnerabilities—such as critical infrastructure in flood-prone areas along the coast—and provides a plan of action for lessening the regional economy's exposure to hazards. Examples

⁶ <http://www.nado.org/wp-content/uploads/2014/08/FL-South-Florida-Regional-Planning-Council-2012-2017.pdf> p. 58

⁷ <http://www.nado.org/wp-content/uploads/2014/08/FL-South-Florida-Regional-Planning-Council-2012-2017.pdf> p. 58

of these recommendations include ensuring that public infrastructure investments are made in locations that are most likely to be viable for at least the expected life of the project, fostering economic diversity by nurturing emerging industries and entrepreneurial ventures, and supporting comprehensive emergency management planning to enhance preparedness and continuity in the face of disruptions.⁸

DATA TABLES AND REGIONAL FACTS

Population Trends

Continued Growth

The Region is home to 4.67 million people, a population larger than 26 individual states.⁹ This is an 8.05% increase represents from 4.32 million in 2010. This growth in population can be attributed to net international migration, natural growth, and domestic migration.

South Florida's population 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 for decades, it is getting older more slowly now because of a reduction in the number of new retirees arriving, a higher rate of natural increase of the population (births minus deaths), and continued international migration.

Population growth rates fell significantly in South Florida during the first decade of this century (only 9.1% for the entire decade, down from 21.0% in the decade before), mostly in response to the global recession, beginning in 2007. During the first half of the current decade, South Florida resumed growth, at almost twice the pace of the nation as a whole—the Region's population grew by 8.1%, compared to 7.8% for the State of Florida and only 4.1% for the U.S. Between 2015 and 2030, South Florida is projected to add a net ~140 residents per day, which would represent an increase of over 780,000 people (see Figure 1). For the Region, that represents an increase of ~18.5%, compared to the State of Florida's projected growth of 21.5% and the U.S. pace of 11.6%. Miami-Dade County is expected to lead South Florida's growth, with an ~21% increase between 2015 and 2030, followed by Broward County (~16%); Monroe County's permanent resident population is projected to remain essentially unchanged (~0.5%).

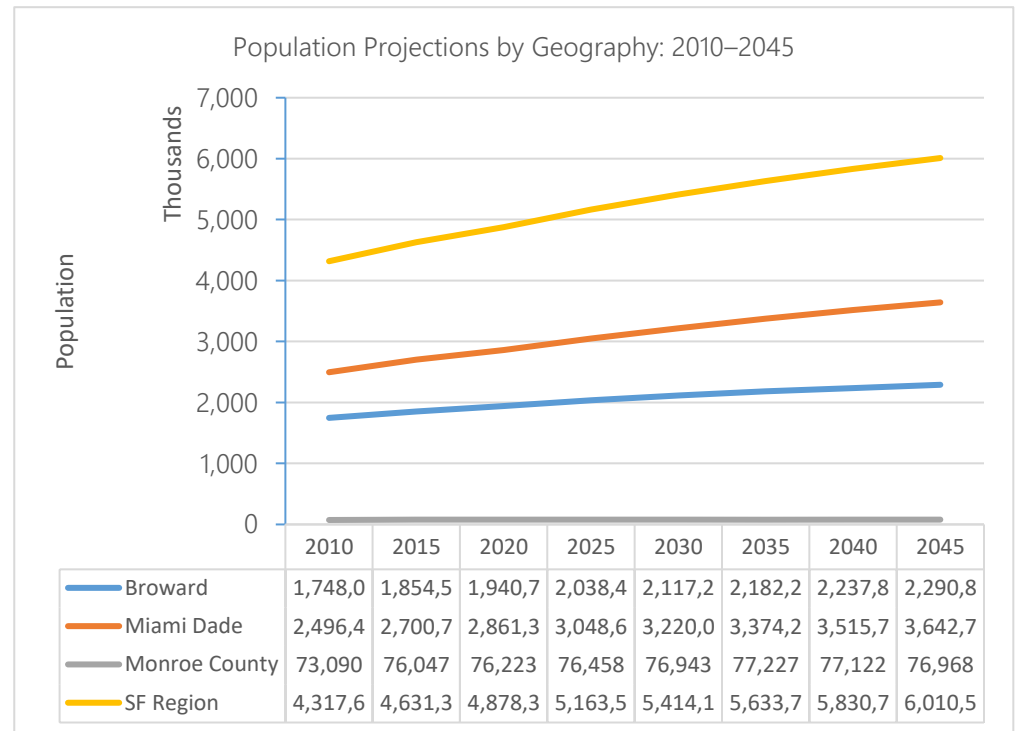


Figure 2: Population projections by geography in South Florida, 2010 U.S. Census Bureau, 2015 5-year ACS Estimates, and BEBR Projections June 2016

⁸ <http://www.nado.org/wp-content/uploads/2014/08/FL-South-Florida-Regional-Planning-Council-2012-2017.pdf> p 11 and p?

⁹ ACS data is published every year. 2016 U.S. Census data shows the region is home to 4.6 million people.

South Florida's population is slightly older than the rest of the nation, but younger than the rest of the State of Florida. The Region's median age in 2015 was 40.1, compared to 41.8 in the State of Florida and the national average of 37.8. The median was higher in Monroe (47.2), but lower in Miami-Dade (39.9) and Broward (40.3).

Diversity and Mobility

International migration, domestic migration and natural increase all contribute to population growth in South Florida. During the first half of the current decade, the Region absorbed almost 348,000 new residents, of which over 80% arrived as international migrants¹⁰. Natural increase (the excess of births over deaths) contributed 100,000 new residents. In contrast, the Region lost approximately 47,000 residents to net domestic out-migration (includes foreign-born and native). In 2015, 44% of the Region's residents were born abroad, up from 26% in 1980 (see Figure 2). The flow of migrants in and out of the Region contributes to the exceptional diversity in the cultural, as well

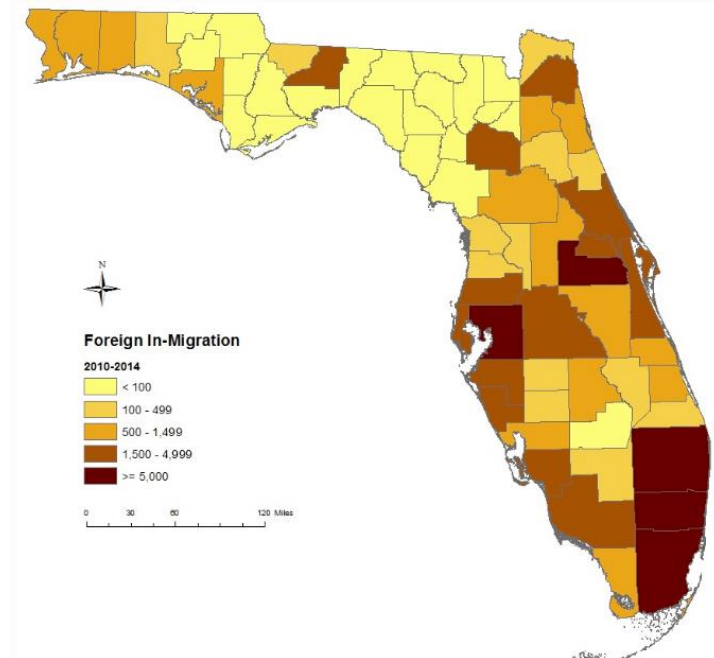


Figure 3: Florida in-migration, 2010-2014. Source: Wang and Rayer, 2016.

as ethnic and racial, composition of South Florida's population.

Place of Birth

Native 55.76% and Foreign Born 44.23%. Of the native population, 59% were born Florida, 35% born in another state, and 6% born abroad. Median age of residents born in the Florida is 20. Of those born in other state the median age is 51. For foreign born the median age is 48.

Of foreign born, 75% are from Latin America (Central and South America, Mexico, and the Caribbean), and increase from 66% in 1990. Most of those from Latin American hail from the Caribbean.¹¹ Of foreign born South Florida residents, ~55% entered the country prior to the year 2000.

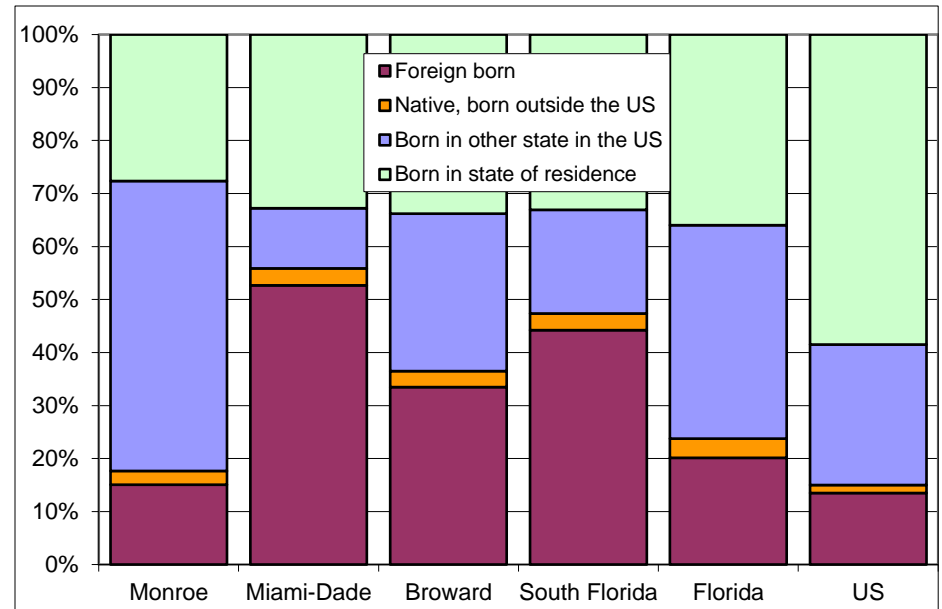


Figure 4: Place of origin by geography, 2015 5-year ACS estimates.

¹⁰ U.S. Bureau of the Census, Population Estimates, July 1, 2015 (March 2016; <http://www.census.gov/programs-surveys/popest/data/data-sets.2015.html>)

¹¹ <http://www.migrationpolicy.org/data/state-profiles/state/demographics/FL>

Age & Diversity

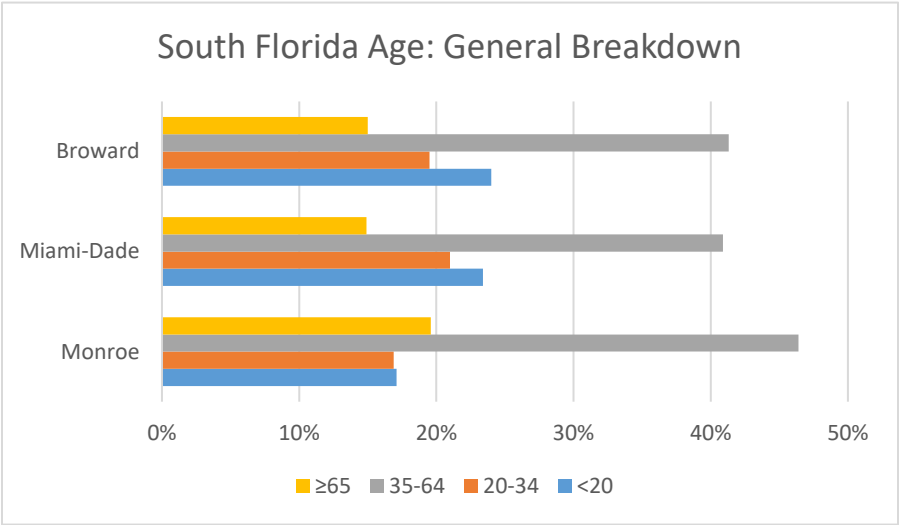


Figure 6. Table S0101, 2015 ACS 5-year estimates.

