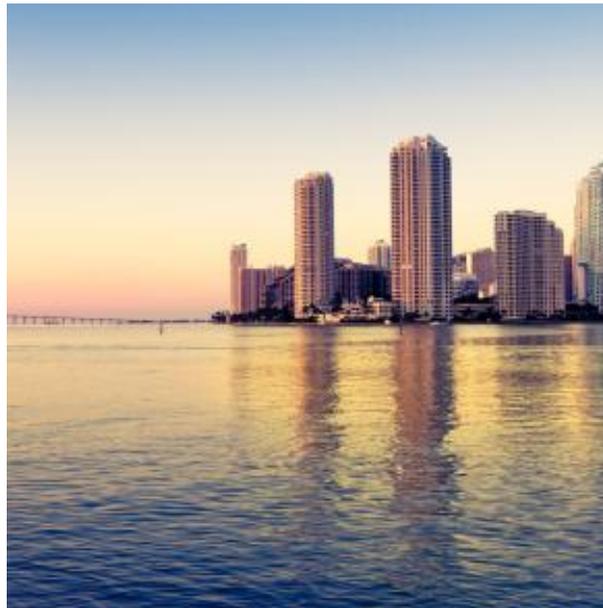


An Equity Profile of the  
**Southeast Florida Region**



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Equity Profiles are products of a partnership between PolicyLink and PERE, the Program for Environmental and Regional Equity at the University of Southern California.

The views expressed in this document are those of PolicyLink and PERE, and do not necessarily represent those of the Southeast Florida Regional Partnership.

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# Foreword

Over the last three years, the Southeast Florida Regional Partnership has been engaged in the development of the Seven50: SE Florida Prosperity Plan. Informed by the input and direction of Partnership members and other stakeholders, data, and the Fair Housing Equity Assessment, this regional plan provides a framework for enhancing economic development and competitiveness, environmental sustainability, and communities through a focus on inclusion and access to opportunity.

As this regional effort transitions from vision to implementation, the work of charting a path of inclusive growth takes on renewed importance. The Southeast Florida Equity Profile provides an invaluable tool for the region's public, private, nonprofit, philanthropic, civic, and community partners as it highlights in a compelling way the challenges and opportunities facing the region. This information will add to the ongoing work of the region's leaders who are making strides toward ensuring that all residents – regardless of their race, ethnicity, birthplace, neighborhood of residence, or other characteristics – are fully able to participate in the region's economic vitality and contribute to the region's readiness for the future.



**James F. Murley**  
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Southeast Florida Regional Partnership

# Summary

Communities of color are driving Southeast Florida's population growth, and their ability to participate and thrive is central to the region's economic success now and in the future. Despite strong growth overall, high unemployment and low wages have plagued the region's economy, which was also hard-hit by the recent recession. Wide racial gaps in income, health, and opportunity – along with declining wages, a shrinking middle class, and high inequality – also place its economic future at risk.

Equitable growth is critical for the region's prosperity. By creating good jobs, connecting youth and vulnerable workers to training and career pathways, and increasing access to economic opportunities located throughout the region, the region's leaders can continue to put all residents on the path toward reaching their full potential, and secure a bright economic future for Southeast Florida.

# Introduction



# Introduction

## Overview

Across the country, regional planning organizations, local governments, community organizations and residents, funders, and policymakers are striving to put plans, policies, and programs in place that build healthier, more vibrant, more sustainable, and more equitable regions.

Equity – ensuring full inclusion of the entire region’s residents in the economic, social, and political life of the region, regardless of race, ethnicity, age, gender, neighborhood of residence, or other characteristic – is an essential element of the plans.

Knowing how a region stands in terms of equity is a critical first step in planning for greater equity. To assist communities with that process, PolicyLink and the Program for Environmental and Regional Equity (PERE) developed an equity indicators framework that communities can use to understand and track the state of equity in their regions.

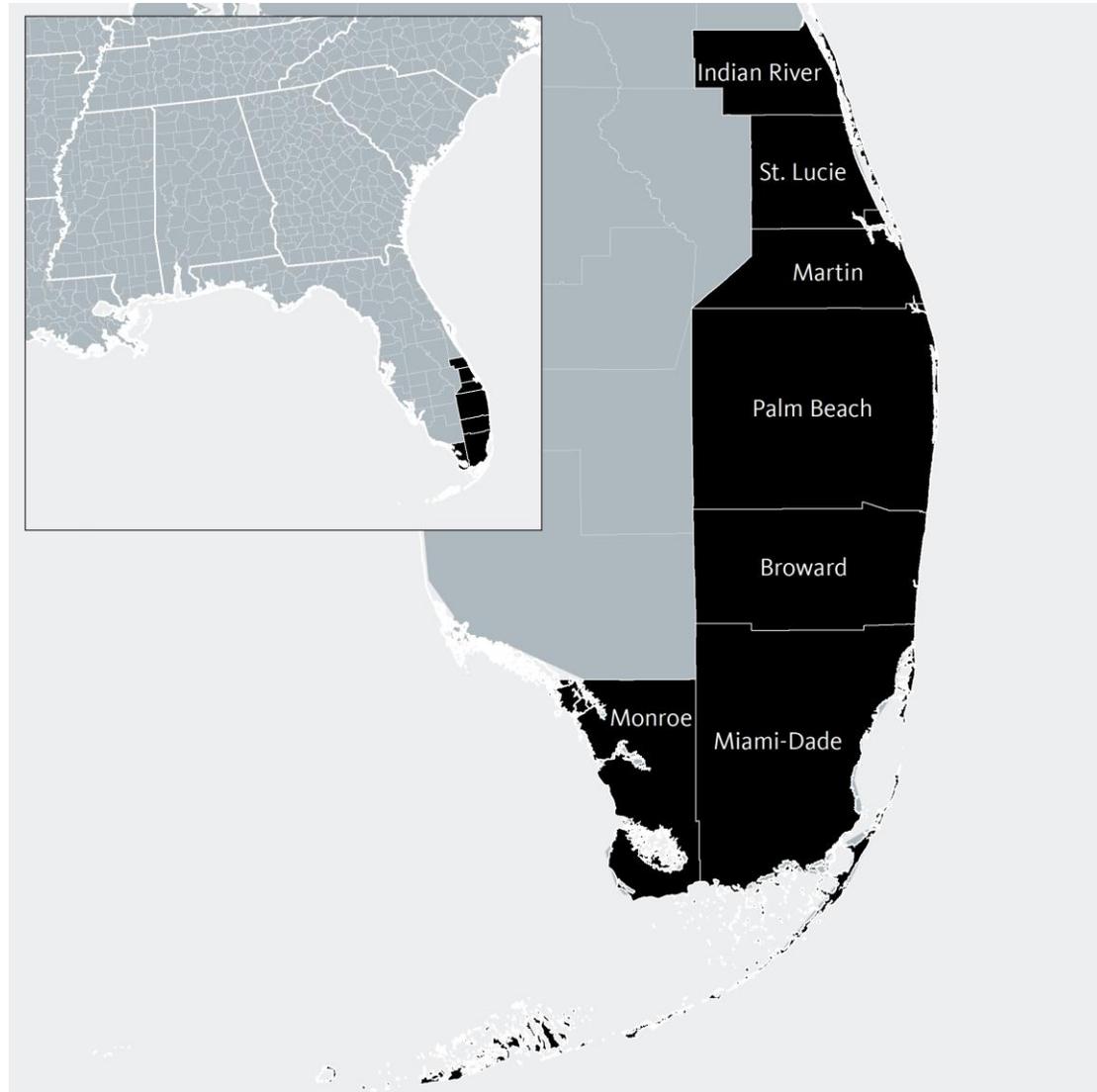
This document presents an equity analysis of the Southeast Florida region. It was developed to help the Southeast Florida Regional Partnership effectively address equity issues throughout its process of planning for a more integrated and sustainable region. PolicyLink and PERE also hope this will be a useful tool for advocacy groups, elected officials, planners, and others.

The data in this profile draw from a regional equity database that includes data for the largest 150 regions in the United States. This database incorporates hundreds of data points from public and private data sources including the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the Behavioral Risk Factor Surveillance System, and Woods & Poole Economics. See the “Data and methods” section of this profile for a detailed list of data sources.

# Introduction

## Defining the region

Throughout this profile and data analysis, the Southeast Florida region is defined as the seven-county area served by the South Florida and Treasure Coast Regional Planning Councils and depicted on the map to the right. All data presented in the profile use this regional boundary. Minor exceptions due to lack of data availability are noted in the “Data and methods” section beginning on page 82.



# Introduction

## Why equity matters now

### The face of America is changing.

Our country's population is rapidly diversifying. Already, more than half of all babies born in the United States are people of color. By 2030, the majority of young workers will be people of color. And by 2043, the United States will be a majority people-of-color nation.

### Yet racial and income inequality is high and persistent.

Over the past several decades, long-standing inequities in income, wealth, health, and opportunity have reached unprecedented levels, and communities of color have felt the greatest pains as the economy has shifted and stagnated.

### Strong communities of color are necessary for the nation's economic growth and prosperity.

Equity is an economic imperative as well as a moral one. Research shows that equity and diversity are win-win propositions for nations, regions, communities, and firms. For example:

- More equitable nations and regions experience stronger growth.<sup>1</sup>
- Companies with a diverse workforce achieve a better bottom line.<sup>2</sup>
- A diverse population better connects to global markets.<sup>3</sup>

### The way forward: an equity-driven growth model.

To secure America's prosperity, the United States must implement a new economic model based on equity, fairness, and opportunity.

### Metropolitan regions are where this new growth model will be created.

Regions are the key competitive unit in the global economy, and the level where strategies are being incubated. These strategies bring about robust job growth that is linked to low-income communities and communities of color.

<sup>1</sup> Manuel Pastor, "Cohesion and Competitiveness: Business Leadership for Regional Growth and Social Equity," OECD Territorial Reviews, Competitive Cities in the Global Economy, Organisation For Economic Co-Operation And Development (OECD), 2006; Manuel Pastor and Chris Benner, "Been Down So Long: Weak-Market Cities and Regional Equity" in *Retooling for Growth: Building a 21<sup>st</sup> Century Economy in America's Older Industrial Areas* (New York: American Assembly and Columbia University, 2008); Randall Eberts, George Erickcek, and Jack Kleinhenz, "Dashboard Indicators for the Northeast Ohio Economy: Prepared for the Fund for Our Economic Future" (Federal Reserve Bank of Cleveland: April 2006), <http://www.clevelandfed.org/Research/workpaper/2006/wp06-05.pdf>.

<sup>2</sup> Cedric Herring, "Does Diversity Pay?: Race, Gender, and the Business Case for Diversity." *American Sociological Review*, 74, no. 2 (2009): 208-22; Slater, Weigand and Zwiirlein. "The Business Case for Commitment to Diversity." *Business Horizons* 51 (2008): 201-209.

<sup>3</sup> U.S. Census Bureau. "Ownership Characteristics of Classifiable U.S. Exporting Firms: 2007" Survey of Business Owners Special Report, June 2012, <http://www.census.gov/econ/sbo/export07/index.html>.

# Introduction

## What is an equitable region?

Regions are equitable when all residents – regardless of their race/ethnicity/nativity; neighborhood of residence; or other characteristics – are fully able to participate in the region’s economic vitality, contribute to the region’s readiness for the future, and connect to the region’s assets and resources.

### Strong, equitable regions:

- Possess **economic vitality**, providing high-quality jobs to their residents and producing new ideas, products, businesses, and economic activity so the region remains sustainable and competitive.
- Are **ready for the future**, with a skilled, ready workforce, and a healthy population.
- Are **places of connection**, where residents can access the essential ingredients to live healthy and productive lives in their own neighborhoods, reach opportunities located throughout the region (and beyond) via transportation or technology, participate in political processes, and interact with other diverse residents.

# Introduction

## Equity indicators framework

The indicators in this profile are presented in four sections. The first section describes the region's demographics. The next three sections present indicators of the region's economic vitality, readiness, and connectedness. Below are the questions answered within each of the four sections.

### Demographics:

Who lives in the region and how is this changing?

- Racial/ethnic diversity
- Demographic change
- Population growth
- Racial generation gap

### Economic vitality:

How is the region doing on measures of economic growth and well-being?

- Is the region producing good jobs?
- Can all residents access good jobs?
- Is growth widely shared?
- Do all residents have enough income to sustain their families?
- Is race/ethnicity/nativity a barrier to economic success?
- What are the strongest industries and occupations?

### Readiness:

How prepared are the region's residents for the 21<sup>st</sup> century economy?

- Does the workforce have the skills for the jobs of the future?
- Are all youth ready to enter the workforce?
- Are residents healthy?
- Are racial gaps in education and health decreasing?

### Connectedness:

Are the region's residents and neighborhoods connected to one another and to the region's assets and opportunities?

- Do residents have transportation choices?
- Can residents access jobs and opportunities located throughout the region?
- Can all residents access affordable, quality, convenient housing?
- Do neighborhoods reflect the region's diversity? Is segregation decreasing?
- Can all residents access healthy food?

# Demographics



# Demographics

## Highlights

### Who lives in the region and how is it changing?

- Southeast Florida is one of the nation's most diverse regions, with growing representation from most major racial/ethnic groups except non-Hispanic whites.
- The region has experienced dramatic growth and change over the past several decades, with its share of people of color increasing from 34 percent to 62 percent since 1980.
- Communities of color, especially Hispanics and blacks (both U.S.-born and immigrants), are driving growth and change in the region and will continue to do so over the next several decades.
- The people-of-color population is growing rapidly in every county within the region. By 2040, four of the region's seven counties will be majority people of color.
- There is a large and persistent racial generation gap between the region's mainly white senior population and its increasingly diverse youth population.