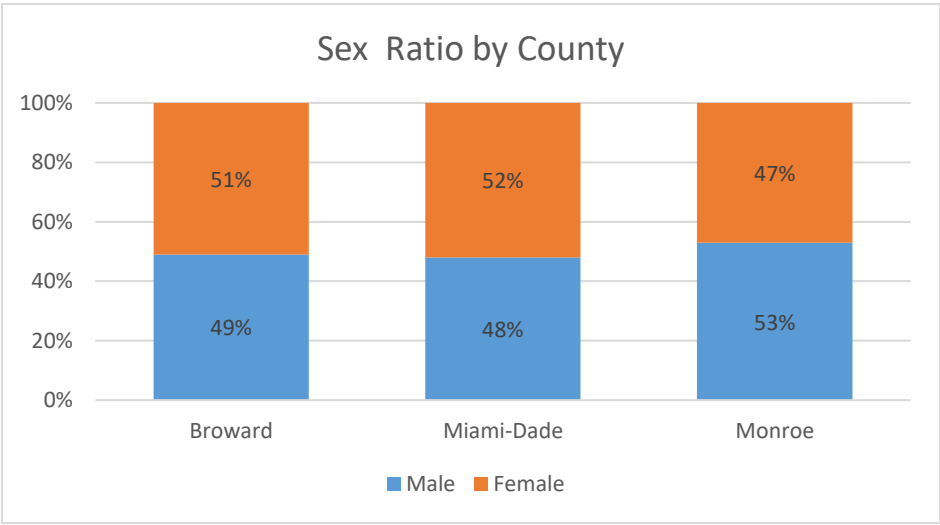


Figure 5: Table B01001, 2015 ACS 5-year estimates.

Median Age		
Broward	Miami-Dade	Monroe
40.3	39.9	47.2

Table S0101, 2015 ACS 5-year estimates

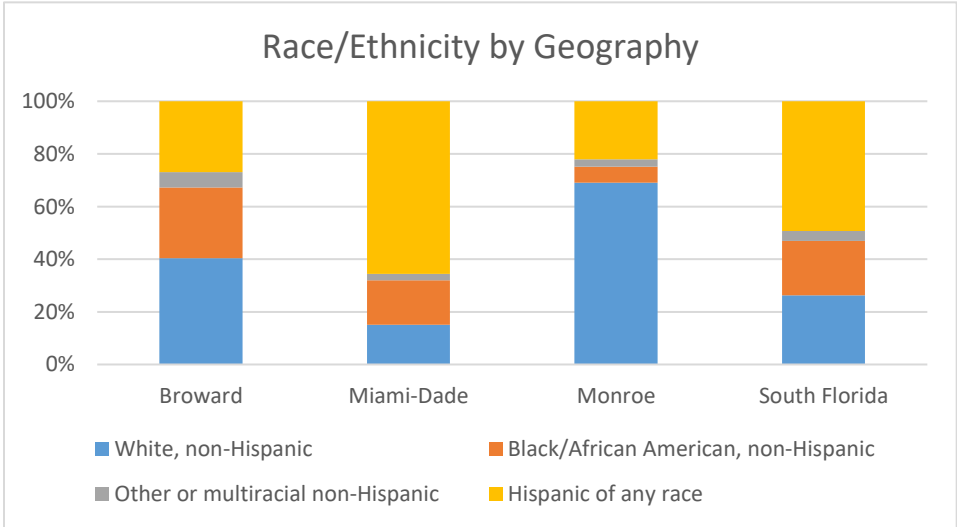


Figure 7: Table B03002, 2015 ACS 5-year estimates.

Education

Educational Attainment

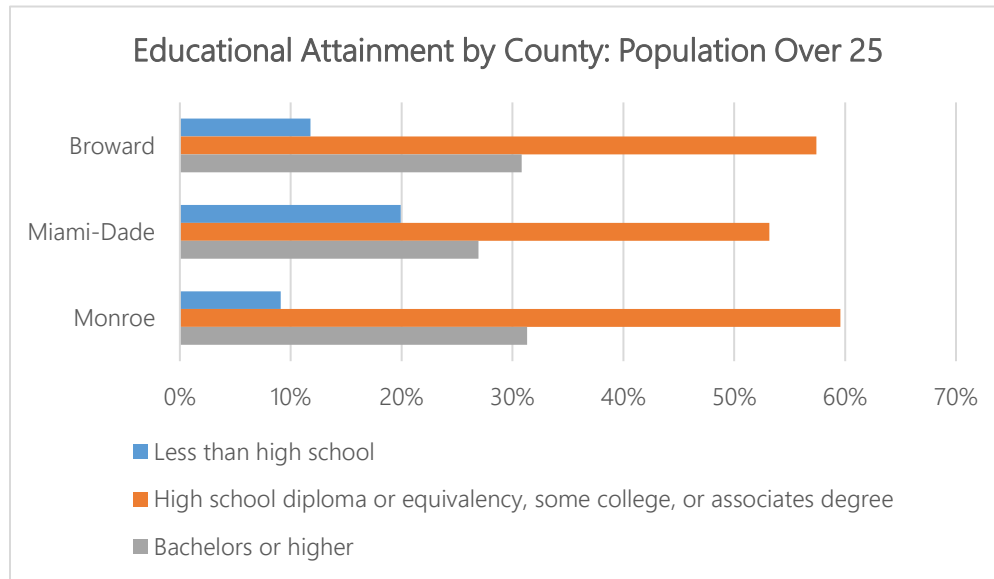


Figure 9: Table S1501, 2015 ACS 5-year estimates.

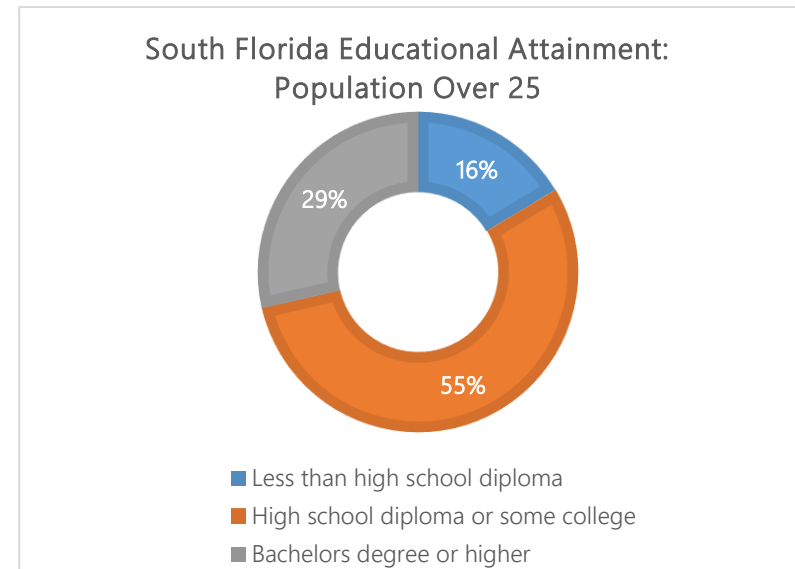


Figure 8: Table S1501, 2015 ACS 5-year estimates.

Institutions of Higher Learning

Ordered by total enrollment:

- Miami-Dade College – MDC has eight campuses and is one of the largest colleges in the country, and has awarded hundreds of thousands of degrees since it's opening in 1960
- Florida International University – founded in 1942, FIU is a research university that is part of the State University System of Florida and offers a variety of undergraduate and graduate degree programs, including business administration, engineering and architecture, law, and medicine
- Broward College – Broward College, established in 1959, is part of the Florida College System, offering associates and bachelor's degrees in the social sciences, liberal arts, and STEM fields
- Florida Atlantic University – FAU is a research university, established in 1961, belonging to the State University System of Florida
- Nova Southeastern University – NSU is a private, non-profit research university offering over 150 undergraduate, graduate, and professional programs, specializing in medicine, law, business, education, pharmacy, dentistry, and more
- Keiser University – KU is a private, non-profit university catering particularly to adult learners; KU specializes in STEM and healthcare fields
- University of Miami – UM is a private research university, recently ranked among the top universities in the country by U.S. News & World Report

Industry Location Quotient and Brain Drain

A location quotient (LQ) analysis quantifies how concentrated specific industries or sectors are in a given region when compared to the nation. An LQ can be useful in determining both what makes a region unique, and where shortcomings exist.

South Florida has a high concentration in several median to high-paying job sectors: Wholesale Trade, Transportation, Financial and Insurance Services, and Professional and Technical Services sector, and compares well to the rest of the nation. On the other hand, South Florida has a higher concentration of low-paying job sectors than the nation: Real Estate, Rental, and Leasing; Other Services; and Administrative, Support and Waste Services. Additionally, South Florida has as a much lower concentration of very high-paying job sectors, such as Utilities and Management of Companies and Enterprises.

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.

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 residents as the good jobs will tend to go to those educated elsewhere.¹²

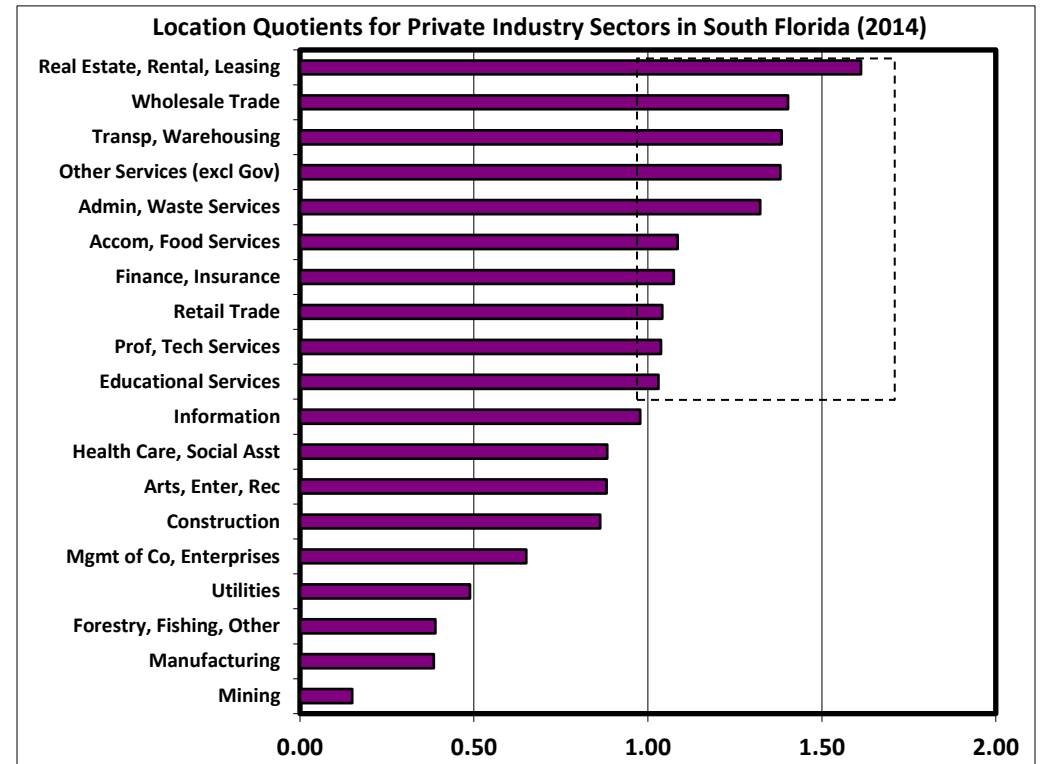
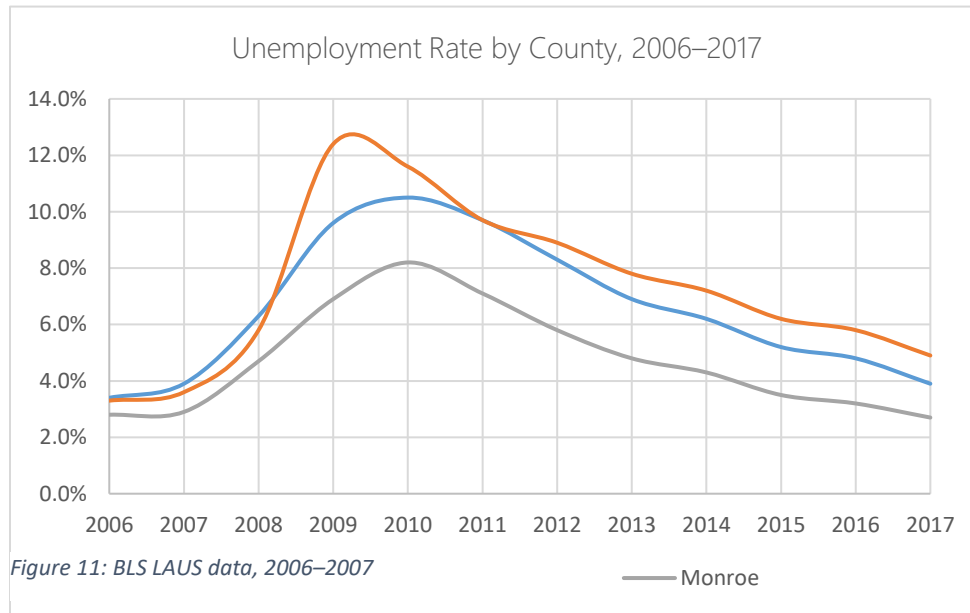


Figure 10: LQs for private industry sectors, based on REMI Policy Insight Plus data, derived from Bureau of Economic Analysis, U.S. Department of Commerce

¹² 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; <https://cew.georgetown.edu/cew-reports/a-decade-behind/>

Employment

South Florida's labor force was 2.4 million in 2016; the labor force at the state and national levels was 9.8 million and 159.2 million, respectively. The Region's economy lost over 226,000 jobs between 2008 and 2010, but gradually recovered, adding more than 302,000 in the following six years. South Florida's average annual unemployment rates, which hit a historic low of 2.9% in 2006, rising through 2010 due to the Great Recession, then falling to 5.0% in 2016 and 4.0% in 2017.



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%. Labor force participation rates in 2016 were 65.4% in Broward, 61.7% in Miami-Dade, and 65.4% in Monroe.

Some economists argue that the labor force participation rate is a better measure of the state of the job market because the unemployment rate does not factor in individuals that have left the "labor force" due to the inability to find a job.¹³ Labor force participation is better measure of engagement with the job market. In 2016, rates for the South Florida Region were slightly higher than for both the national (63.1%) and the State of Florida (58.2%). It's important to note that the lower rates for the State may be due to a higher percentage of retired individuals for the State than for the South Florida Region.

¹³ <http://www.pewresearch.org/fact-tank/2017/03/07/employment-vs-unemployment-different-stories-from-the-jobs-numbers/>

Equity Income

While wages have gradually increased over the last several years in South Florida, when adjusted for inflation, those numbers are relatively stagnant. In some areas, real median household income has fallen by roughly 10% since 2007.

Due in part to an exodus of middle-income jobs during the Great Recession, several independent reports have found South Florida, particularly Miami, to have one of the highest income inequalities of large metropolitan areas in the country.¹⁴ Additionally, the Region ranks towards the top of lists ranking the gap between wages and housing costs.

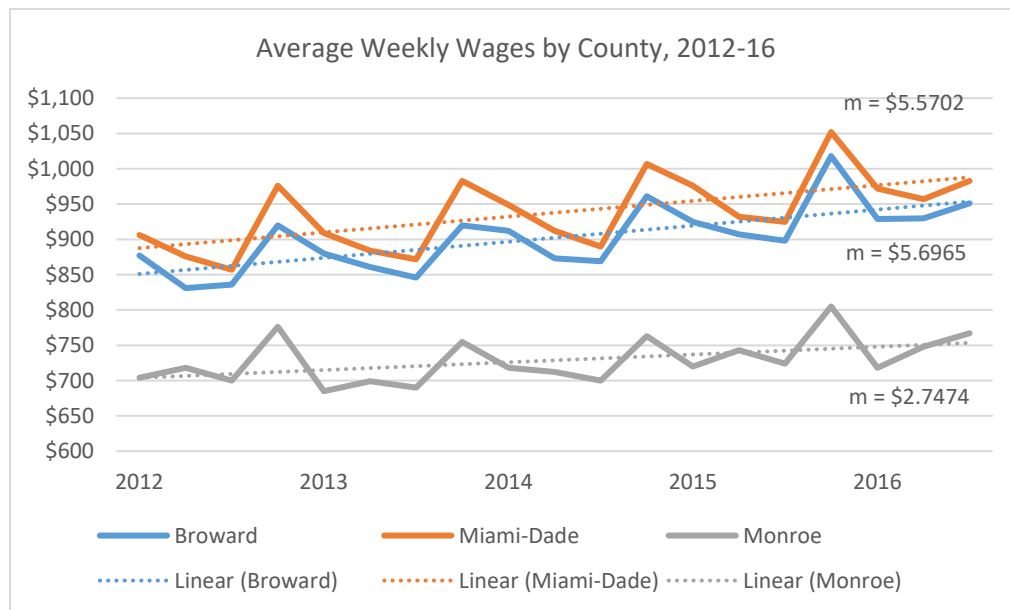
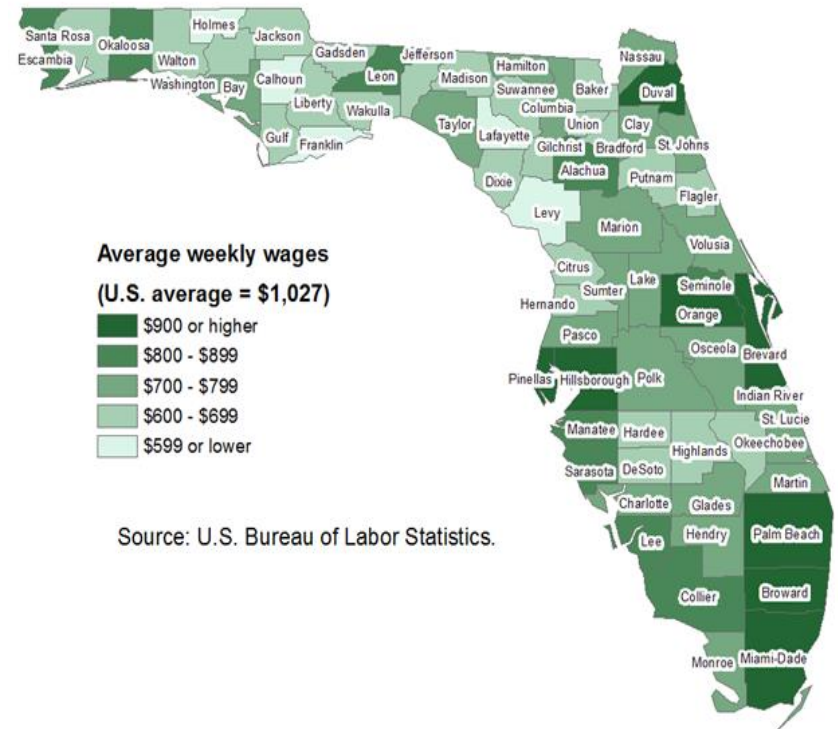


Figure 14: Average weekly wage increases from 2012–2017. Source: US Bureau of Labor Statistics.



Source: U.S. Bureau of Labor Statistics.

Figure 12: Average weekly wages by county in Florida, 2016. Source: US Bureau of Labor Statistics.

Figure 13: BLS Quarterly Census of Employment and Wages, 2012–2016

Average Weekly Wage Increases, 2012–2016

Broward	Miami-Dade	Monroe
Quarterly Increase		
\$5.70	\$5.57	\$2.75
Annual Increase		
\$22.79	\$22.28	\$10.99

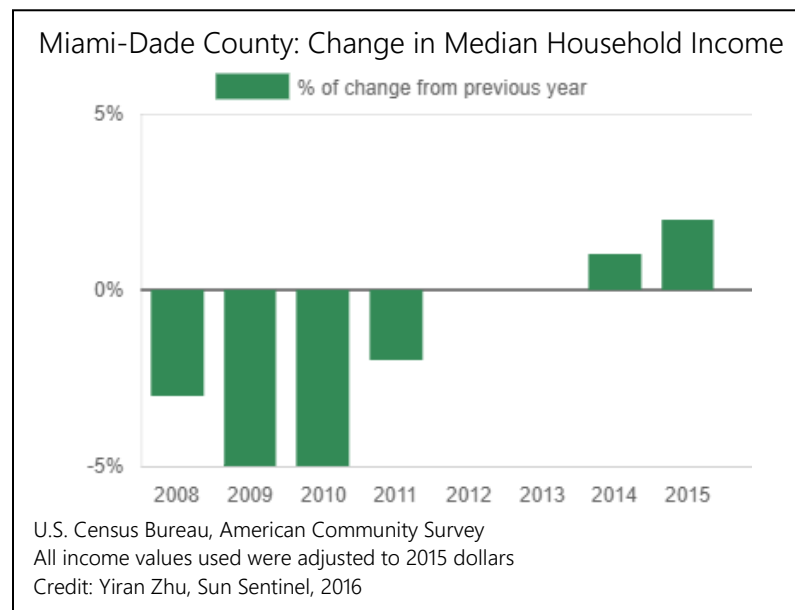
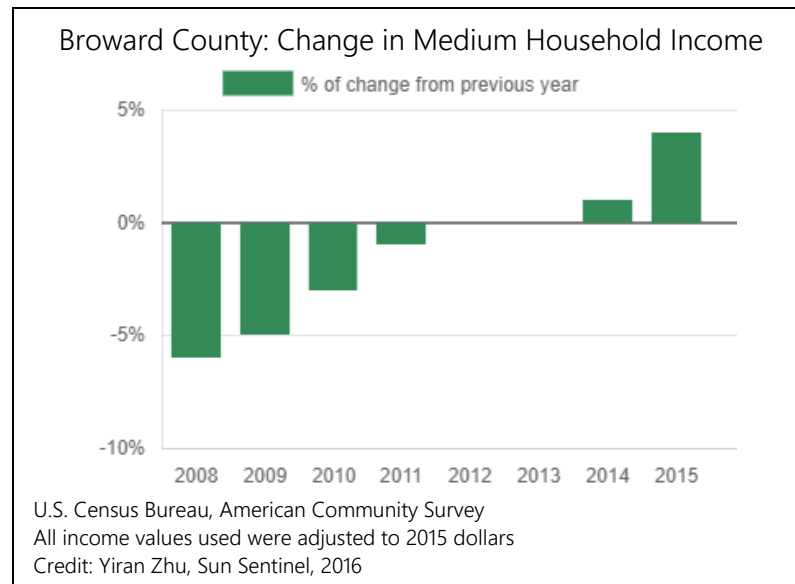
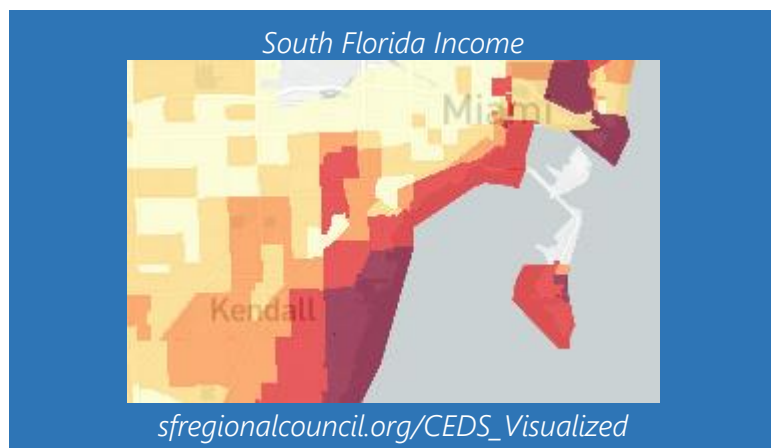
¹⁴ Bloomberg: <https://www.bloomberg.com/news/articles/2016-10-05/miami-is-the-newly-crowned-most-unequal-city-in-the-u-s>
The Brookings Institute: <https://www.brookings.edu/research/some-cities-are-still-more-unequal-than-others-an-update/>

According to the U.S Census Bureau, the median household income in the U.S. is \$55,775; the median household income in Florida is \$49,426.¹⁵ Both Broward and Monroe Counties' median household income values are within 5% of the national median, and are above the median for the State of Florida. Miami-Dade's median household income was more than 20% lower than the national median and more than 10% lower than the State median at the time this data was collected.

The image to the right display variations in median household income since the Great Recession. Inflation adjusted median household incomes continued to fall in the Region through 2011, and largely remained stagnant through 2013. Median household incomes began to rise in 2014 and 2015, however have still not returned to pre-recession values when adjusted for inflation.

South Florida Income		
Broward	Miami-Dade	Monroe
<i>Per Capita Income</i>		
\$28,381	\$23,850	\$36,208
<i>Median Household Income</i>		
\$53,926	\$43,786	\$57,290

Figure 15: Table B19301, 2015 ACS 5-year estimates.



¹⁵ U.S. Census Bureau, 2015 5-year ACS estimates.

Poverty

The US Census Bureau calculates the official measure of poverty by comparing a household's income and the characteristics of the people within the household to an inflation-adjusted threshold. In 2017, for a household comprised of two adults and two children, that threshold nationwide is \$24,339.