People of color:

62%

Diversity rank  
(out of largest 150 regions):

#17

Growth rate of white  
population, 2000-2010:

-9%

# Demographics

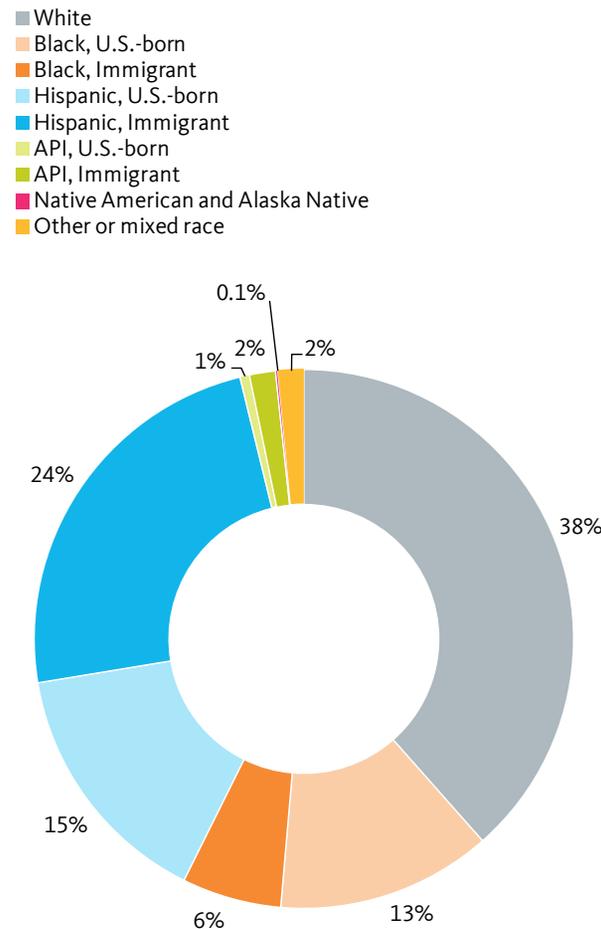
## One of the most diverse regions

Sixty-two percent of residents are people of color, including many different racial and ethnic groups. Fully 39 percent of the region’s residents are of Latino/Hispanic ethnicity. Many of the region’s Hispanics are of Cuban ancestry (41 percent), but there are many people of Puerto Rican, Colombian, Mexican, and Nicaraguan ancestry as well.

The region has a large black population (nearly 20 percent), and it has a particularly large black immigrant population: about one in three black residents is an immigrant, compared to less than one in ten nationwide. Not surprisingly given geographic proximity, a large share of the black population has roots in the Caribbean.

While not shown here, the Asian population is relatively small but diverse: large groups include Asian Indian, Chinese/Taiwanese, and Filipino.

**Southeast Florida is majority people of color**  
**1. Race, Ethnicity, and Nativity, 2010**



Sources: IPUMS; U.S. Census Bureau. 2006-2010 IPUMS data adjusted to match 2010 Census results.

**Diverse black and Hispanic populations**  
**2. Black and Hispanic Populations by Ancestry, 2006-2010**

### Black

Ancestry	Population
African American	504,445
Haitian	275,128
Jamaican	139,213
All other blacks	217,644
<b>Total</b>	<b>1,136,430</b>

### Hispanic

Ancestry	Population
Cuban	936,923
Puerto Rican	216,399
Colombian	194,867
Mexican	161,264
Nicaraguan	122,034
All other Hispanics	639,547
<b>Total</b>	<b>2,271,034</b>

Source: IPUMS.

# Demographics

## One of the most diverse regions

(continued)

Southeast Florida is the 17<sup>th</sup> most diverse metropolitan region out of the largest 150 regions. Southeast Florida has a diversity score of 1.21, which is about the same as other similarly sized metro areas in the South, including Dallas (1.23) and Atlanta (1.18).

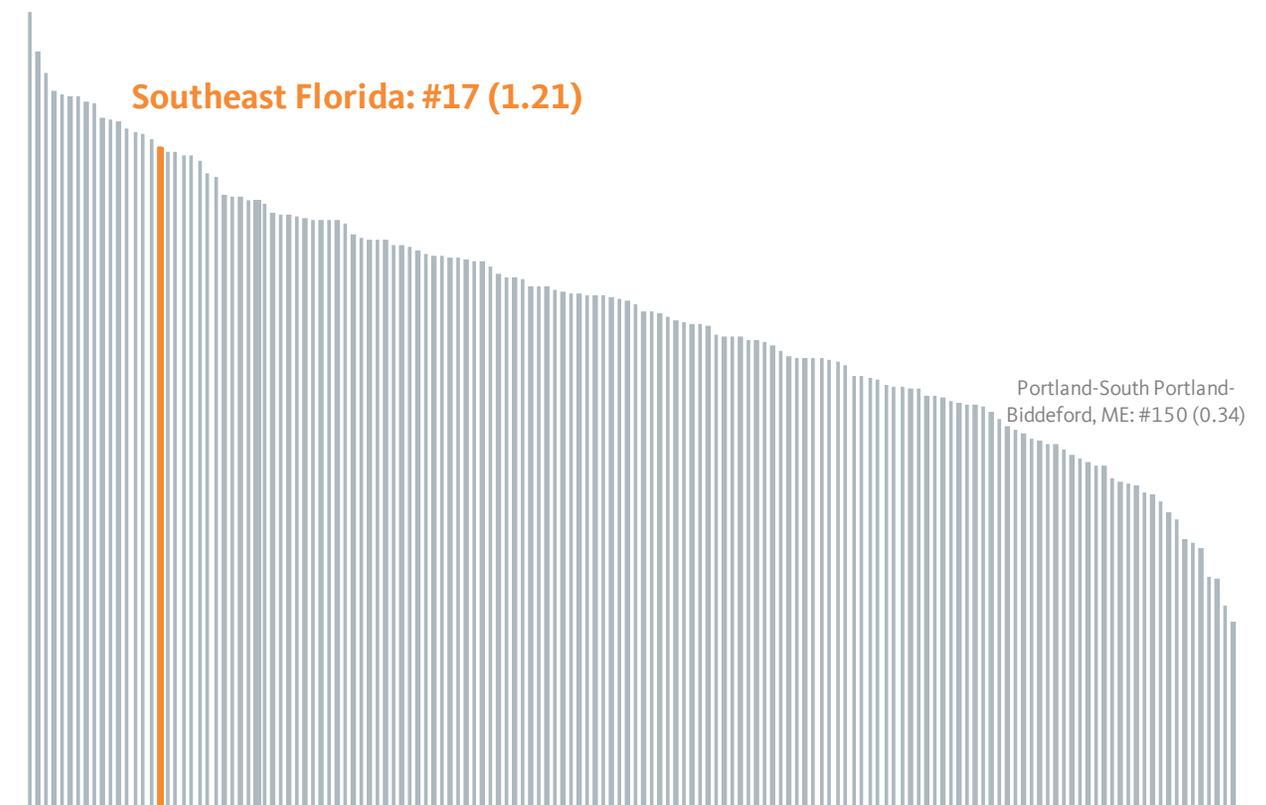
The diversity score is a measure of racial/ethnic diversity a given area. It measures the representation of the six major racial/ethnic groups (white, black, Hispanic, API, Native American, and other/mixed race) in the population. The maximum possible diversity score (1.79) would occur if each group were evenly represented in the region – that is, if each group accounted for one-sixth of the total population.

Note that the diversity score describes the region as a whole and does not measure racial segregation, or the extent to which different racial/ethnic groups live in different neighborhoods. Segregation measures can be found on pages 65-66.

### Southeast Florida is the 17<sup>th</sup> most diverse region

#### 3. Diversity Score in 2010: Largest 150 Metros Ranked

Vallejo-Fairfield, CA: #1 (1.45)



# Demographics

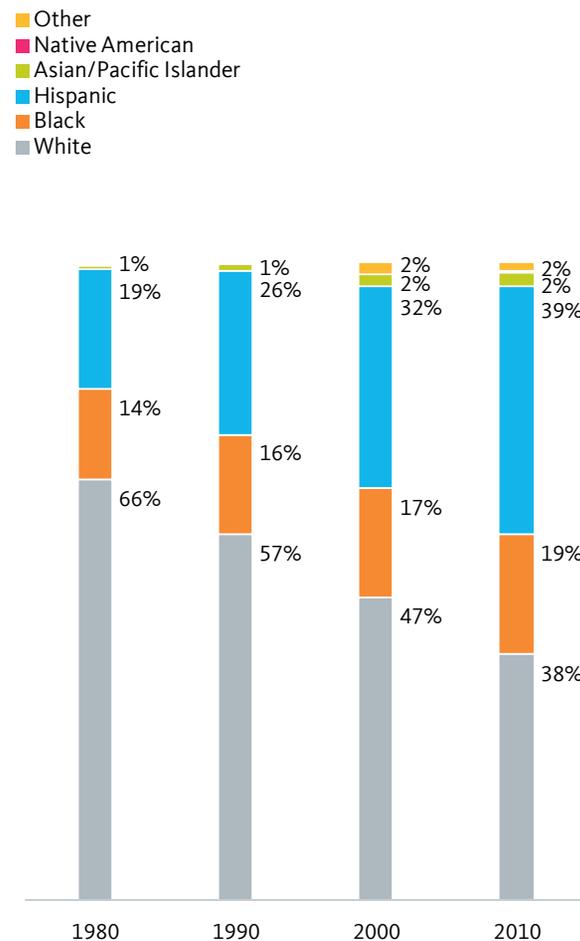
## Dramatic growth and change over the past several decades

Southeast Florida has experienced explosive population growth since 1980. It had the 39<sup>th</sup> fastest growth rate among the largest 150 regions, increasing its population from 3.5 million to 6.2 million.

In the same time period, it has experienced rapid demographic change, with its people-of color population increasing from 34 to 62 percent. Southeast Florida became a majority people-of-color region in the 1990s.

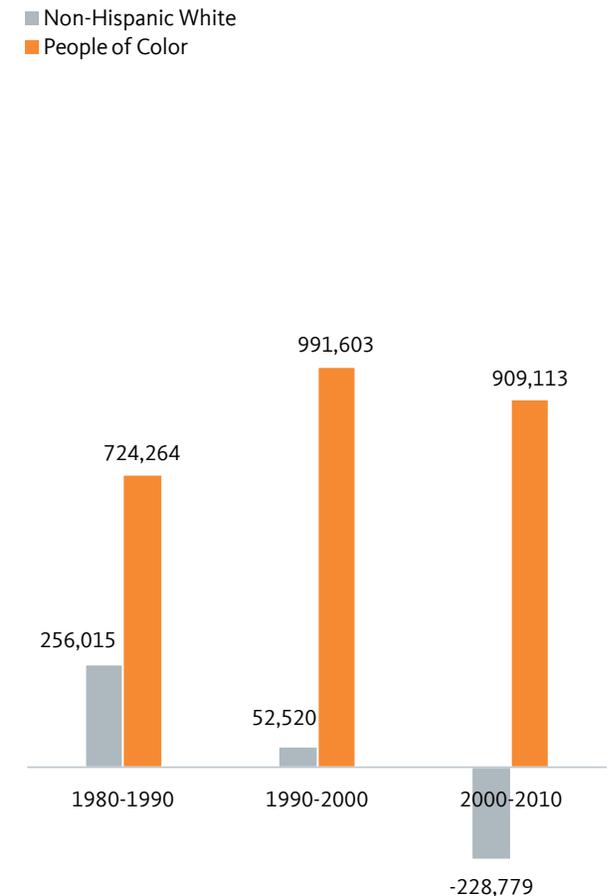
People of color have driven the region's growth over the past three decades, contributing 74 percent of the growth in the 1980s, 95 percent of the growth in the 1990s, and 100 percent of the growth in the 2000s.

**The population has rapidly diversified**  
**4. Racial/Ethnic Composition, 1980 to 2010**



Source: U.S. Census Bureau.

**People of color have driven the region's growth since 1980**  
**5. Composition of Net Population Growth by Decade, 1980 to 2010**



Source: U.S. Census Bureau.

# Demographics

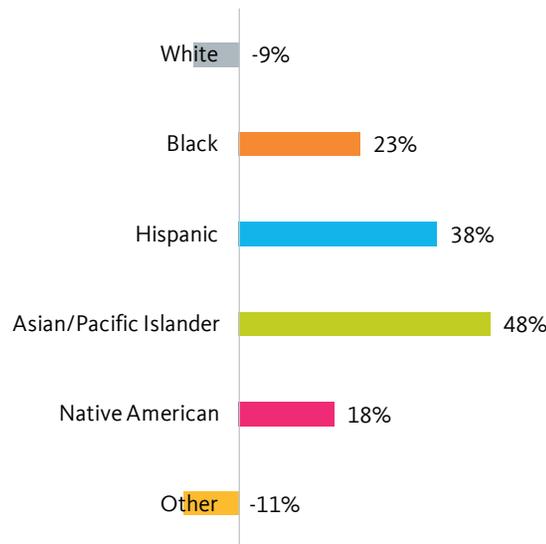
## Hispanics, blacks, and Asians are leading the region's growth

Over the past decade, Southeast Florida's Hispanic population grew 38 percent, adding 658,000 residents, and the black population grew 23 percent, adding 218,000 residents. The Asian population grew rapidly—by 48 percent—but because the Asian population share is smaller, the number of Asian residents only grew by 43,000. The white population shrank by nine percent (229,000 residents).

Most of the growth in the Hispanic population (57 percent) is not due to immigration but to new births among Hispanic U.S. residents. On the other hand, most of growth in the Asian population (69 percent) came from immigrants. While not shown here, the increase in the black population was divided about evenly between new immigrants and U.S.-born blacks (49 percent and 51 percent, respectively).

The Asian and Hispanic populations experienced the highest growth rates in the past decade, while the white population declined

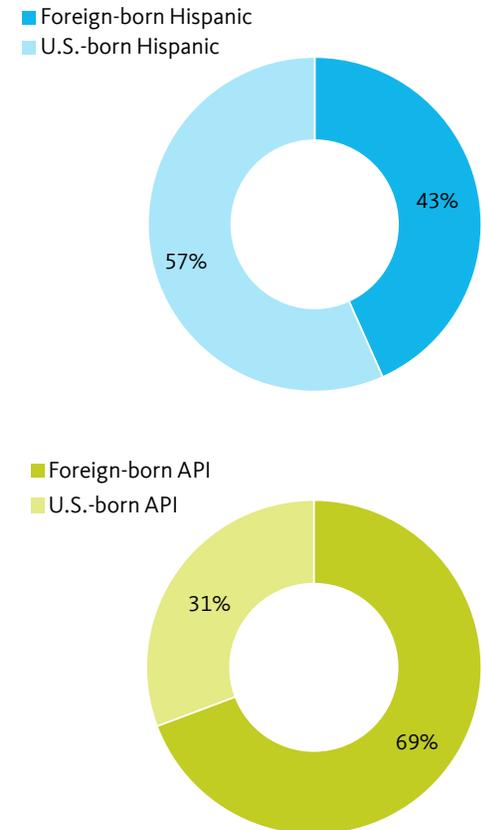
6. Growth Rates of Major Racial/Ethnic Groups, 2000 to 2010



Source: U.S. Census Bureau.