Because in many cases this is an overly simplified metric, the Census Bureau has released an additional report, the Supplemental Poverty Measure (SPM), since 2010. This metric takes additional cost of living variables into consideration (utilities, clothing costs, etc.), and reflects how the cost of these variables vary with geography. Because of cost of living fluctuates with geography, the SPM threshold fluctuates spatially. This is shown in Figure 16; in regions where the cost of living is generally higher, the poverty threshold is set higher. While the official threshold of poverty may be applicable in much of the county, it is likely set too low for South Florida, where the threshold is between \$27,500 and \$29,999. This indicates that many more households are struggling than what is reported in the standard measure of poverty.

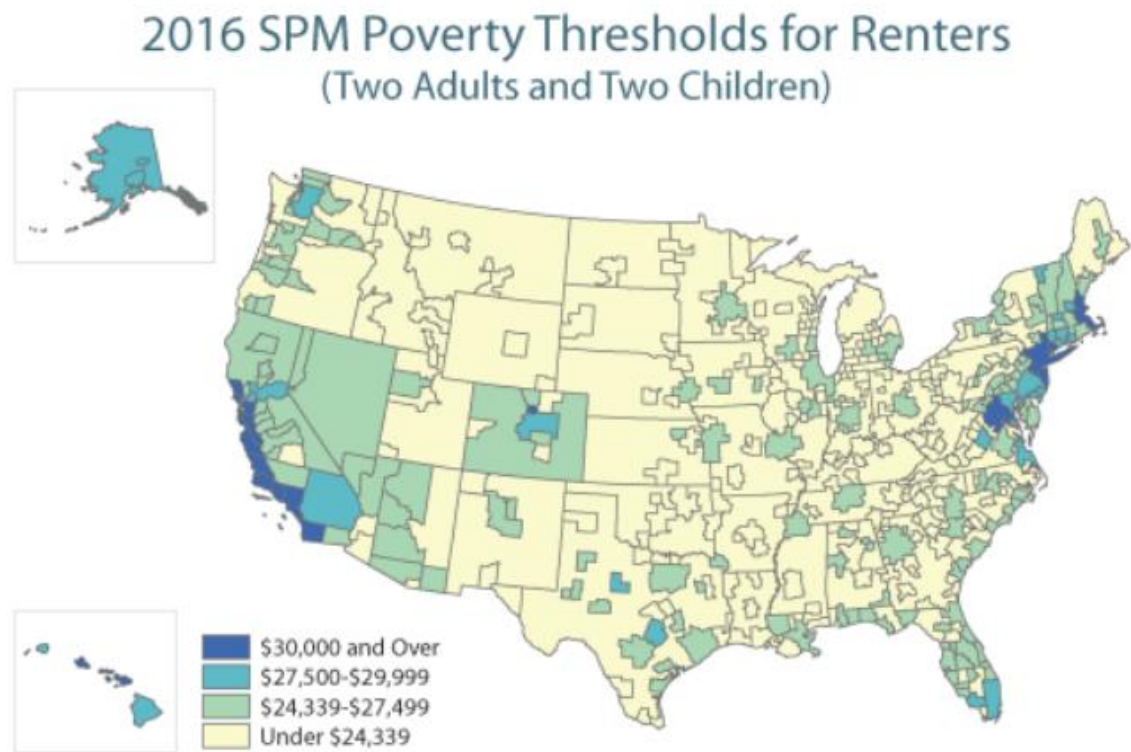


Figure 16: US Census Bureau, 2015 ACS 5-Year estimates.

Poverty in South Florida Region					
Broward %	Miami-Dade %	Monroe %	People in Poverty in the 3-County Region	SFRPC %	U.S. %
13.9%	20.0%	13.4%	805,884	17.9%	15.5%

Figure 17: Table S1701, 2015 5-year ACS

Housing and Vehicle Access

The majority of occupied housing units (~58%) in South Florida are owned by a member that lives in the unit; the rate in Miami-Dade (54%) is lower than both Broward (64%) and Monroe (61%). This is typical at the national level, as more Americans are renting rather than buying home. This is particularly true in large cities; whereas of 2015, 52 of the 100 largest cities in the U.S. were majority renter.¹⁶ This is a somewhat recent trend in many of these cities, beginning around the time of the 2008 recession.

Regional Housing Stock in Units			
Broward	Miami-Dade	Monroe	Total
814,454	998,833	52,913	1,866,200

Figure 18: Table B25001, 2015 ACS 5-year estimates.

Housing Cost Burden

A lack of affordable housing has long been a concern in South Florida, as the gap between housing costs and median incomes is one of the largest in the county. According to a newly released report by Harvard's Joint Center for Housing Studies, ~60% of renting households are cost burdened in the South Florida region, meaning more than 30% of their income is spent on housing; 30–35% are severely cost burdened, spending more than 50% of their income on housing. While these percentages are lower for homeowners, the rate of cost-burdened households in South Florida is still one of the highest in the country.

Vehicles Available and Commuting

Between 8–12% of households in Broward, Miami-Dade, and Monroe Counties are without vehicles, which is right around the national average. The reasons a household may be without a vehicle vary, including financial constraints or preferential use of other means of transportation (public transit, carpooling, bicycling, or walking).

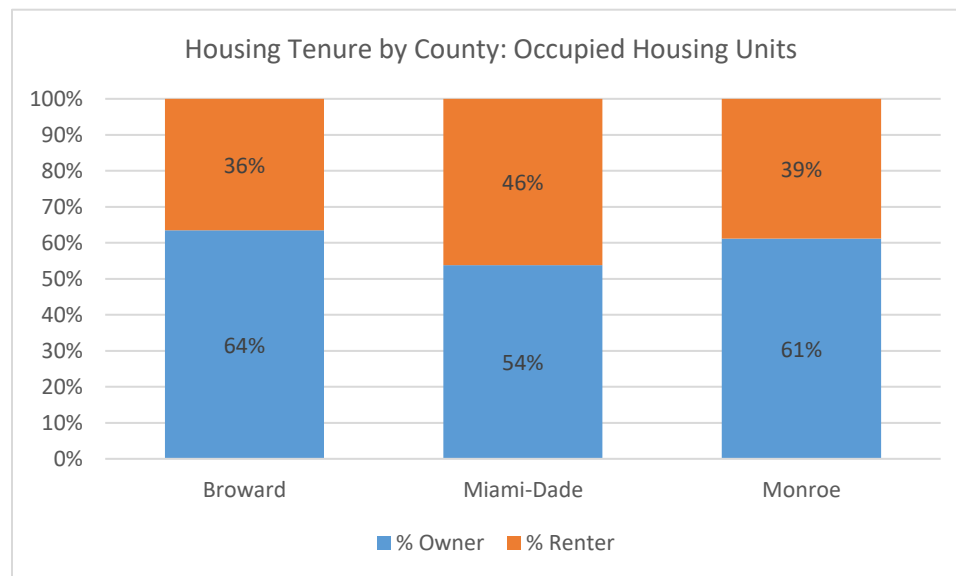


Figure 19: Table B25001, 2015 ACS 5-year estimates.

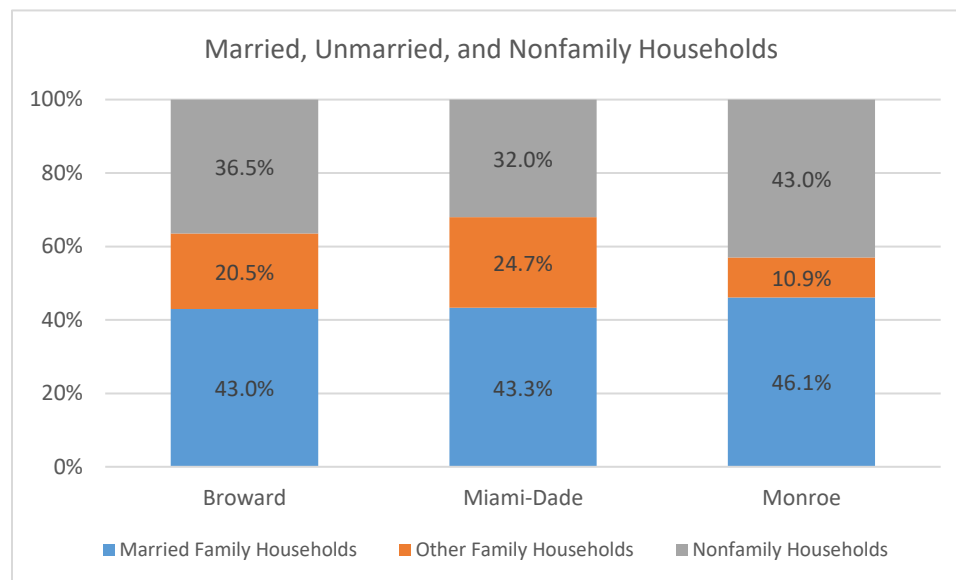


Figure 20: Table S2501, 2015 ACS 5-year estimates.

¹⁶ Source: <https://www.bloomberg.com/news/articles/2017-03-23/renters-now-rule-half-of-u-s-cities>

ALICE Index

The ALICE Index, which stands for Asset Limited, Income Constrained, and Employed provides a different view of financial burden than the official measure of poverty as issues by the Census Bureau. The developer of the index, United Way, describes ALICE as representing “those who work hard and are above the poverty line, but due to high costs and factors often beyond their control, must live paycheck to paycheck.” Their most recent 2017 report, unexpected expenses like car repairs or routine healthcare costs can “plunge” working families into financial chaos.

Families with Children by Income, 2015

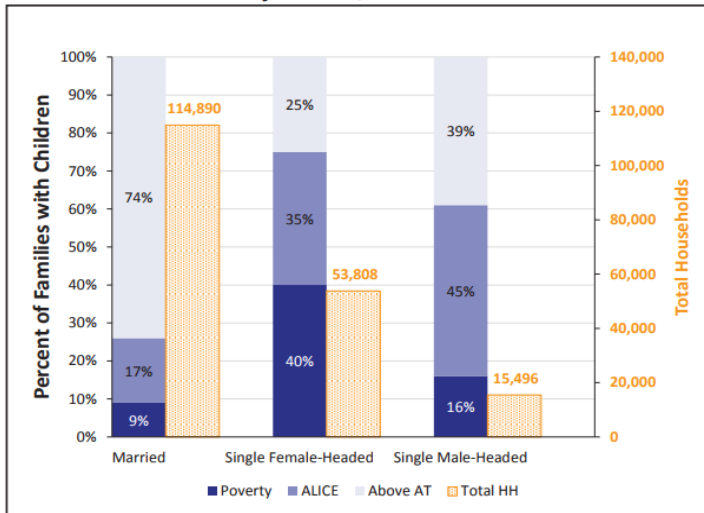


Figure 22: Broward County, United Way 2017 ALICE Report

➤ Broward County
44% of households in Broward County are below the ALICE threshold.

According to the 2017 report, few families in the South Florida region have access to substantial liquid assets, such as savings accounts and retirement accounts. While home ownership is valuable for wealth building, liquidity is important for unexpected emergencies.

Families with Children by Income, 2015

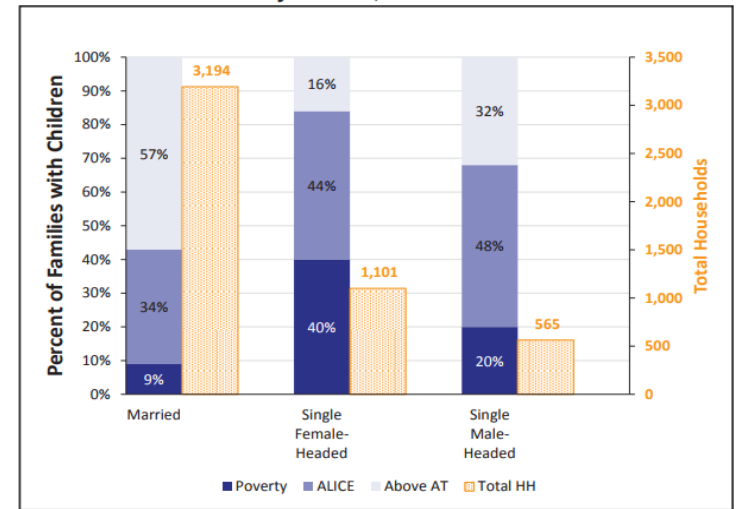


Figure 23: Monroe County, United Way 2017 ALICE Report

➤ Miami-Dade County

55–61% of households in Miami-Dade County are below the ALICE threshold.

When ALICE households do not have the necessary income to make ends meet week-to-week, difficult choices are often made. These may include taking high-interest cash advances or payday loans, purchasing cheaper food (which tends to be less healthy, and skipping over necessary home maintenance or visits to healthcare providers.

Families with Children by Income, 2015

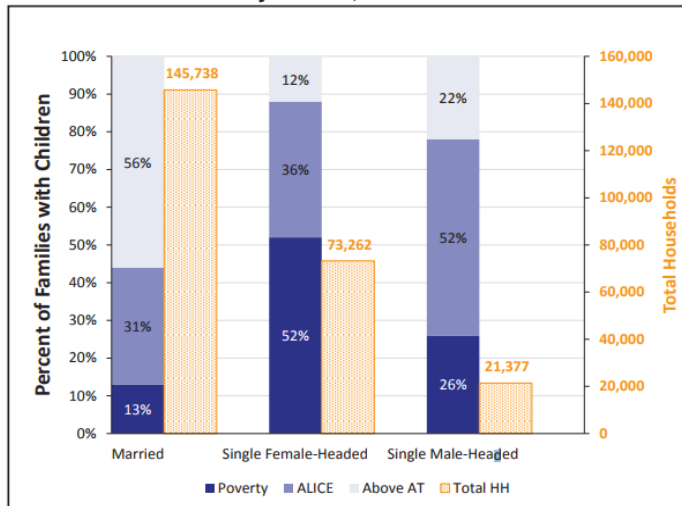


Figure 21: Miami Dade County, United Way 2017 ALICE Report

➤ Monroe County

46% of households in Monroe County are below the ALICE threshold.

The 2017 report outlines several suggestions for meeting these widespread financial challenges, including an increase in medium- and high-paying jobs, improvements in the availability of affordable housing, and reform to the health care delivery system. Addressing these concerns is beneficial entire communities, both socially and economically, and reduces the strain on the entire Region at large.

Health Insurance

The percent of the population with health insurance coverage in the South Florida Region has increased substantially over the last five years (for 2015 data, please visit the “South Florida Without Health Insurance” visualization on our website). This follows a general trend state- and nation-wide. In 2010, between 20–25% of the population in Florida was uninsured; by 2016, that range had fallen to 10–15%.¹⁷ Despite this improvement, the percentage of the State of Florida population that is uninsured is still one of the highest in the country.

County	Population Without Health Insurance	%
Broward	256,724	13.5
Miami-Dade	449,995	16.8
Monroe	15,757	20.5

Figure 25: Table B25001, 2015 ACS 5-year estimates

County Health Rankings

The ranking in health outcomes represent how healthy counties are in Florida¹⁸. The ranks are based on life expectancy and how healthy people feel while alive and helps us understand what influences these factors. The ranking in health factors represent what impacts the health of a county. The ranks are based on health behaviors, clinical care, social and economic, and physical environmental factors. Factors that could impact the health of communities are high school graduation rates, access to healthy foods, rates of smoking obesity, and teen births.¹⁹ They are estimates of the future health of counties as compared to other counties in Florida. The ranks are based on the total number of counties in Florida (67).

County	Ranking in Health Outcomes	Ranking in Health Factors
Broward	19	14
Miami-Dade	23	28
Monroe	10	6

Figure 27: Florida County Health Rankings.

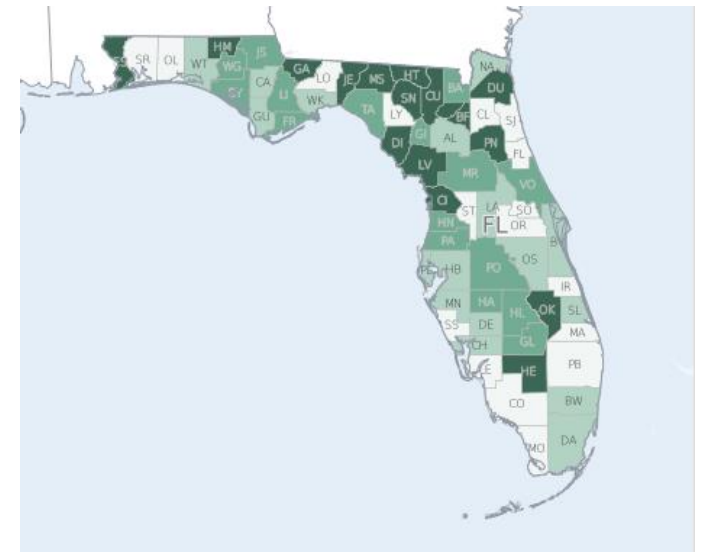


Figure 24: Overall Rankings in Health Outcomes. Source: County Health Rankings and Roadmaps.

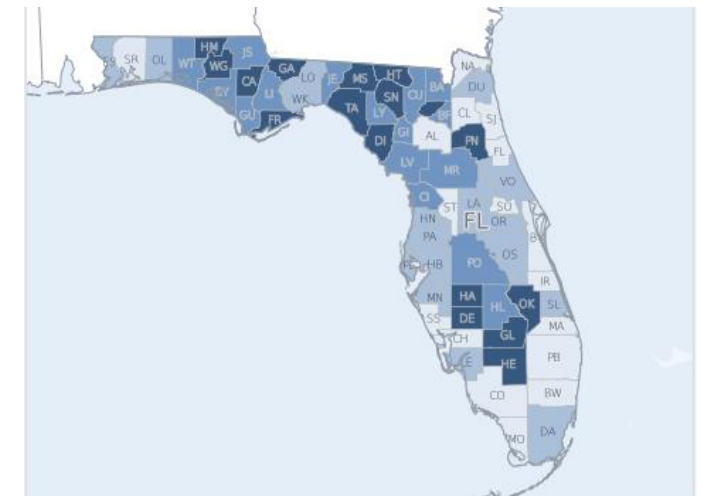


Figure 26: Overall Rankings in Health Factors. Source: County Health Rankings and Roadmaps.

¹⁷ U.S. Census Bureau 2015 ACS 5-Year Data

¹⁸ <http://www.countyhealthrankings.org/app/florida/2017/overview>

¹⁹ http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2017_FL.pdf

Development and Density

Scarcity of developable land in South Florida creates problems, especially within the context of projected population increases. While urban infill and redevelopment are viable strategies for managing population growth and encouraging economic development, South Florida is already one of the densest regions in the state, bordered by the Atlantic Ocean to the east and the Everglades to the west.

Economic Conditions

With a total value of \$226 billion²⁰ in goods and services (Gross Domestic Product, GDP), the South Florida Region produced 26% of the State of Florida's output and accounted for almost 1.4% of the nation's GDP in 2014.

The region's six private non-farm sectors (in 2-digit NAICS²¹ codes) with the highest levels of employment in 2014 were: Retail Trade, Health Care and Social Assistance, Administrative Support and Waste Management Services, Other Services²², Accommodation and Food Services, and Professional and Technical Services. Together with Real Estate, Finance and Insurance, Wholesale Trade, Transportation, and Construction, these 11 sectors accounted for 80% of regional employment. The Region's economy accounts for a little over one-fourth of total employment in the State of Florida. Total South Florida employment is projected to grow at an average annual pace of 1.4% from 2014 to 2022, only slightly faster than the nation's annual pace of 1.0%. 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 280,000 in 2014 to 348,000 in 2022, a 24% increase. Substantial growth is also projected for the Accommodation and Food Services (41,000, 18%) and the Professional and Technical Services (39,000, 19%) sectors during the same period.

South Florida's workers' compensation rates affect the 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. Generally, compensation rates in South Florida in 2014 were about the same as or slightly higher than the average rates for most comparable sectors in the State of Florida. Exceptions were in Mining, Manufacturing and Other Services, where South Florida workers received only 54%, 86% and 88% of the State average, respectively. The Region's compensation rates in most sectors were lower than the comparable national averages in 2014, with exceptions for the Retail Trade (109%), Educational Services (104%), Arts Entertainment and Recreation (117%), and Accommodation and Food Services (123%) sectors. However, a decent wage is just one side of the equation of

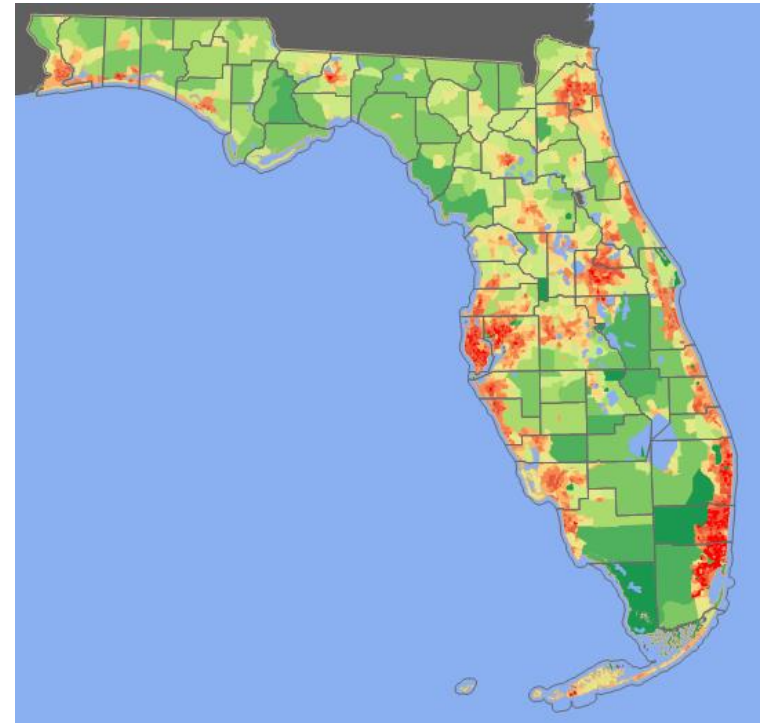


Figure 28: Relative population density in Florida. Source: U.S. Census Bureau.

²⁰ Expressed in 2009 Dollars. Source: Policy Insight Plus, a nationally acclaimed economic and demographic forecasting model, developed by Regional Economic Models, Inc. (REMI). Version 2.0.3, used for this analysis, contains actual economic data through 2014, with forecast data from 2015 to 2060.

²¹ 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.

²² Establishments in this sector are primarily engaged in activities such as equipment and machinery repairing, promoting or administering religious activities, grant-making, advocacy, and providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

the quality of life. 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.

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 the Real Estate, Wholesale Trade, Transportation, Other Services, and Administrative and Support Services sectors. In addition, the Accommodation and Food Services, Finance and Insurance, Retail Trade, Professional and Technical Services, and Educational Services sectors have shares of the Regional economy above the national average ($LQ > 1$).

A *shift-share analysis* projects the employment growth or decline of specific industry sectors in a region over a given future time period, measured by three variables: share change, mix change, and shift change. Share change measures the degree to which an industry sector expands as a result of general economic growth in the country or the region. Mix change is growth that can be attributed to a specific industry, measured as the difference of an industry's growth in the region as compared to that industry's growth nationally. Share change is similar to mix change, but measures the difference between a specific regional industry change in employment compared to the composite national growth rate. Between 2017-2021, based on these metrics, most of the private sector industries are projected to grow, except for Utilities and Manufacturing. Perhaps most notably, the Professional & Tech Services and Healthcare & Social Assistance industries are projected to expand dramatically, followed by Accommodation & Food Services and Construction.

Both the quantity and quality of economic growth are important aspects in assessing the Region's economic development status. South Florida grew more slowly than the nation during the recession, but it is projected to grow at a faster rate over the next five years. In addition, a more diversified economic structure—a more favorable sectoral and geographic distribution of economic activity—needs to be achieved to increase the long-term sustainability of the economic growth. Diversification is a critical component of the Region's economic development effort because a large, varied 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.

Energy

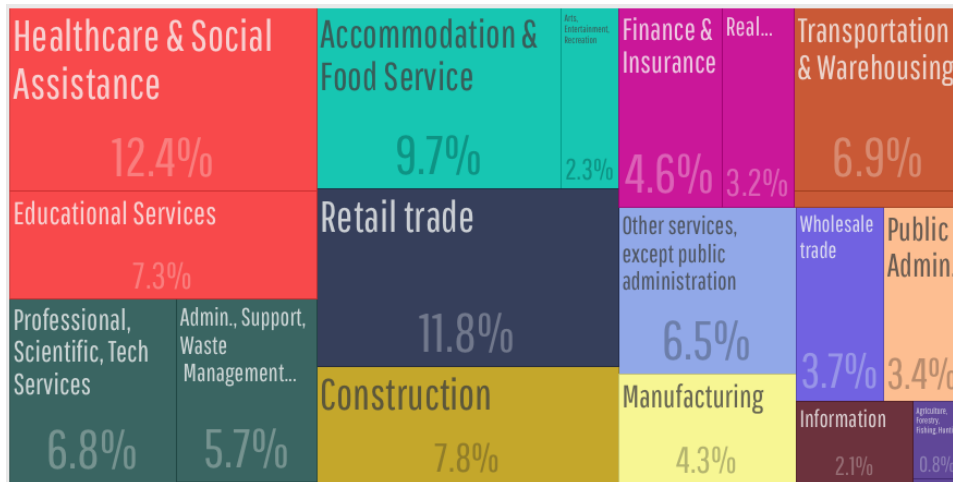
Florida is the nation's second largest energy producer. The state also has the capacity to be a leader in renewable energy production. According to the U.S. Army Corp of Engineers' 2017 Infrastructure Report Card, Florida ranks 12th in the nation in production of energy from renewables.²³ The state ranks third in the nation for solar panel potential, and is currently one of only four states with utility-scale electricity generation from solar technology. The state also has viable coastlines for successful wind farms in some areas. Both industries would improve the region's long-term sustainability and provide thousands of new jobs, while also reducing greenhouse gas emissions.