Hispanic population growth was mainly due to an increase in U.S.-born Hispanics, while Asian population growth was primarily due to immigration

7. Share of Net Growth in Hispanic and Asian Population by Nativity, 2000 to 2006-2010



Source: IPUMS.

# Demographics

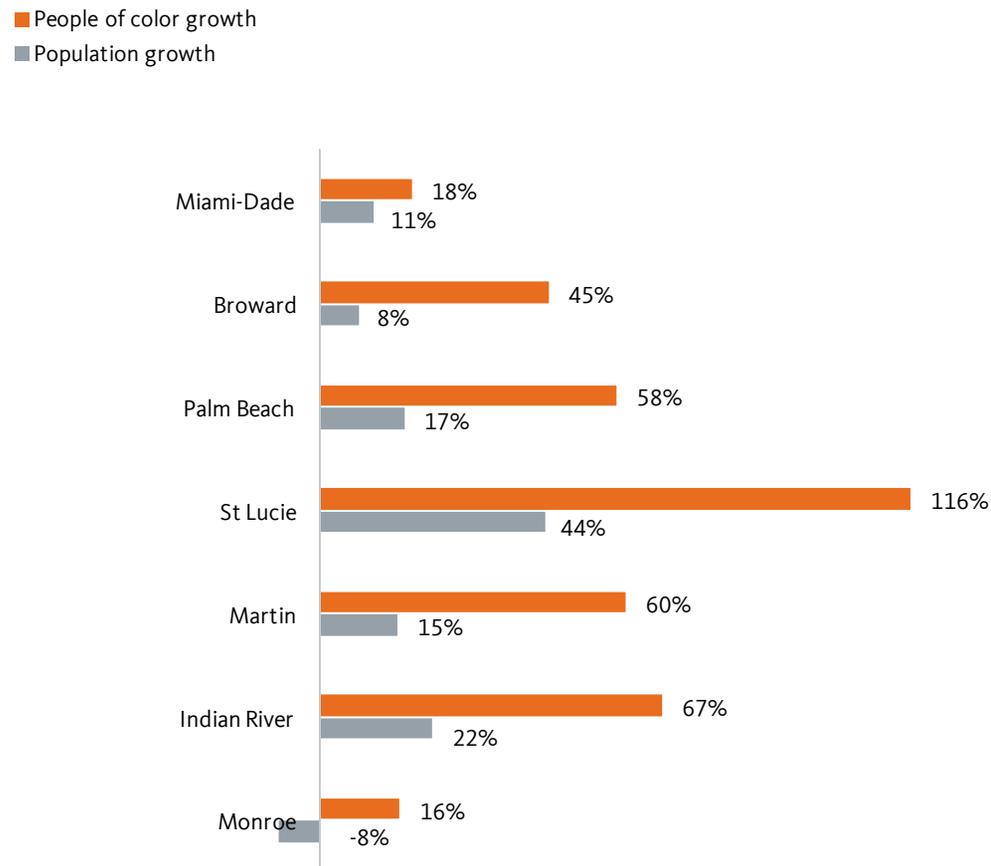
## People of color are driving growth throughout the region

All but one county in the region experienced population growth over the past decade, and in every county within the region, the people-of-color population grew at a much faster rate than the population as a whole.

Miami-Dade County, home to 40 percent of the region’s residents, grew 11 percent overall but its people-of-color population grew by 18 percent. All of the growing coastal counties north of Miami-Dade (Broward, Palm Beach, Martin, St. Lucie, and Indian River) experienced significant growth in their people-of-color populations. Monroe was the only county within the region that experienced overall population decline, and its people-of-color population still grew.

The people-of-color population is growing faster than the overall population in every county

8. Percent Change in Population, 2000 to 2010 (in descending order by 2010 population)



Source: U.S. Census Bureau.

# Demographics

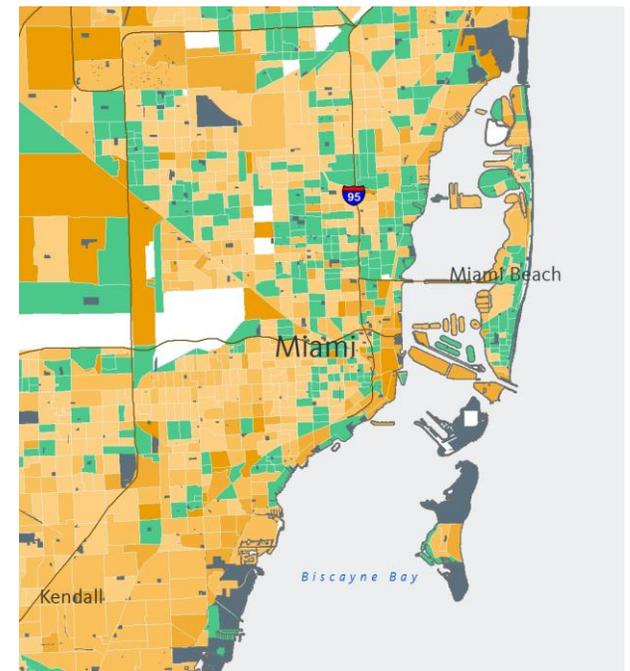
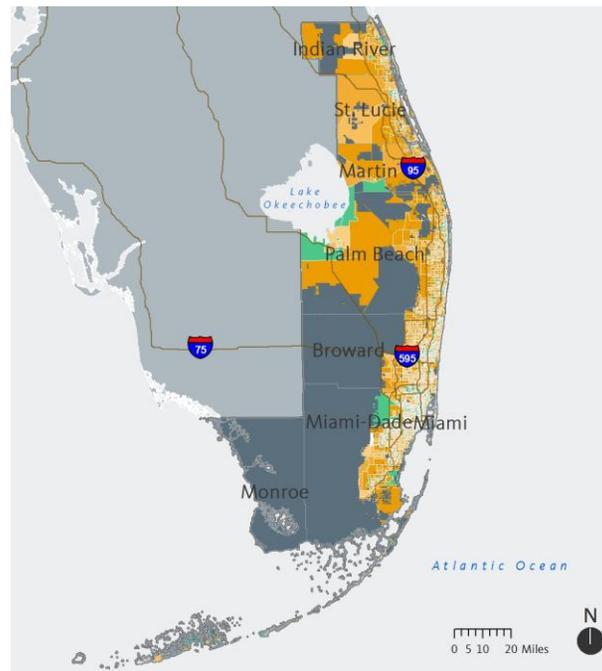
## People of color are driving growth throughout the region

(continued)

Rapidly growing communities of color can be found in every county in the region. St. Lucie, Indian River, Martin, and Palm Beach counties are home to many growing communities of color, where the people-of-color population has more than doubled in many block groups over the past decade. Growth in communities of color is slower in much of Miami-Dade county, but the people-of-color population there is already large (85 percent).

**Significant growth in communities of color throughout the region**  
**9. Percent Change in People of Color by Census Block Group, 2000 to 2010**

- Decline or no population growth
- Less than 15% increase
- 15% to 42% increase
- 43% to 93% increase
- 94% or more increase
- Conservation areas and county parks



Sources: U.S. Census Bureau; Geolytics.

Note: To more accurately visualize change, block groups with a small populations (50 or fewer people in either 2000 or 2010) were excluded from the analysis. Excluded block groups are shaded in white.

# Demographics

## Suburban areas are becoming more diverse

Since 1990, population growth has spread outward from many of the region’s coastal cities, and at the same time the suburbs have become increasingly diverse. Hispanic and Asian populations grew significantly in every county, as did the other/mixed race population. The black population grew in large numbers in Broward, Palm Beach, and St.

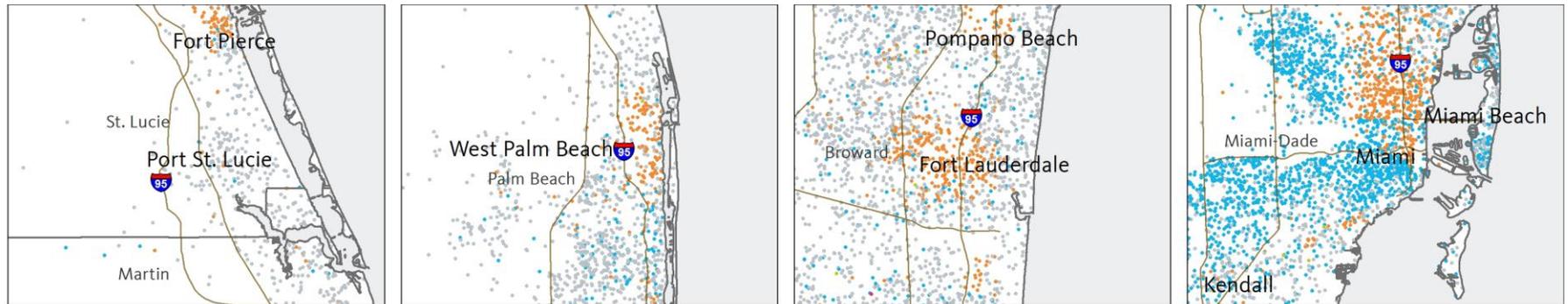
Lucie counties. Asian populations grew in Broward and Palm Beach counties. The white population shrank in Miami-Dade, Broward, and Monroe counties, and grew modestly in the region’s other counties with the exception of Palm Beach, which saw larger gains.

### Diversity is spreading outwards

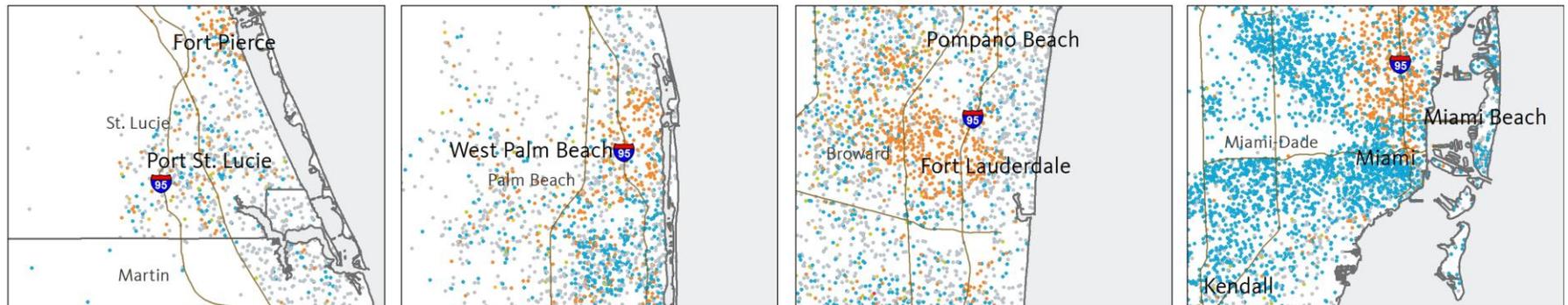
#### 10. Racial and Ethnic Composition by Census Tract, 1990 and 2010

- Race/Ethnicity  
1 dot = 400
- Non-Hispanic White
  - Black
  - Hispanic
  - Asian/Pacific Islander
  - American Indian or Alaska Native
  - Other or Mixed Race

1990



2010



Sources: U.S. Census Bureau; Geolytics.

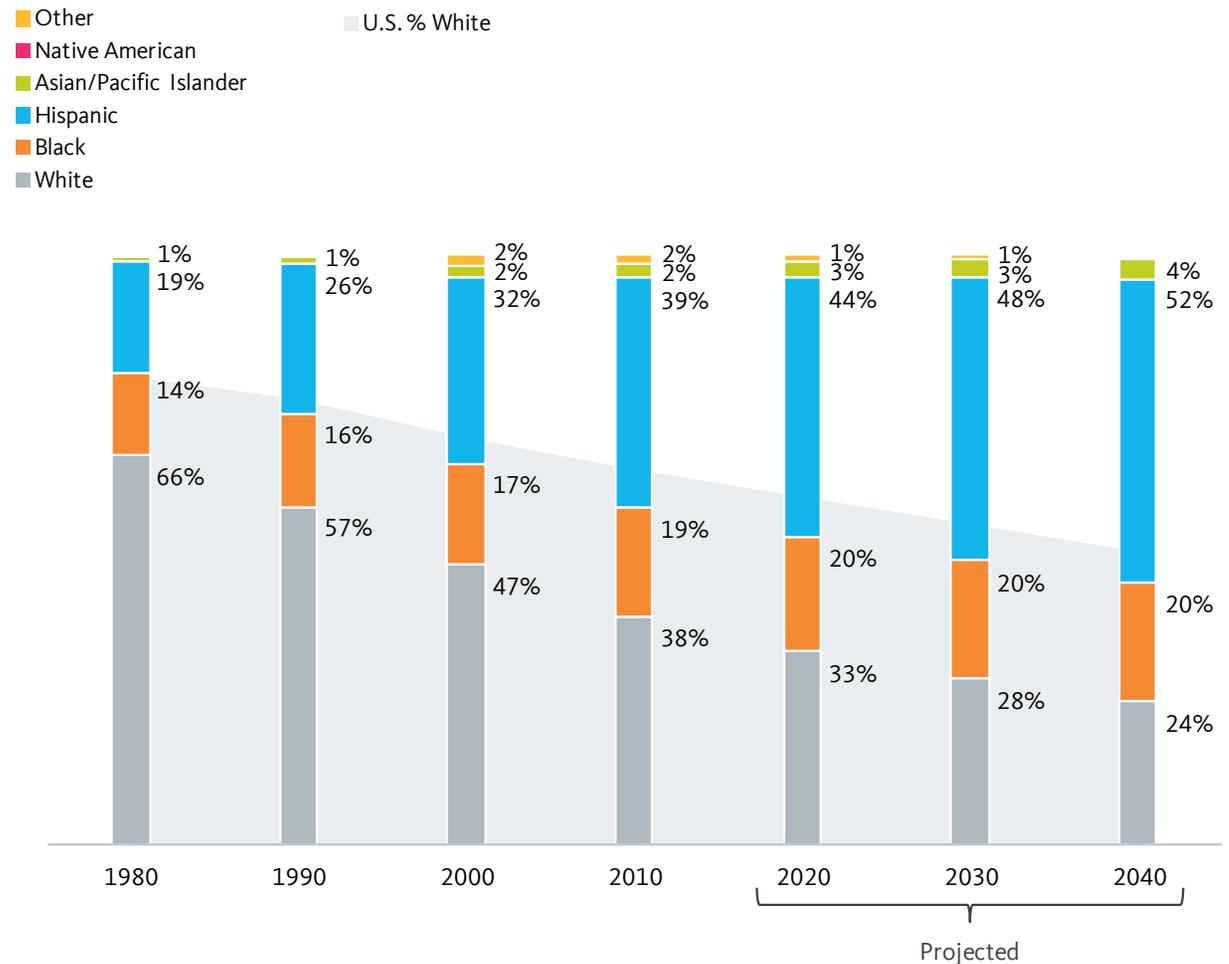
# Demographics

## At the forefront of the nation's demographic shift

The Southeast Florida region has long been more diverse than the nation as a whole. While the country is projected to become majority people of color by the year 2043, Southeast Florida passed this milestone in the 1990s. By 2040, 76 percent of the region's residents are projected to be people of color and the region will be majority Hispanic. This would rank the region 13<sup>th</sup> among the 150 largest metros in terms of its share of people of color.

The share of people of color is projected to increase through 2040

11. Racial/Ethnic Composition, 1980 to 2040



Sources: U.S. Census Bureau; Woods & Poole Economics.

# Demographics

## At the forefront of the nation’s demographic shift

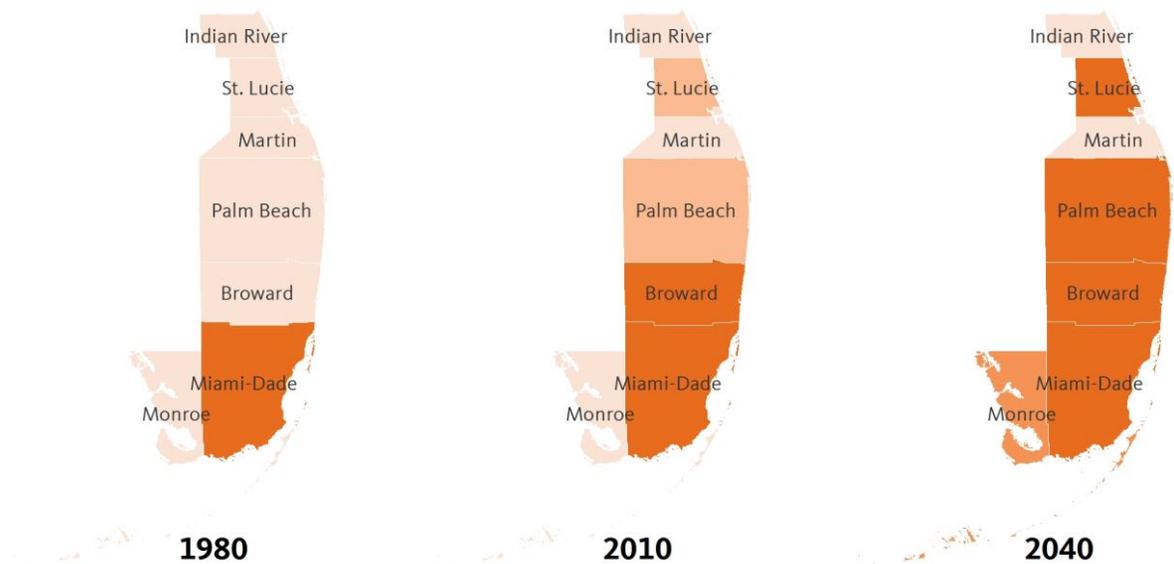
(continued)

In 1980, Miami-Dade was the only majority people-of-color county in the region. Now, Broward is also majority people of color. By 2040, four out of the region’s seven counties will be majority people of color, with another (Monroe County) projected to be more than 40 percent people of color.

All but Indian River, Martin, and Monroe counties are expected to be majority people-of-color by 2040

12. Percent People of Color by County, 1980 to 2040

- Less than 30%
- 30% to 39%
- 40% to 49%
- 50% or more



Sources: U.S. Census Bureau; Woods & Poole Economics.

# Demographics

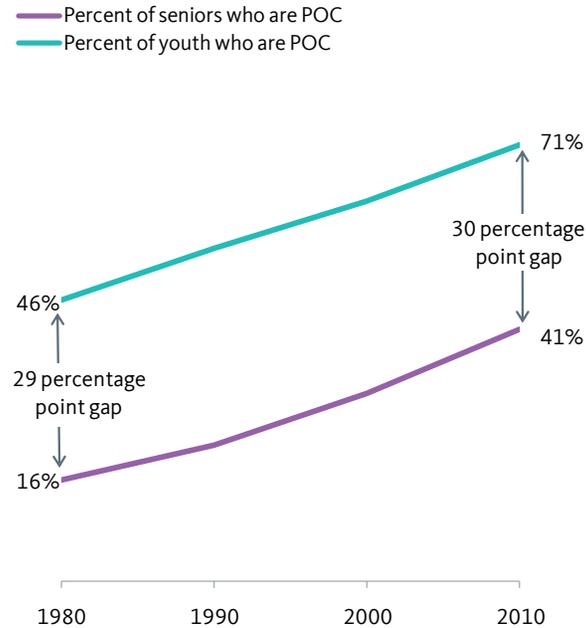
## A large and persistent racial generation gap

Nationwide, the racial/ethnic profiles of young and old are becoming more different, with the youth population increasingly diverse while the senior population remains largely white. This “racial generation gap” can be measured as the difference between the share of people of color among young and old. The racial generation gap may negatively affect the region if seniors do not invest in the educational systems and community infrastructure needed to support a youth population that is more racially diverse.

Southeast Florida has had a large racial generation gap since 1980. Today, 71 percent of Southeast Florida’s youth (under age 18) are people of color, compared with 41 percent of the region’s seniors (over age 64).

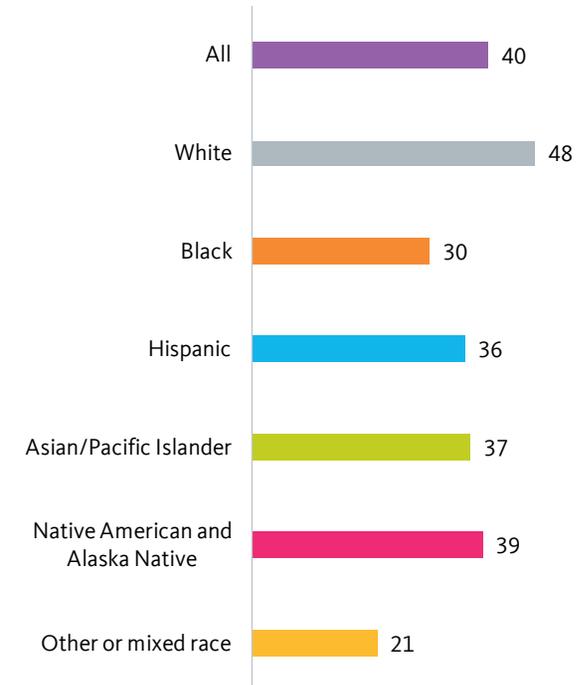
The region’s white population is much older than its communities of color. The median age of the white population is 48 years, compared with a median age of 30 for the black population and 36 for the Hispanic population.

The region’s 30 percentage point racial generation gap has persisted since at least 1980  
**13. Percent People of Color (POC) by Age Group, 1980 to 2010**



Source: U.S. Census Bureau.  
 Note: Gap value may not equal the difference in percentages shown due to rounding.

The region’s white population is much older than its communities of color  
**14. Median Age (years) by Race/Ethnicity, 2006-2010**



Source: IPUMS.

# Demographics

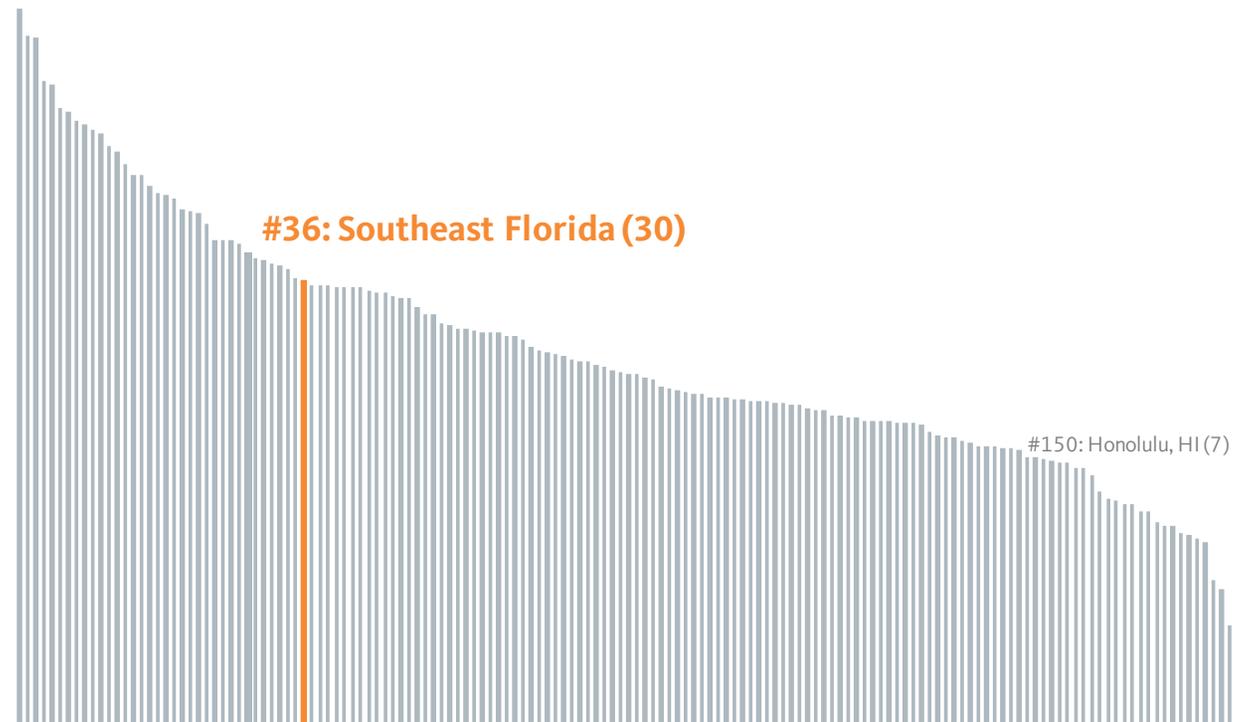
## A large and persistent racial generation gap

(continued)

Southeast Florida's 30 percentage point racial generation gap is larger than the national average (26 percentage points), and is the 36<sup>th</sup> highest among the largest 150 regions.

**Southeast Florida has the 36<sup>th</sup> highest racial generation gap**  
**15. The Racial Generation Gap in 2010: Largest 150 Metros Ranked**

#1: Naples-Marco Island, FL (48)



Source: U.S. Census Bureau.

# Economic vitality



# Economic vitality

## Highlights

How is the region doing on measures of economic growth and well-being?

- Although the region has experienced strong growth in jobs and output since 1979, it has high unemployment and was hard-hit by the recession.
- Income inequality is high, and the majority of workers have seen their wages decline in recent decades.
- Poverty and working poverty are high and on the rise, and rates are highest for communities of color.
- The middle class is shrinking, and the region is adding low- and high-wage jobs much faster than it is growing middle-wage jobs.
- Although education is a leveler, racial and gender gaps persist in the labor market. At nearly every level of educational attainment, people of color earn less and face higher unemployment than whites, and women generally have worse economic outcomes than their male counterparts.

Wage growth for workers at the 10<sup>th</sup> percentile since 1979:

-9%

Working poverty rank (out of largest 150 regions):

#16

Income inequality rank (out of largest 150 regions):

#6

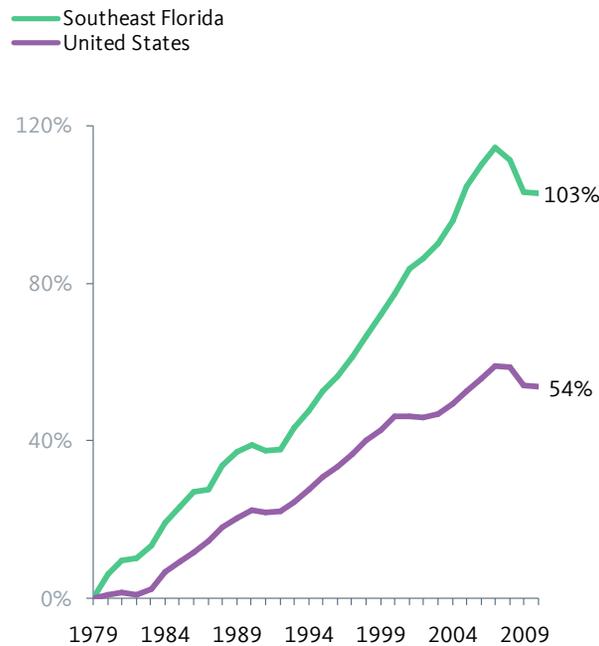
# Economic vitality

## Strong overall growth in jobs and output

Economic growth, as measured by increases in jobs and Gross Regional Product (GRP), which is the value of all goods and services produced, has been consistently strong in Southeast Florida over the past several decades. Since at least 1979, the region has far outperformed the nation on both measures.