²³ <https://www.infrastructurereportcard.org/infrastructure-super-map/>

Regional Industry Clusters

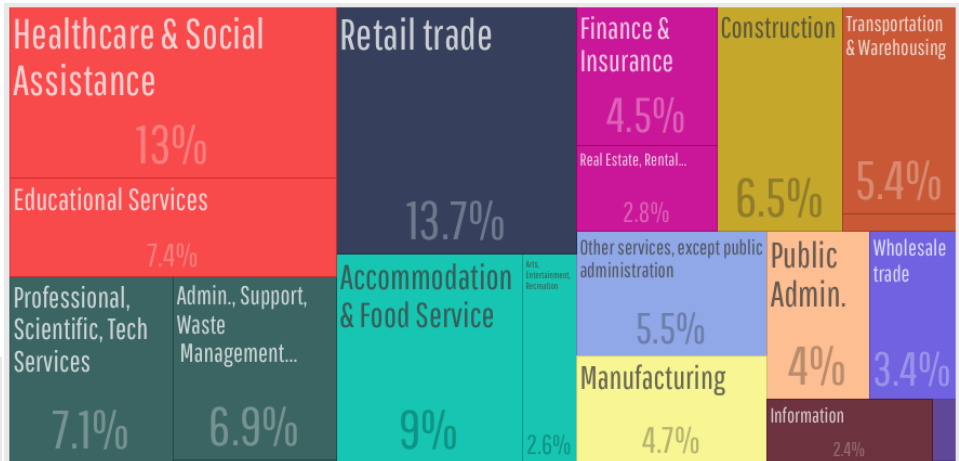
Broward County Industry Clusters ➤

Figure 29. 2015 ACS 5-year estimates, produced by Deloitte, Datawheel, C. Hidalgo
(<https://datausa.io/about/#about-datawheel>)



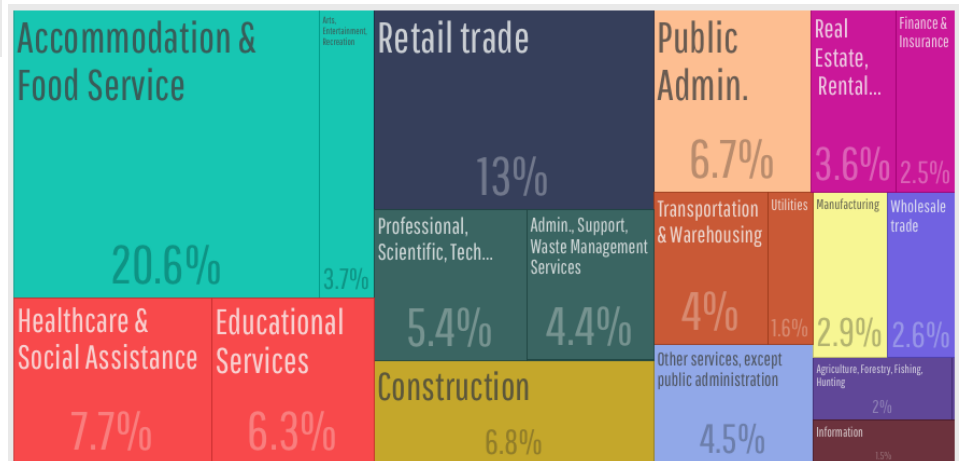
Monroe County Industry Clusters ➤

Figure 31. 2015 ACS 5-year estimates, produced by Deloitte, Datawheel, C. Hidalgo
(<https://datausa.io/about/#about-datawheel>)



◀ Miami-Dade County Industry Clusters

Figure 30. 2015 ACS 5-year estimates, produced by Deloitte, Datawheel, C. Hidalgo
(<https://datausa.io/about/#about-datawheel>)



Innovation and Technology

Innovation Index 2.0 – Innovation Index for US Regions

#44 of 384 Economic Development Districts.

The Innovation Index 2.0, developed by the U.S. EDA, tracks a region's innovation performance against other regions around the country. The South Florida Region ranks as having a "very high relative capacity for innovation," coming in at 44 out of a total 384 Economic Development Districts (EDDs) countrywide.

High Points

Of the constituent indices, the Region places towards the front of the pack in the Human Capital and Knowledge Creation Index, Business Dynamics Index, and Business Profile Index. Within the Human Capital index, South Florida receives high ranks for university-based knowledge centers, business incubators, and percent of residents holding bachelor's and master's degrees. With the Business Dynamics and Business Profile indices, the Region ranks in the top 10 in the nation regarding the establishment of new businesses and jobs associated directly with those businesses. Industry diversity and cluster growth, however, tend to be low.

Room for Improvement

South Florida ranks particularly low in the Economic Well Being Index. Personal income growth in the region tends to be low, while income inequality is very high. Poverty is also higher than the average of other EDDs. Interestingly, South Florida also ranks at the end of pack in the net migration metric. While the Region is an attractor for a variety of reasons, this metric also considers the quantity of people that migrate out—high out-migration can be indicative of poor or stagnant economic conditions, poor wage growth, or unaffordable housing. These factors are especially important as they concern the retention of innovative talent.

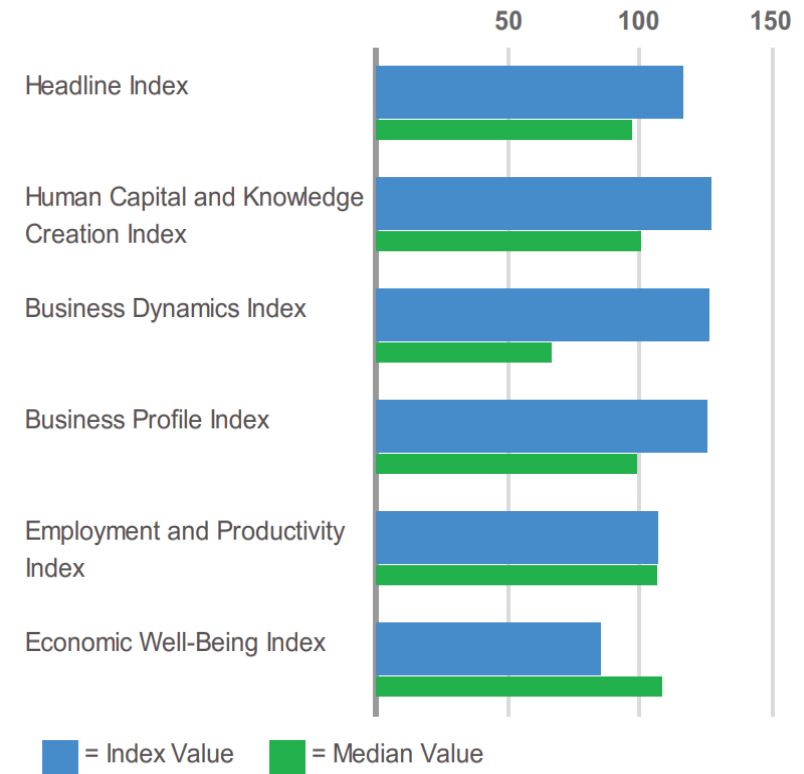


Figure 32: Innovation Index 2.0, showing the composite "Headline Index" score, as well as constituent indices.

Bloomberg US Innovation Index

The Bloomberg US Innovation Index²⁴ ranks all 50 states on a 0–100 scale, equally weighing six metrics: research and development; productivity; high-tech density; concentration of science, technology, engineering and mathematics (STEM) employment; science and engineering degree holders; and patent activity. Florida ranks 34th in the nation, indicating the region has opportunities for growth and improvement in the coming decades.

Room for Improvement

Florida ranks towards the medium-low end of the pack in productivity and STEM concentration. Productivity here is calculated as the per capita contribution to the gross state product (GSP), or total economic output of the state *per person*. However, ranked by GSP alone, Florida is fourth in the nation (\$840 billion in 2014).

The percent of the workforce employed in STEM (science, technology, engineering, and mathematics) professions is low. The percentage of STEM degree holders is similarly low.

However, the index ranks Florida as #11 in tech company density (number of technologically intensive public companies as a percent of total public companies). This indicates that *professional and technical services* is a growth cluster.

The Kauffman Index of Startup Activity

The Kauffman Index of Startup Activity measures a region's entrepreneurial spirit by looking at the (1) rate new businesses are established, the (2) density of those businesses, and the (3) market opportunities that are available. In the 2015 Kauffman State Trends report²⁵, Florida ranked 9th in the nation. By 2016, the state had jumped to 2nd, and remained in the top three at 3rd place in 2017.

The index also ranks the country's 40 largest metropolitan areas. In 2015 and 2016, the Miami-Fort Lauderdale-Pompano Beach region ranked #2. In 2017, with increasing startup opportunity and activity, South Florida moved to #1, overtaking the Austin-Round Rock-San Marcos metropolitan area.

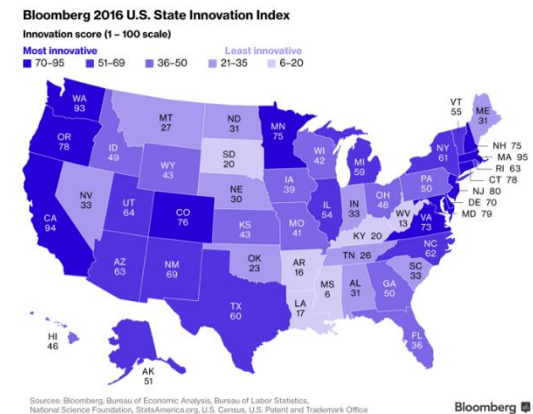


Figure 33: Bloomberg ranks Florida 34th in the nation in Bloomberg's Innovation Index.

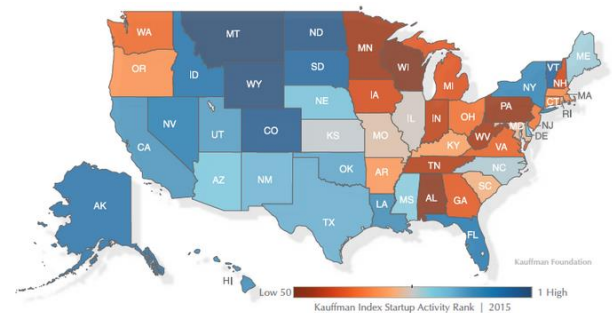


Figure 34: Kauffman Index of Startup Activity; Florida ranked 9th in 2015.

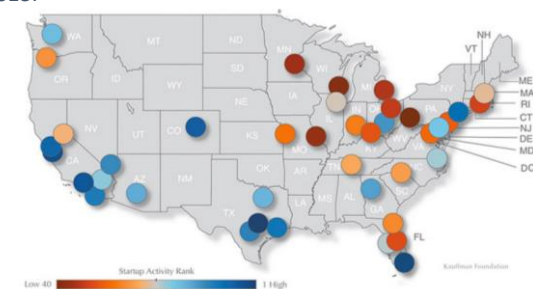


Figure 35: Kauffman Index of Startup Activity; Florida ranked 2nd in 2016.

²⁴ For more information, visit <https://www.bloomberg.com/news/articles/2016-12-22/here-are-the-most-innovative-states-in-america-in-2016>.

²⁵ For more information, visit <http://www.kauffman.org/kauffman-index/reporting/startup-activity> for reports and interactive maps.