**Job growth has consistently outpaced the national average since at least 1979**

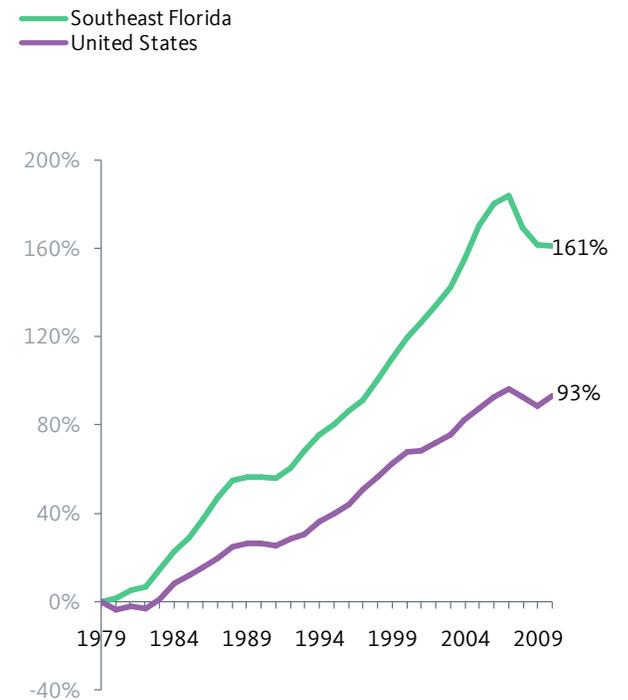
**16. Cumulative Job Growth, 1979 to 2010**



Source: U.S. Bureau of Economic Analysis.

**Gross Regional Product (GRP) growth has outpaced the nation since at least 1979**

**17. Cumulative Growth in Real GRP, 1979 to 2010**



Source: U.S. Bureau of Economic Analysis.

# Economic vitality

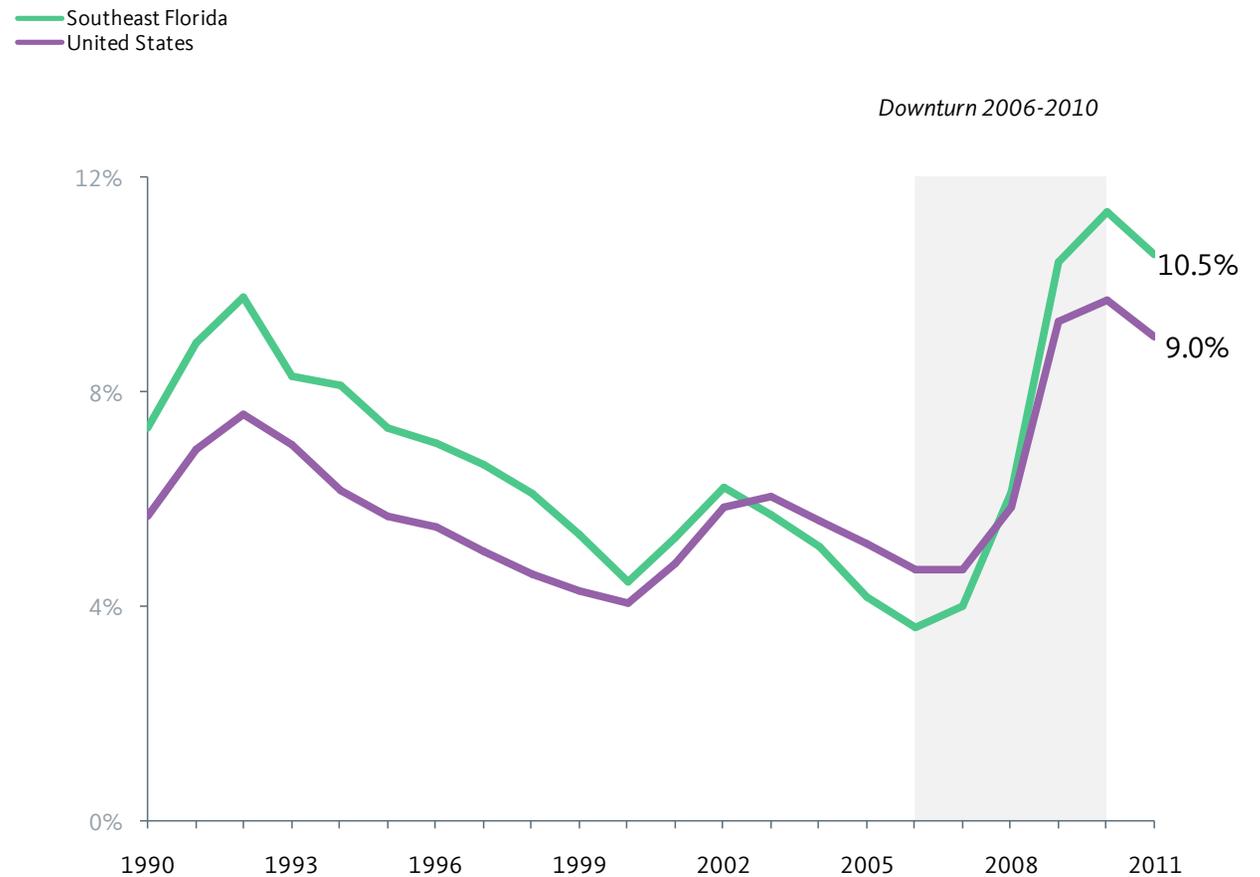
## High unemployment, and hard-hit by the downturn

Despite having strong job and GRP growth, unemployment has been a challenge for much of the past two decades, and the Great Recession hit hard in Southeast Florida. Unemployment was higher than the national average during the 1990s, dropped during the bubble period preceding the downturn, and then skyrocketed, surpassing the national average in 2008.

According to recent data from the Brookings Institution, however, the regional economy has done better since the end of the recession. As of March 2013, the Miami-Fort Lauderdale-Pompano Beach metro area ranks in the top half of the 100 largest regions (34<sup>th</sup>) in its economic recovery, based on measures of employment, unemployment, GRP, and housing prices.

### Unemployment remains far above the national average

18. Unemployment Rate, 1990 to 2011



Source: U.S. Bureau of Labor Statistics. Universe includes the civilian non-institutional population ages 16 and older.

# Economic vitality

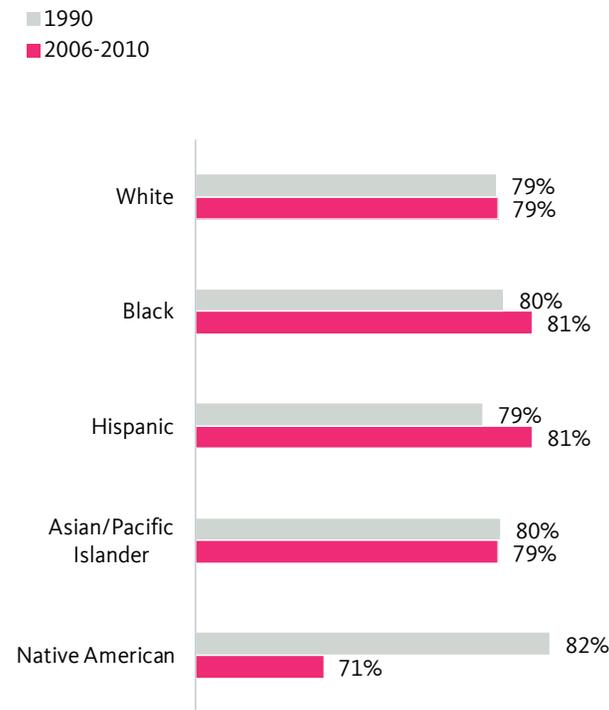
## Unemployment higher for some communities of color

Examining unemployment by race over the past two decades, we find there are persistent racial employment gaps in the Southeast Florida region. Most racial/ethnic groups participate in the labor force (either working or actively looking for work) at similar rates as whites (with the notable exception of Native Americans). African Americans, Hispanics, and Native Americans, however, face much higher levels of unemployment than whites or Asians.

It is important to note that while this analysis uses the most recent data available for labor force participation and unemployment by race/ethnicity at the regional level, the data point is an average of annual data from 2006 through 2010 and therefore cannot fully account for the economic recession, which lasted until 2010 in some regions.

Labor force participation improved for blacks and Hispanics since 1990, but decreased significantly for Native Americans

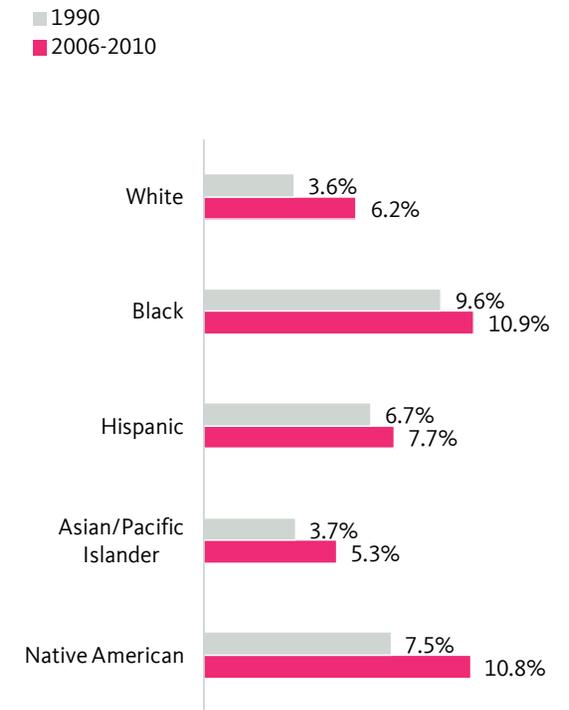
19. Labor Force Participation Rate by Race/Ethnicity, 1990 and 2006-2010



Source: IPUMS. Universe includes the civilian non institutional population ages 25 through 64.  
 Note: The full impact of the Great Recession is not reflected in the latest data shown, which is averaged over 2006 through 2010. These trends may change as new data become available.

Blacks, Hispanics, and Native Americans have higher unemployment rates than whites or Asians

20. Unemployment Rate by Race/Ethnicity, 1990 and 2006-2010



Source: IPUMS. Universe includes the civilian non institutional population ages 25 through 64.  
 Note: The full impact of the Great Recession is not reflected in the latest data shown, which is averaged over 2006 through 2010. These trends may change as new data become available.

# Economic vitality

## High unemployment in urban communities of color and rural areas

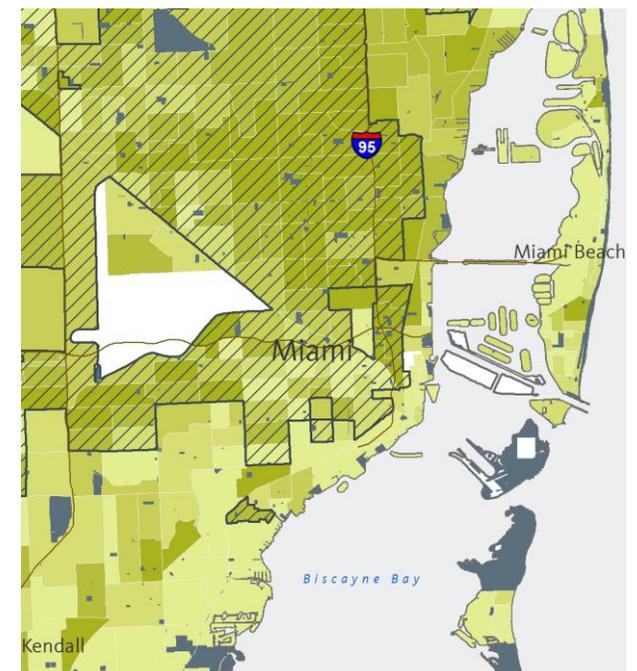
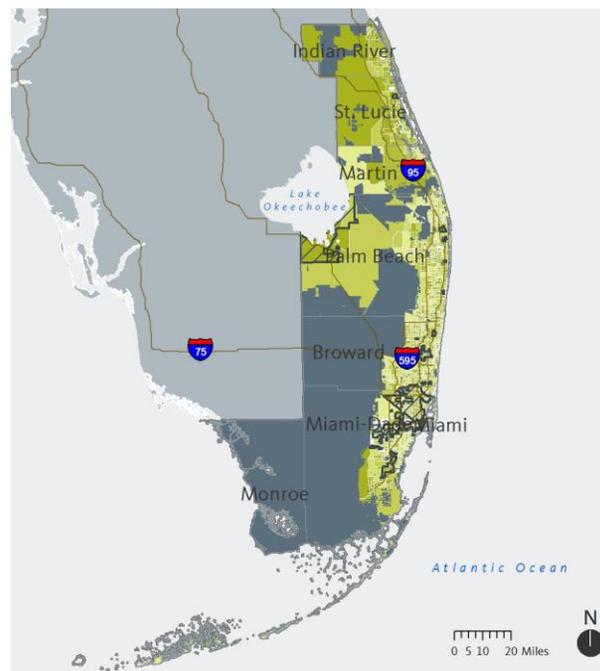
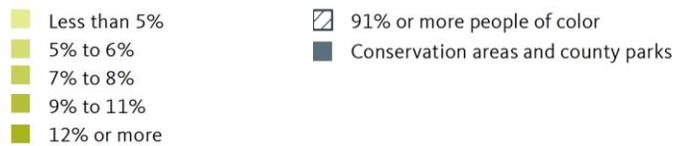
Knowing where high-unemployment communities are located in the region can help the region’s leaders develop targeted solutions.

Concentrations of unemployment exist in Southeast Florida’s communities of color in the region’s urban centers, particularly in the City of Miami. One in four of the region’s unemployed residents live in the 20 percent of neighborhoods where at least 91 percent of residents are people of color.

Areas of concentrated unemployment are also found in some suburban areas, as well as in the western parts of Indian River, St. Lucie, and Palm Beach counties.

### Clusters of unemployment can be found in communities of color and rural areas

21. Unemployment Rate by Census Tract and High People-of-Color Tracts, 2006-2010



Source: U.S. Census Bureau. Areas in white are missing data.

# Economic vitality

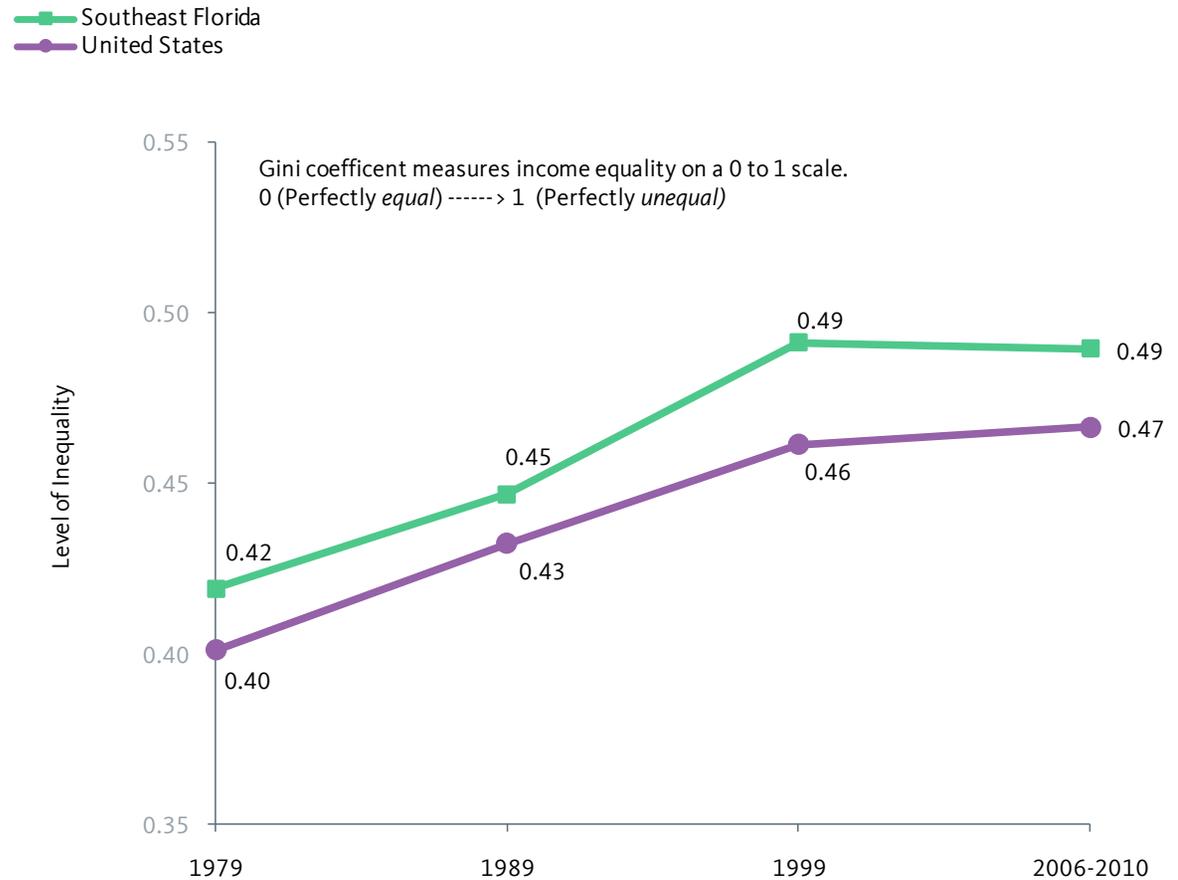
## Long-term increase in income inequality

Income inequality has been higher in Southeast Florida than the national average since at least 1979. Inequality grew sharply in the region between 1979 and 1999, but has stayed the same over the past decade.

Inequality here is measured by the Gini coefficient, which is the most commonly used measure of inequality. The Gini coefficient measures the extent to which the income distribution deviates from perfect equality, meaning that every household has the same income. The value of the Gini coefficient ranges from zero (perfect equality) to one (complete inequality, one household has all of the income).

Household income inequality increased sharply since 1979, but remained stable for last decade

22. Gini Coefficient, 1979 to 2006-2010



Source: IPUMS. Universe includes all households (no group quarters).

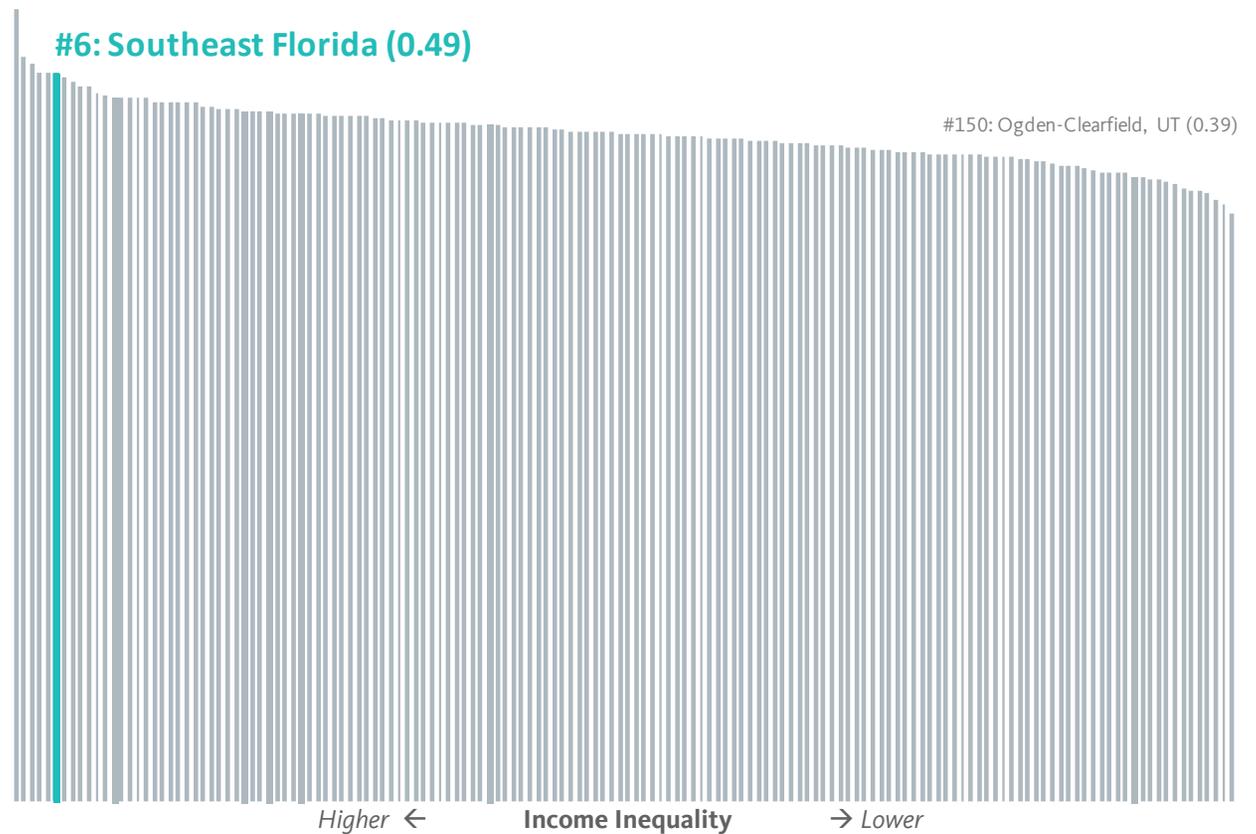
# Economic vitality

## High income inequality

In 1979, Southeast Florida ranked 11<sup>th</sup> out of the largest 150 regions in terms of income inequality. Today, it ranks 6<sup>th</sup>, leaving it between Brownsville, TX (5<sup>th</sup>) and Tallahassee, FL (7<sup>th</sup>). Compared with other similarly sized metros in the South, the level of inequality in Southeast Florida (0.49) is higher than Houston (0.47), Dallas (0.46), and Atlanta (0.45).

**Southeast Florida has the 6<sup>th</sup> highest income inequality**  
**23. The Gini Coefficient in 2006-2010: Largest 150 Metros Ranked**

#1: Bridgeport-Stamford-Norwalk, CT (0.53)



Source: IPUMS. Universe includes all households (no group quarters).

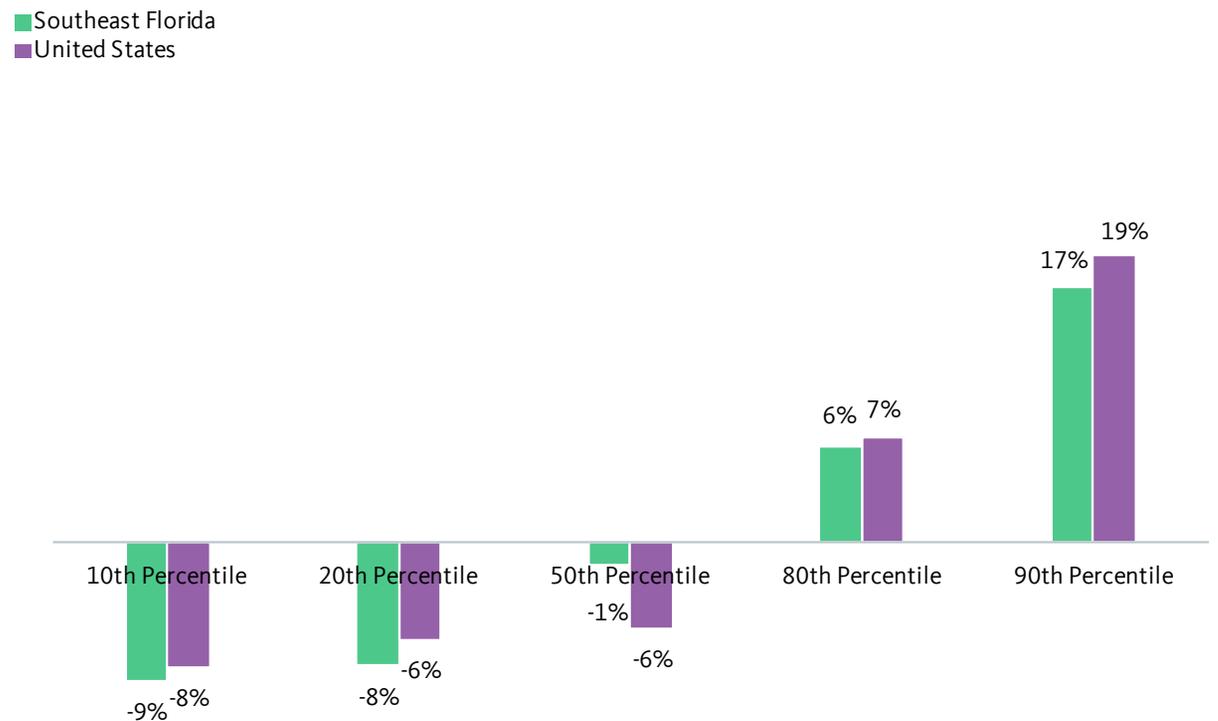
# Economic vitality

## Declining or stagnant wages for most workers

Declining wages play an important role in the region’s high inequality. After adjusting for inflation, wages have declined or stagnated for the vast majority of Southeast Florida’s workers over the past three decades. Wage decline has been more severe for the lowest-paid workers in the region than it has been nationwide. Wages fell nine percent for workers in the 10<sup>th</sup> percentile (those earning less than 90 percent of all workers), and eight percent for those in the 20<sup>th</sup> percentile, while wages increased by 17 percent for workers in the 90<sup>th</sup> percentile.

### Wages have stagnated or declined for most full-time workers

24. Real Earned-Income Growth for Full-Time Wage and Salary Workers Ages 25-64, 1979 to 2006-2010



Source: IPUMS. Universe includes civilian non-institutional full-time wage and salary workers ages 25 through 64.

# Economic vitality

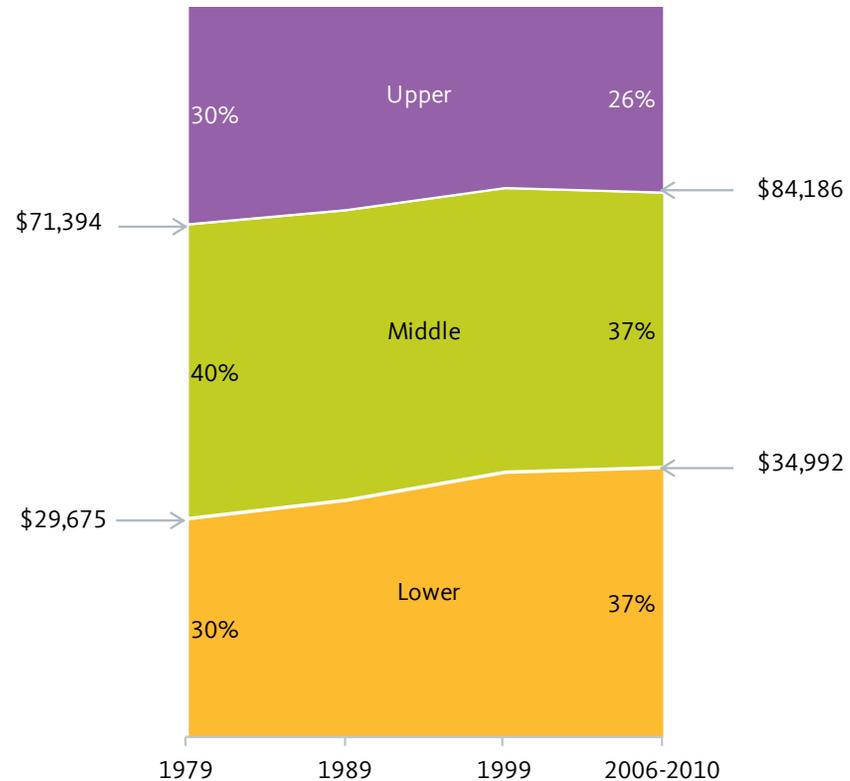
## A shrinking middle class

Southeast Florida’s middle class is shrinking: since 1979, the share of households with middle-class incomes decreased from 40 to 37 percent. The share of upper-income households also declined, from 30 to 26 percent, while the share of lower-income households grew from 30 to 37 percent.

In this analysis, middle-income households are defined as having incomes in the middle 40 percent of household income distribution. In 1979, those household incomes ranged from \$29,675 to \$71,394. To assess change in the middle class and the other income ranges, we calculated what the income range would be today if incomes had increased at the same rate as average household income growth. Today’s middle class incomes would be \$34,992 to \$84,186, and 37 percent of households fall in that income range.