Transportation Networks

Commuting in South Florida

Average commute times in South Florida have continued to rise over the last several years. Despite increasing traffic congestion in South Florida, the average commute times for those that drive themselves are still substantially lower than those that utilize public transportation. In 2015, average commute time by personal vehicle was ~31 minutes, compared to ~51 minutes when using public transit—an increase of roughly 65%. While commuters have been shown to use public transportation when travel times are less, comparable, or slightly higher, substantial increases in travel times are prohibitive to many. The percentage of commuters in the Miami metropolitan area with commutes longer than 30 minutes increased from ~48% to ~55% from 2011 to 2015.²⁶ Research shows that additional time spent commuting is detrimental to personal well-being and worker productivity, and has financial implications for the region as well.²⁷

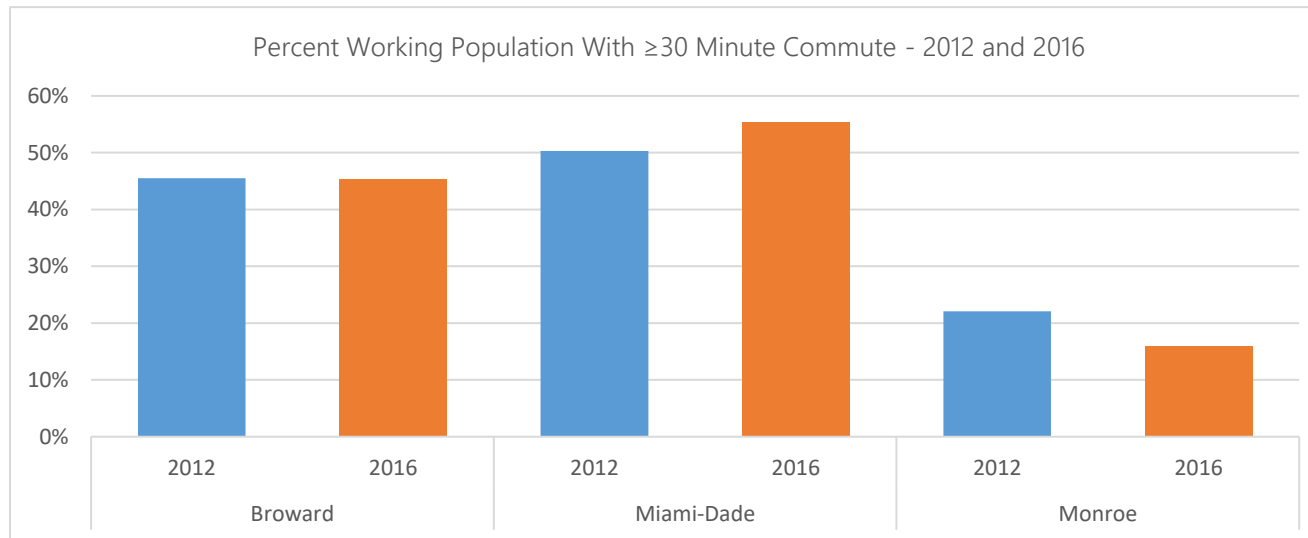
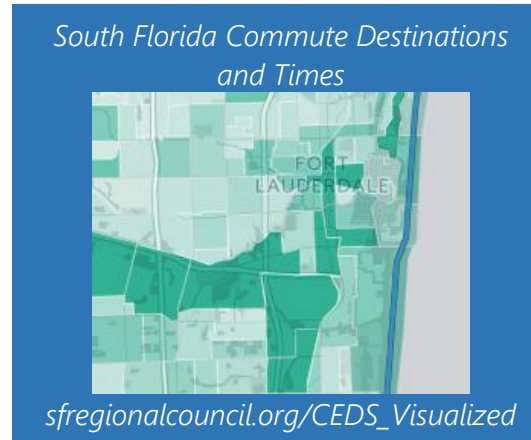


Figure 36: Table B08012, 2012 and 2016 ACS 1-year estimates.

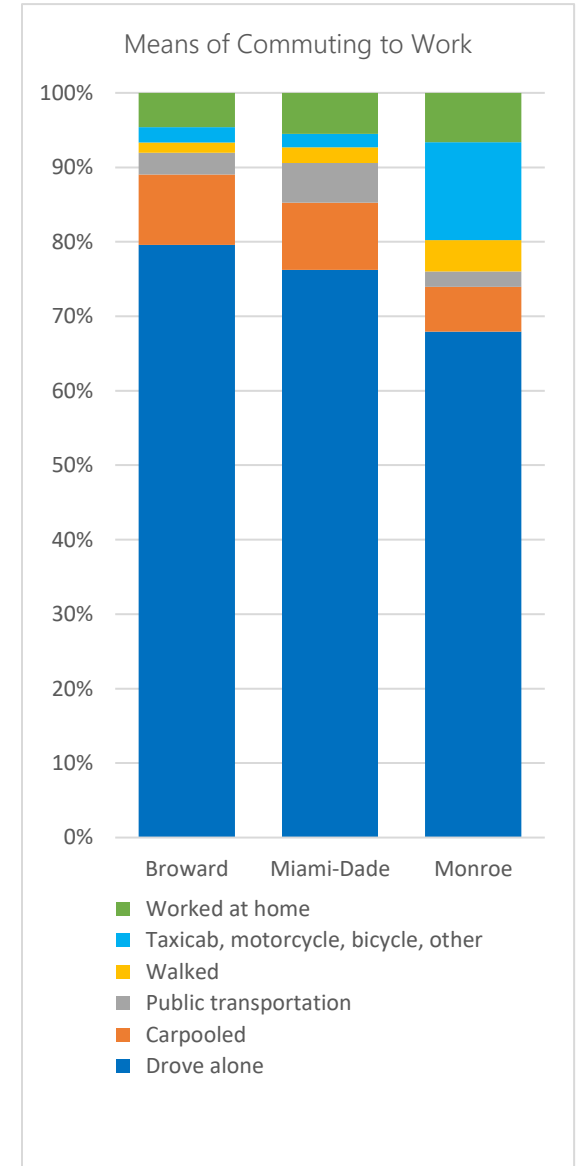


Figure 37: Table B08101, 2015 ACS 5-year estimates.

²⁶ <http://ourmiami.org/our-study-2/issue-areas/transportation/#transportation3>

²⁷ Van Ommeren, J. N., & Gutiérrez-i-Puigarnau, E. (2011). Are workers with a long commute less productive? An empirical analysis of absenteeism. *Regional Science and Urban Economics*, 41(1), 1-8.

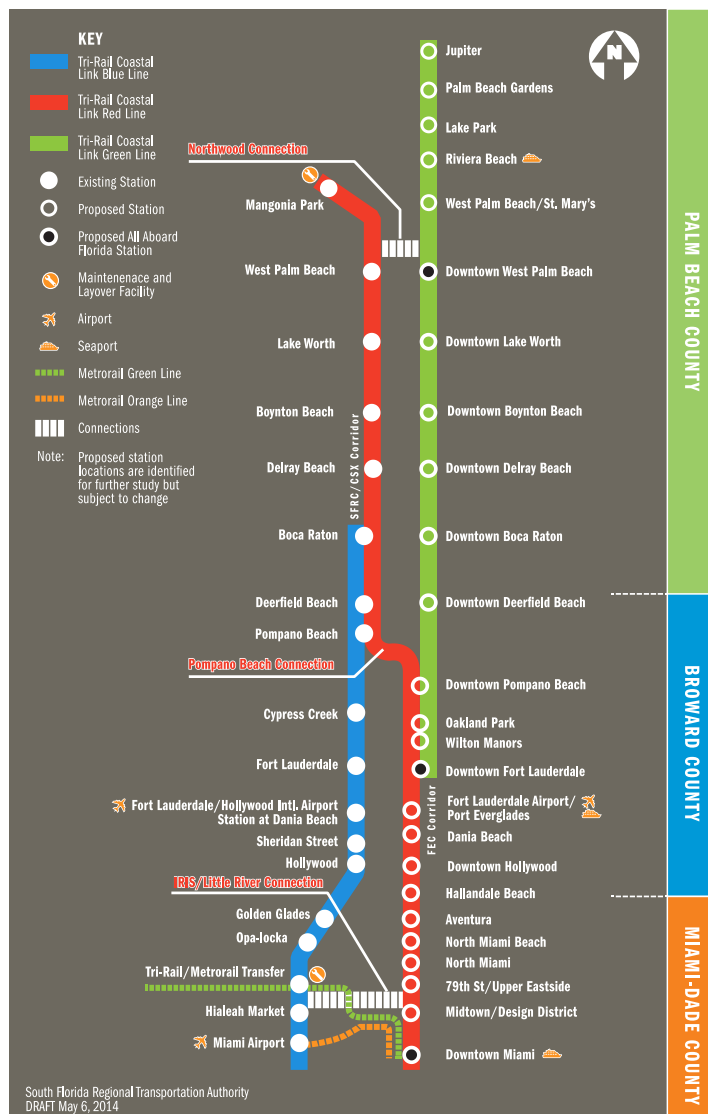


Figure 38: Existing Tri-Rail routes and proposed Coastal Link improvements. Source: South Florida Regional Transportation Authority.

Tri-Rail²⁸

The Tri-Rail commuter line currently serves areas from Mangonia Park to the north, to Miami International Airport/Intermodal Center to the south. There are presently 18 stations, six in Palm Beach, seven in Broward County, and five in Miami-Dade County. To aid in connectivity, the SFRTA operates a commuter bus service for Tri-Rail riders at several stations—County bus lines also service the stations. Since 2010, ridership has steadily been on the rise.

Ridership

- FY 2010 (3,604,526)
- FY 2014 (4,400,274)
- FY 2015 (4,292,380)
- FY 2016 (4,240,699), a 17.6% increase since 2010

Tri-Rail Coastal Link

The Coastal Link is a proposed extension and expansion of the existing Tri-Rail transit system that will serve the Florida East Coast (FEC) corridor of Palm Beach, Broward, and Miami-Dade Counties from Jupiter to Downtown Miami to dramatically increase mobility within the region. The project will capitalize heavily on Transit-Oriented Development (TOD)

around the ~25 proposed stations, a strategy for developing vibrant, new places around transit corridors. Studies have shown that a permanent investment in a community, such as a rail station, serves as an impetus for redevelopment and revitalization in the surrounding area. The planned locations presently represent a variety of land use types, from suburban to downtown business districts, all of which will benefit from increased walkability, mixed use development, and improved housing diversity.



Figure 39: Tri-Rail, photo courtesy of the Sun Sentinel

²⁸ <http://www.sfcta.fl.gov/docs/planning/TDP/SFRTA-TDP-FY16-Annual-Update-Final-Draft-Transmittal-to-FDOT.pdf>

Trade and Travel

Florida's aviation is one of the hardest working in the United States. Florida is #1 in international air cargo, 4th ranked state for tonnage, and holds 11% of the market share of the top 10 air cargo states. Two-thirds of all perishables and 90% of all flowers imported to the US come through Florida first, making the state and the region an important commercial hub with the rest of the continent and the world. Florida Aviation also needs to be highlighted for being #1 in student pilots, sport pilots, airline transport pilots, and flight instructors. The Region is home to more than 6% of the nation's general aviation fleet. In the commercial service area, Florida had 9.76% of all national enplanements in 2015, and served over 168 Million passengers in 2016. Over 50% of Florida's visitors arrive by air.

	Total Passengers	Year
✈ Fort Lauderdale/Hollywood International	44,584,603	2016
✈ Miami International	44,584,603	2016
✈ Key West International	383,776	2014

Figure 41: Total enplanements, deplanements, and direct transits combined. Source: FAA.gov. and www.floridaairports.org.



Figure 40: Three international airports in the region. Image credit: www.FLL.net, ABC Local 10 News, www.EYW.com.

Foreign Trade

Through August of 2017, Miami's top five trading partners were:
1. Brazil
2. China
3. Colombia
4. Dominican Republic
5. Chile
Through August of 2017, Miami's top five exports by value were:
1. Civilian aircraft parts
2. Cell phones and related equipment
3. Computers
4. Gold
5. Medical instruments

Figure 42: Top trading partners and exports by value, 2017 (through August). Source: World City Trade Numbers, www.USTradeNumbers.com.

Seaports

PortMiami is recognized as a hub for international commerce and tourism around the world. The port is a major economic driver in the South Florida region, contributing \$41.4 billion annually to the local economy and providing more than 324 thousand jobs.²⁹

PortMiami is also known as the "Cruise Capital of the World," acting as the home port for five of the largest cruise lines in the

world. Home to 18 different brands berthing 42 total cruise ships, PortMiami serves as the cruise gateway to the Bahamas, the Caribbean, Mexico, and many other destinations.