The share of middle class households has declined since 1979

25. Household by Income Level, 1979 and 2006-2010 (all figures in 2010 dollars)



Source: IPUMS. Universe includes all households (no group quarters).

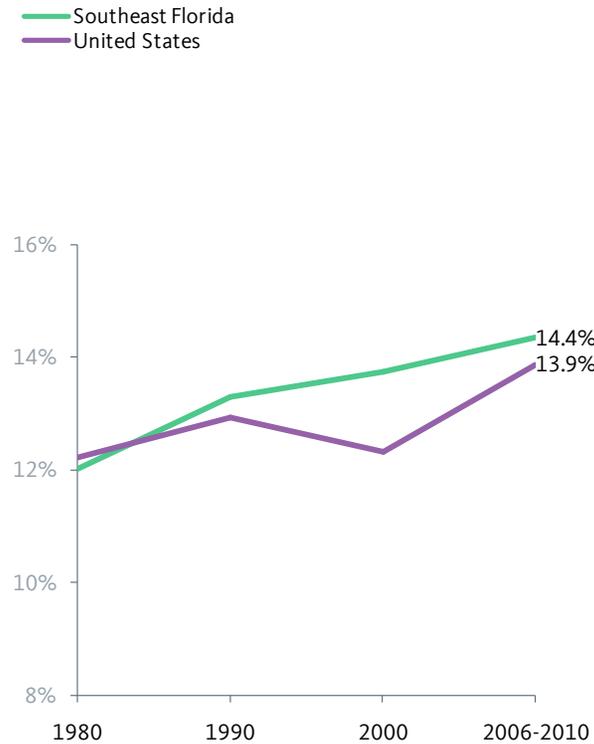
# Economic vitality

## Growing poverty and working poverty

Poverty has increased steadily in Southeast Florida over the past 30 years, and surpassed the national average in the 1980s. Today, about one in seven Southeast Florida residents (14.4 percent) live below the poverty line, which is about \$22,000 a year for a family of four, giving the region the 56<sup>th</sup> highest rank among the largest 150 metros. Poverty rates vary across the region's counties. The highest poverty rate by far is found in Miami-Dade County (17.2 percent), while the lowest is found in Martin County (10.4 percent).

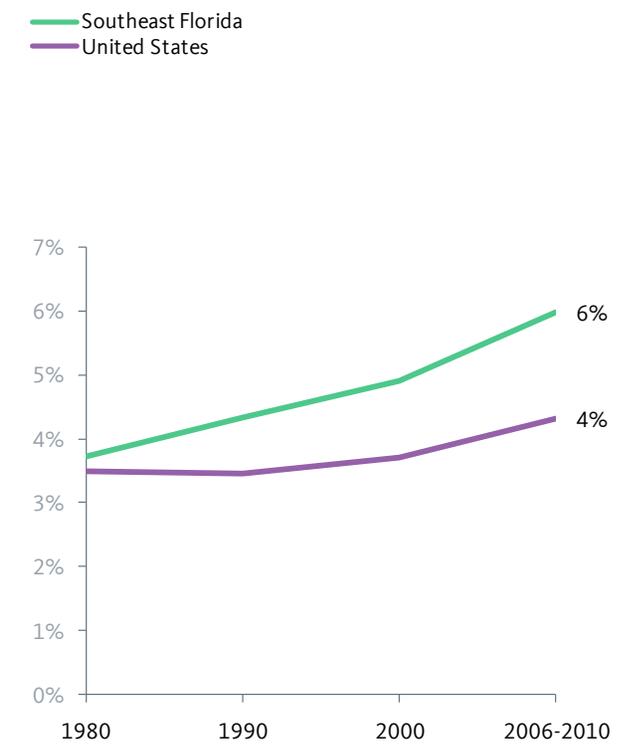
Working poverty, defined as working full-time with an income below 150 percent of the poverty level, has also risen sharply in the region and has been above the national average since before 1980. About one in 17 of the region's 25 to 64 year olds are working poor (6.0 percent).

Poverty rates have exceeded national averages since 1990  
**26. Poverty Rate, 1980 to 2006-2010**



Source: IPUMS. Universe includes all persons not in group quarters.

Working poverty rates have exceeded national averages since 1980  
**27. Working Poverty Rate, 1980 to 2006-2010**



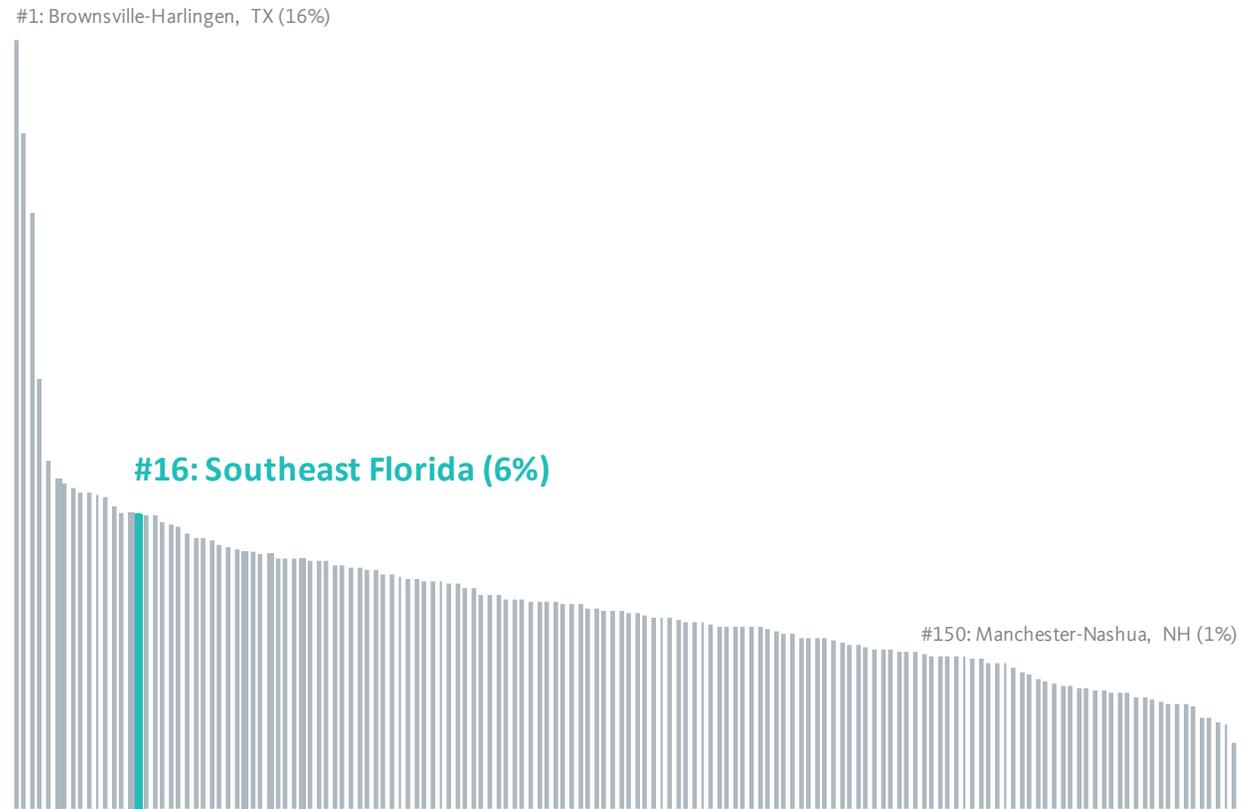
Source: IPUMS. Universe includes the civilian non-institutional population ages 25 through 64 not in group quarters.

# Economic vitality

## High working poverty

Working poverty is a particular challenge in the region. Southeast Florida has the 16<sup>th</sup> highest rate of working poverty among the largest 150 metros. Compared with other similarly sized metros in the South, the working poverty rate in Southeast Florida (6.0 percent) is slightly lower than Houston (6.4 percent), about the same as Dallas (6.0 percent), and much higher than Atlanta (4.2 percent).

**Southeast Florida has the 16<sup>th</sup> highest working poverty rate**  
**28. Working Poverty Rate in 2006-2010: Largest 150 Metros Ranked**



Source: IPUMS. Universe includes the civilian non-institutional population ages 25 through 64 not in group quarters.

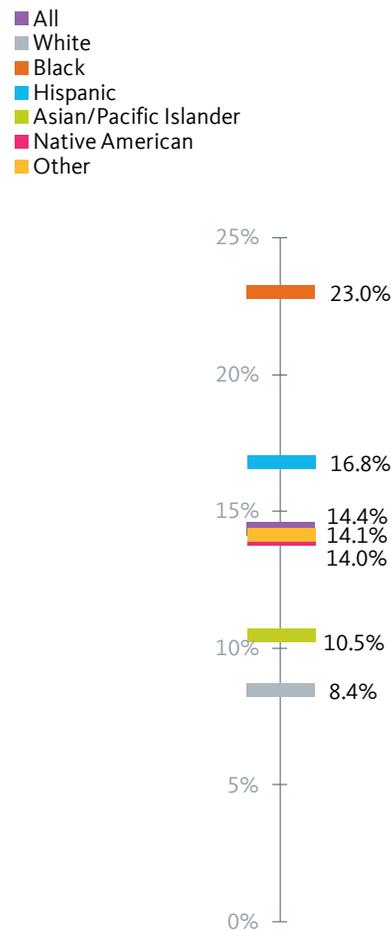
# Economic vitality

## Higher poverty and working poverty for people of color

Nearly one in four of the region’s blacks, and about one in six Hispanics, live below the poverty level – compared with about one in 12 whites. Native Americans, people of other or mixed racial backgrounds, and Asians also all have higher poverty rates compared with whites.

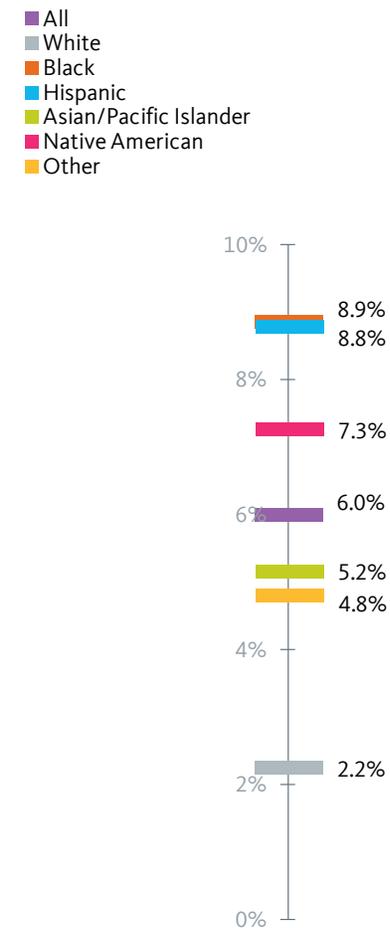
Blacks and Hispanics are much more likely to be working poor compared with all other groups, with 8.9 and 8.8 percent working poverty rates, respectively, and compared with the 6.0 percent average overall. Native Americans also have an above-average working poverty rate. Whites have the lowest rate of working poverty, at about 2.2 percent.

**Poverty is highest for blacks**  
**29. Poverty Rate by Race/Ethnicity, 2006-2010**



Source: IPUMS. Universe includes all persons not in group quarters.

**Working poverty is highest for blacks and Hispanics**  
**30. Working Poverty Rate by Race/Ethnicity, 2006-2010**



Source: IPUMS. Universe includes the civilian non-institutional population ages 25 through 64 not in group quarters.

# Economic vitality

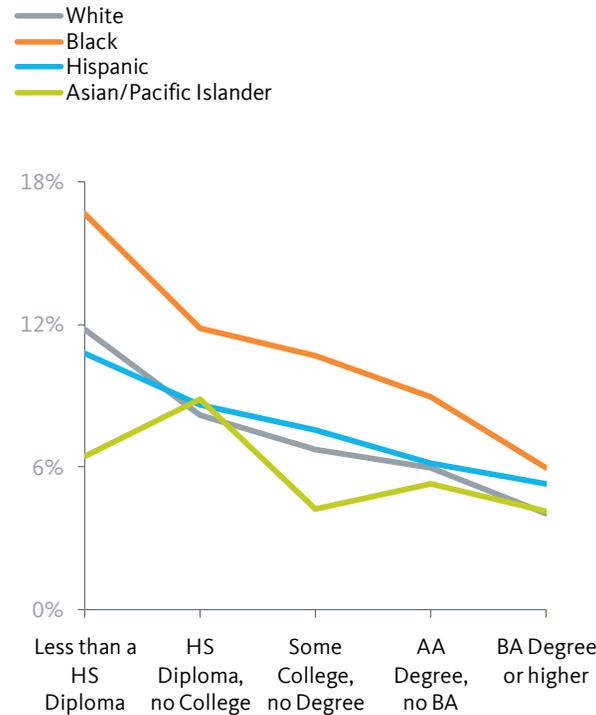
## Education is a leveler, but racial economic gaps persist

In general, unemployment decreases and wages increase with higher educational attainment. But at nearly every education level, Southeast Florida’s communities of color have worse economic outcomes than whites.

Unemployment rates are particularly high for the region’s black residents regardless of their educational attainment, and Asians have lower unemployment at nearly every education level. Racial differences are also stark when it comes to wages. At every level of education, whites earn more than people of color. Among the region’s college graduates, for example, wages average \$7/hour lower for Hispanics and blacks, and \$2 lower for Asians compared with whites.