Port Everglades, located in Broward County, is also a key economic driver in the region, also serving as one of the largest cruise ports in the world. Just as in the case of PortMiami, tourists that travel through Port Everglades contribute directly to the local economy through hotel stays, restaurant dining, and other spending in the service and hospitality industries.

Figure 44: PortMiami cruise ships. Image credit: worldmaritimenews.com

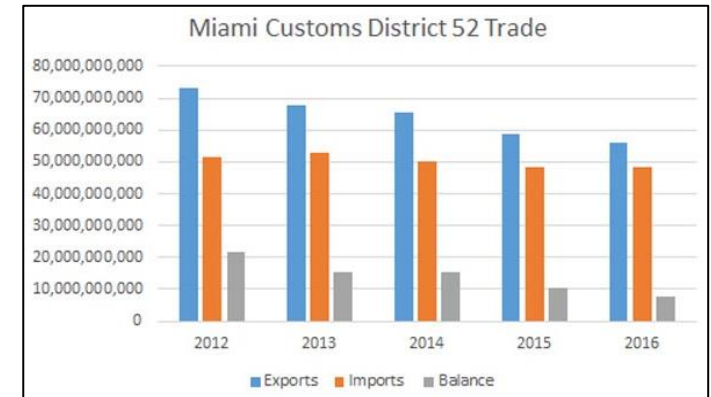


Figure 43: Imports, exports, and balances for South Florida Customs District 52, 2012–2016.



²⁹ <http://www.miamidade.gov/portmiami/>

Import and Export Trade Value

South Florida's total trade (imports and exports) with the rest of the world has increased in value from \$65.9 billion in 2005 to \$106.8 billion in 2016, despite the recent drop-off shown in from January to July 2017, trade is up 2.41% when compared to the same period in 2016. According to the Census Bureau, Miami's trade surplus amounted to \$7.75 billion in 2016, and it remains one of a very few Customs Districts that continues to enjoy a trade surplus in the U.S.

Environmental Profile

Most of the South Florida Region's climate is considered *tropical*, with *wet savanna*, *monsoon*, or *rainforest* subclimates. All three sub-classifications are characterized by average monthly temperatures that are greater than 64°. Within the two most prominent climates in the Region, *tropical savanna* and *tropical monsoon*, a distinct wet season typically occurs in late summer, and a dry season occurs in late winter to early spring.

As a direct result of South Florida's warm climate, uniquely diverse ecosystems, and cultural heritage sites, environmental tourism thrives, exemplified by the abundance of national, state, county, and local parks in the region. Ecotourism, distinguished from environmental tourism as low impact, education based, and conservation conscientious, has also gained traction in recent decades. A shift from high-impact tourism to ecotourism signifies a growing regional interest in both environmental and economic sustainability.



Figure 47: Hugh Taylor Birch State Park. Image credit: FL DEP.

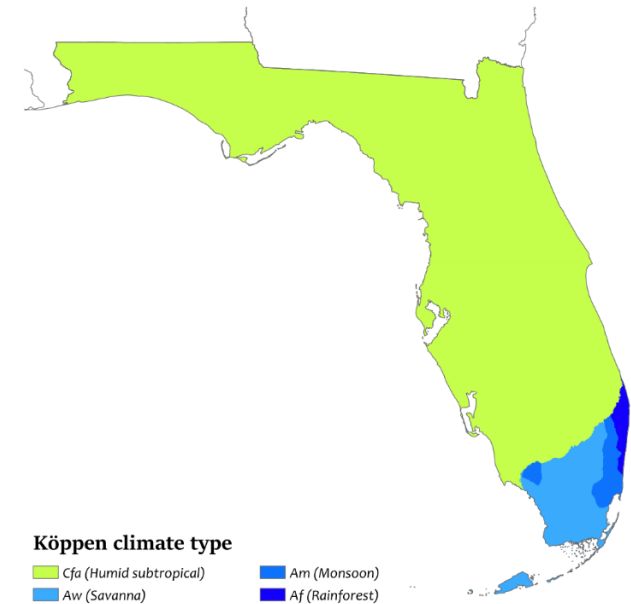


Figure 47: Dry Tortugas National Park. Image credit: NPS.

The Everglades are one of the richest natural ecosystems in the world, and largest expanse of undeveloped subtropical wilderness in the country. In 2016, it was estimated that Everglades National Park generated a \$136 million economic benefit in local communities in tourism alone.³⁰

³⁰ https://www.nps.gov/nature/customcf/NPS_Data_Visualization/docs/2016_VSE.pdf

Köppen climate types of Florida



*Northern used to distinguish temperate (C) and continental (D) climates in °C
Data sources: Köppen types calculated from data from PRISM Climate Group, Oregon State University, <http://prism.oregonstate.edu>
Outline map from US Census Bureau

Figure 45: Köppen climate classification. Image source: Oregon State University.

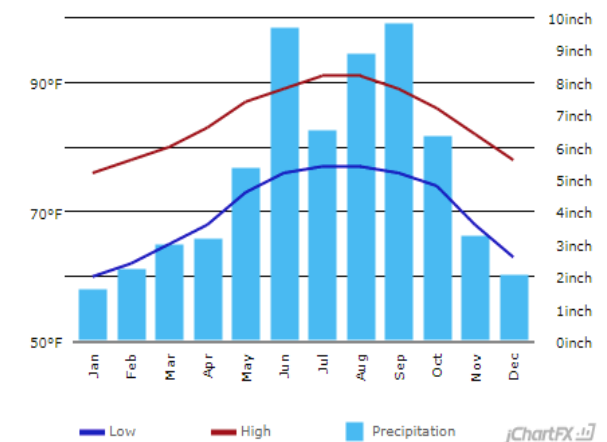


Figure 48: Mean rainfall and high and low temperatures, by month, Miami, Florida. Source: USClimateData.com.

Coral Reef Decline

Coral reefs are one of the most ecologically diverse and productive biomes in the world—they are also one of the most threatened. Coral reefs are found all over the world, but are typically most prolific near the equatorial region. Coral reefs are economically important for a variety of reasons, including support for commercial and recreational fisheries, contributions to medical science, and tourism. Large swaths of reef exist off the South Florida coast, extending down into the Keys.

Recent studies have concluded that there have been significant declines in

Help Maintain Florida's Reefs

- Research, public education, and outreach
- Community participation in reef management decisions
- Encourage low-impact recreation, discourage coral harvesting and trade
- Reduce nutrient runoff and point-source pollution

South Florida's coral reefs over the last several decades. These declines are due to many factors. Direct human disruption, such as high-impact recreation and damage from ships, is especially problematic in densely populated areas such as South Florida. Overfishing also contributes to the decline of coral reef health, disrupting the balance of food webs and in some cases leading to overgrowth of microalgae.³¹ Ocean acidification, caused primarily by an increasing uptake of atmospheric carbon dioxide, is also a leading contributor to declining coral reef health. Increasingly acidic water leads to the dissolution of carbonate-based corals.



Figure 50: Time series for Carysfort Reef, Florida. Source: Biosphere Foundation, 2013.

³¹ <http://ufdcimages.uflib.ufl.edu/IR/00/00/31/58/00001/SS51800.pdf>

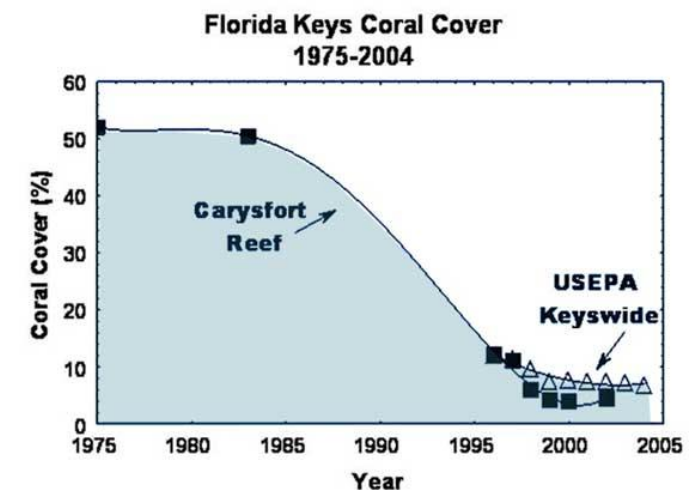
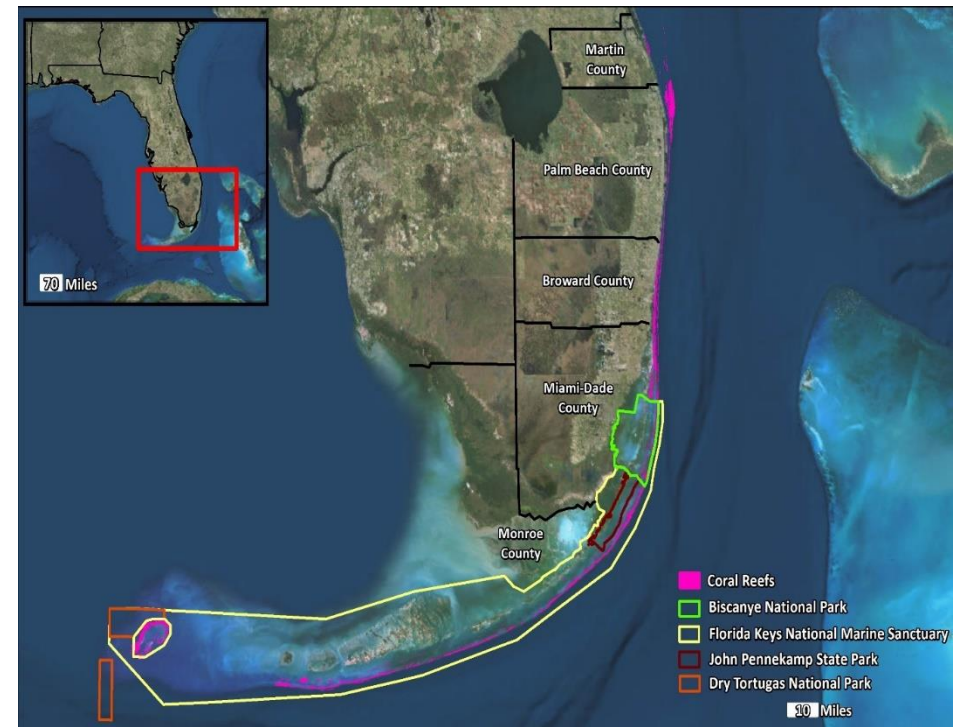


Figure 49: Loss of living coral on Carysfort Reef between 1975 and 2000. Credit: Dustan and Halas; FKNMS Coral Reef Evaluation and Monitoring Project.

Community Participation: The CEDS Steering Committee

The CEDS steering committee is made up of a diverse yet focused group of interested community leaders and citizens who shaped this CEDS and as how they want to see the region grow. Their work is greatly appreciated and the South Florida Economic Development District looks forward to a continued partnership with the committee in the future. The majority of CEDS Steering Committee members come from the private sector, non-profits, and major academic institutions.

Alexina E. Alonso	Florida International University/Life Sciences of South Florida
Luther Brewster	FIU NeighborhoodHELP
Shekeria Brown	South Florida Community Development Coalition
Sheri Colas-Gervais	Beacon Council
Mildred Coyne	Broward College Workforce Education and Economic Development
Robin Giblin Davis	University of Florida Extension Center
Jaap Donath	Beacon Council
Ron Drew	Greater Fort Lauderdale Alliance
Jean-Pierre Fortin	Broward College CTE Program/Workforce
Roman Gastesi	Monroe County
Diana Gonzalez	Economic Development Council of South Miami-Dade
Dale Gregory	InternetCoast
James Knapp	Florida International University/Life Sciences of South Florida
Diane Peart	Broward College Workforce Education and Economic Development
Valeria Perez-Ferreiro	Citi Foundation
Phil Purcell	Marine Industries Association
Amanda Sanfilippo	South Florida Cultural Consortium
Janisse Schoepp	Health Foundation of South Florida
Jack Stephens	South Florida Transportation Authority
Lori Wheeler	Marine Industries Association
June Wolfe	South Florida Manufacturers Association



2017-2022 South Florida Comprehensive Economic Development Strategy
Available online at http://sfregionalcouncil.org/portfolio-item/ceds_visualized/



South Florida Regional Planning Council
3440 Hollywood Blvd, Suite 140, Hollywood, FL 33021
(954)985-4416

The work that provided the basis for this publication was supported by funding under an award with the U.S. Department of Commerce's Economic Development Administration (EDA)