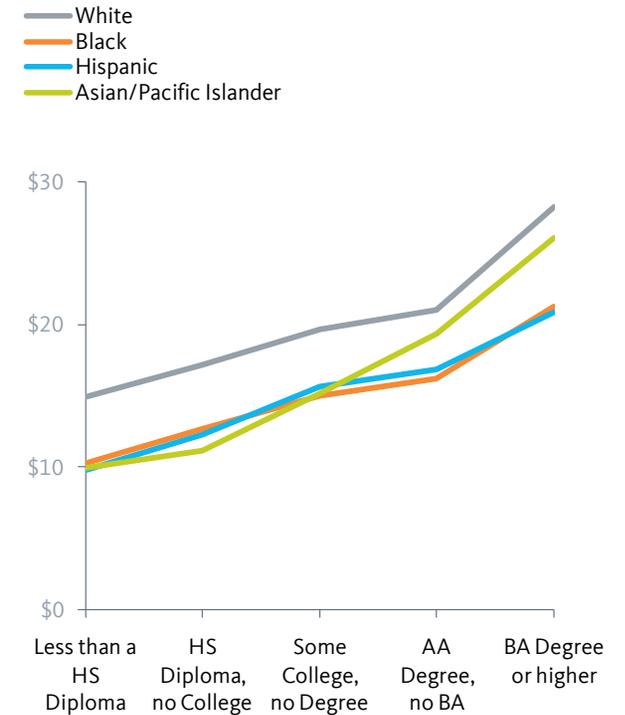
At every education level, people of color earn lower wages than whites

**31. Unemployment Rate by Educational Attainment and Race/Ethnicity, 2006-2010**



Source: IPUMS. Universe includes the civilian non-institutional population ages 25 through 64.

**32. Median Hourly Wage by Educational Attainment and Race/Ethnicity, 2006-2010**



Source: IPUMS. Universe includes civilian non-institutional full-time wage and salary workers ages 25 through 64.

# Economic vitality

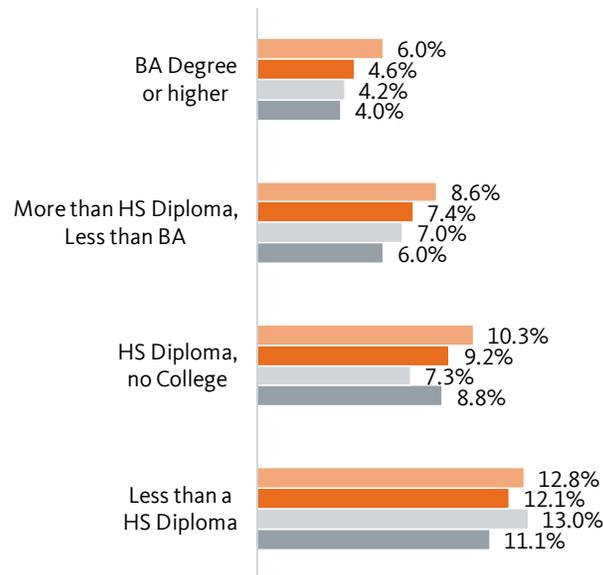
## There is also a gender gap in work and pay

At nearly every level of education, white women and women of color have higher unemployment rates and earn lower wages than their male counterparts. Women of color generally face the highest unemployment rates and earn the least among all groups. The one exception is for white women with a high school diploma but no college education, who have a slightly lower unemployment rate than white males. White men earn a substantial wage premium compared with all other groups.

### Women of nearly every education level earn less and are more likely to be unemployed

**33. Unemployment Rate by Educational Attainment, Race/Ethnicity, and Gender, 2006-2010**

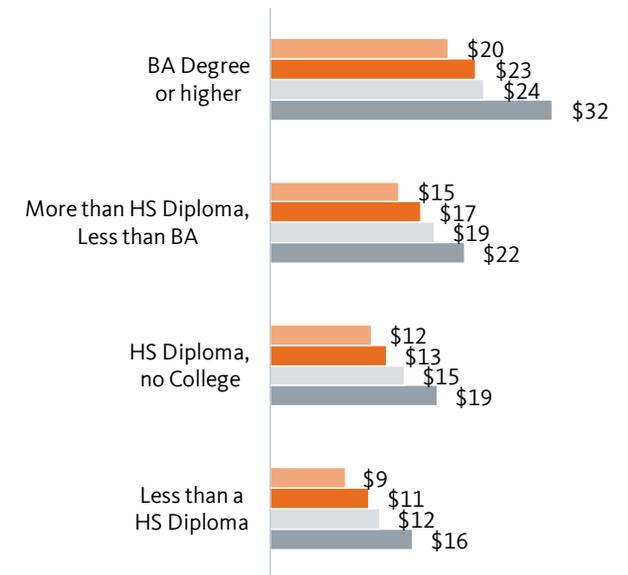
- Women of color
- Men of color
- White women
- White men



Source: IPUMS. Universe includes the civilian non-institutional population ages 25 through 64.

**34. Median Hourly Wage by Educational Attainment, Race/Ethnicity, and Gender, 2006-2010**

- Women of color
- Men of color
- White women
- White men



Source: IPUMS. Universe includes civilian non-institutional full-time wage and salary workers ages 25 through 64.

# Economic vitality

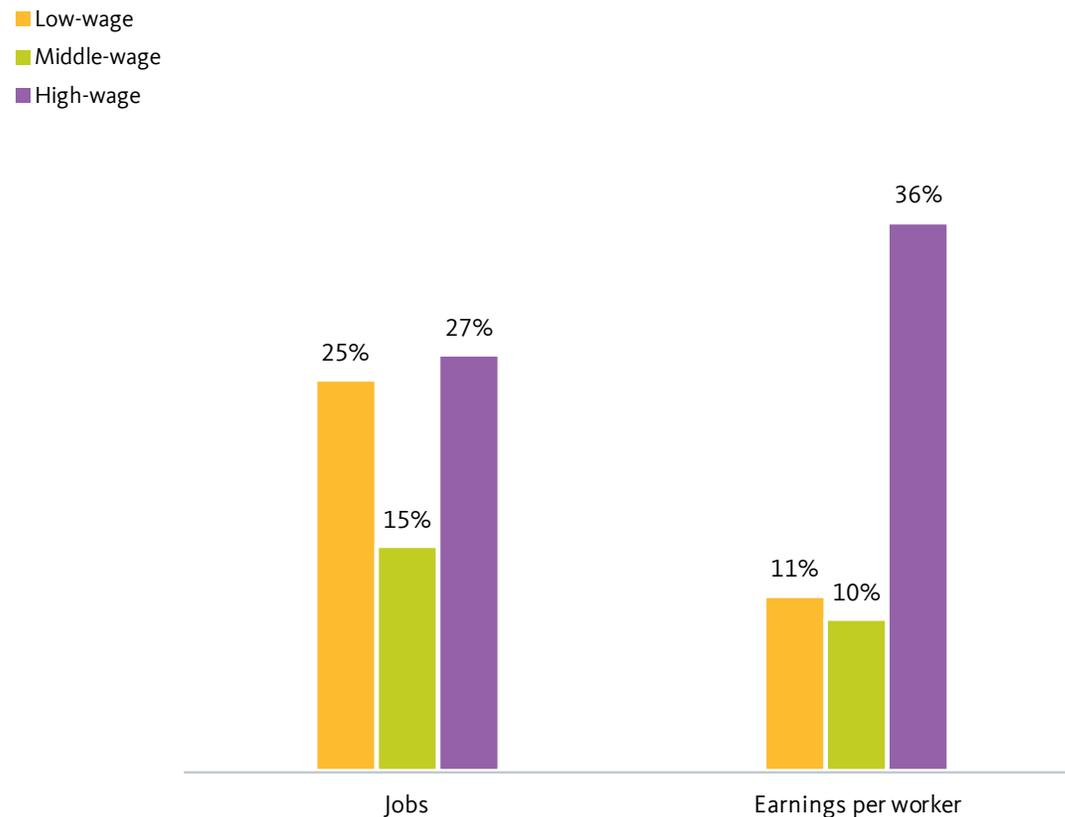
## Faster growth of low- and high-wage jobs than middle-wage jobs

Following the national trend, over the past two decades, Southeast Florida saw much faster growth of low- and high-wage jobs (25 and 27 percent) compared with middle-wage jobs (15 percent). Middle-wage job growth is important, because these jobs are often accessible to workers without four-year college degrees and provide a pathway into the middle class.

During the same time period, earnings growth has been much higher for the jobs that were already high-wage (36 percent), while low- and middle-wage jobs have seen much less earnings growth (11 and 10 percent, respectively).

The fastest job growth is in low- and high-wage jobs, and high-wage jobs had the most earnings growth

35. Growth in Jobs and Earnings by Wage Level, 1990 to 2010



# Economic vitality

## Wage growth fast at the top, slower at the bottom and middle

The region’s high-wage workers have fared well over the past two decades. Those working in management, for example, have seen their incomes nearly double.

Some middle-wage workers, such as those in wholesale trade, manufacturing, and education services, have seen moderately strong wage growth. But those working in health care – the region’s second largest industry – saw their wages decline.

Wage growth was uneven for the region’s low-wage workforce. The region’s 300,000-plus retail workers barely saw their incomes budge. Hotel and restaurant workers, despite some growth, still earned annual wages below the poverty line for a family of four in 2010. Those working in arts and entertainment and administrative support had higher wage growth.

**A widening wage gap by industry sector**  
**36. Industries by Wage Level Category in 1990**

Wage Category	Industry	Average Annual Earnings	Average Annual Earnings	Percent Change in Earnings	Number of Jobs
		1990 (\$2010)	2010 (\$2010)	1990-2010	2010
High	Utilities	\$62,663	\$85,127	36%	7,023
	Management of Companies and Enterprises	\$61,493	\$110,943	80%	22,335
	Professional, Scientific, and Technical Services	\$58,990	\$68,194	16%	148,184
	Mining	\$55,650	\$60,580	9%	554
	Information	\$51,220	\$67,038	31%	44,457
	Finance and Insurance	\$49,663	\$75,829	53%	102,342
Middle	Wholesale Trade	\$48,584	\$59,177	22%	124,321
	Health Care and Social Assistance	\$45,830	\$45,011	-2%	300,248
	Transportation and Warehousing	\$42,980	\$47,099	10%	82,203
	Manufacturing	\$40,975	\$49,212	20%	80,385
	Construction	\$40,680	\$43,638	7%	97,933
	Real Estate and Rental and Leasing	\$35,347	\$40,260	14%	53,635
	Education Services	\$30,350	\$40,210	32%	51,892
Low	Retail Trade	\$27,165	\$28,292	4%	311,945
	Administrative and Support and Waste Management and Remediation Services	\$26,883	\$32,694	22%	157,034
	Other Services (except Public Administration)	\$26,826	\$29,425	10%	88,860
	Arts, Entertainment, and Recreation	\$26,784	\$36,883	38%	43,585
	Agriculture, Forestry, Fishing and Hunting	\$24,121	\$24,379	1%	20,499
	Accommodation and Food Services	\$18,363	\$20,911	14%	237,414

Sources: U.S. Bureau of Labor Statistics; Woods & Poole Economics. Universe includes all jobs covered by the federal Unemployment Insurance (UI) program.

# Economic vitality

## Identifying the region’s strong industries

Understanding which industries are strong and competitive in the region is critical for developing effective strategies to attract and grow businesses. To identify strong industries in the region, we categorized 19 industry sectors according to an “**industry strength index**” that measures four characteristics: size, concentration, job quality, and growth. Each characteristic was given an equal weight (25 percent each) in determining the index value. “Growth” was an average of three indicators of growth (change in number of jobs, percent change in number of jobs, and real wage growth). These characteristics were examined over the last decade to provide a current picture of how the region’s economy is changing.

### Industry strength index =



Note: This industry strength index is only meant to provide general guidance on the strength of various industries in the region, and its interpretation should be informed by an examination of individual metrics used in its calculation, which are presented in the table on the next page. Each indicator was normalized as a cross-industry z-score before taking a weighted average to derive the index.

# Economic vitality

## Health care, management, and professional services dominate

According to the industry strength index, the region’s strongest industries are **health care and social assistance, management, and professional services**. Health care and social assistance ranks first due to a relatively large and growing employment base, along with some wage growth over the past decade. Management of companies and

enterprises ranks second because of its high and increasing annual wages and moderate employment growth, but this sector employs relatively few people. Professional services ranks third.

Health care and social assistance tops the list of strongest industries in the region. Management, professional services, accommodations/food services, and wholesale trade show strengths and are expanding

### 37. Industry Strength Index

Industry	Size	Concentration	Job Quality	Growth			Industry Strength Index
	Total employment (2010)	Location quotient (2010)	Average annual wage (2010)	Change in number of jobs (2000-10)	% Change in number of jobs (2000-10)	Real wage growth (2000-10)	
Health Care and Social Assistance	300,248	1.0	\$45,011	70,105	30%	5%	77.9
Management of Companies and Enterprises	22,335	0.7	\$110,943	4,408	25%	25%	53.6
Professional, Scientific, and Technical Services	148,184	1.1	\$68,194	14,275	11%	4%	44.3
Accommodation and Food Services	237,414	1.2	\$20,911	41,498	21%	7%	36.4
Wholesale Trade	124,321	1.3	\$59,177	4,349	4%	3%	34.0
Retail Trade	311,945	1.2	\$28,292	-2,762	-1%	-4%	29.7
Finance and Insurance	102,342	1.0	\$75,829	-5,864	-5%	8%	28.8
Education Services	51,892	1.2	\$40,210	19,803	62%	11%	21.2
Real Estate and Rental and Leasing	53,635	1.5	\$40,260	3,104	6%	-1%	12.5
Administrative and Support and Waste Management and Remediation Services	157,034	1.2	\$32,694	-17,654	-10%	6%	-2.6
Transportation and Warehousing	82,203	1.2	\$47,099	-10,656	-11%	6%	-4.8
Arts, Entertainment, and Recreation	43,585	1.3	\$36,883	2,236	5%	-1%	-15.9
Utilities	7,023	0.7	\$85,127	-3,551	-34%	10%	-16.0
Information	44,457	0.9	\$67,038	-19,141	-30%	6%	-19.9
Other Services (except Public Administration)	88,860	1.1	\$29,425	-2,191	-2%	5%	-20.3
Construction	97,933	1.0	\$43,638	-26,074	-21%	1%	-31.6
Agriculture, Forestry, Fishing and Hunting	20,499	1.0	\$24,379	-8,258	-29%	-11%	-83.1
Manufacturing	80,385	0.4	\$49,212	-57,707	-42%	7%	-86.3
Mining	554	0.0	\$60,580	-149	-21%	-5%	-106.9

Sources: U.S. Bureau of Labor Statistics; Woods & Poole Economics. Universe includes all jobs covered by the federal Unemployment Insurance (UI) program.

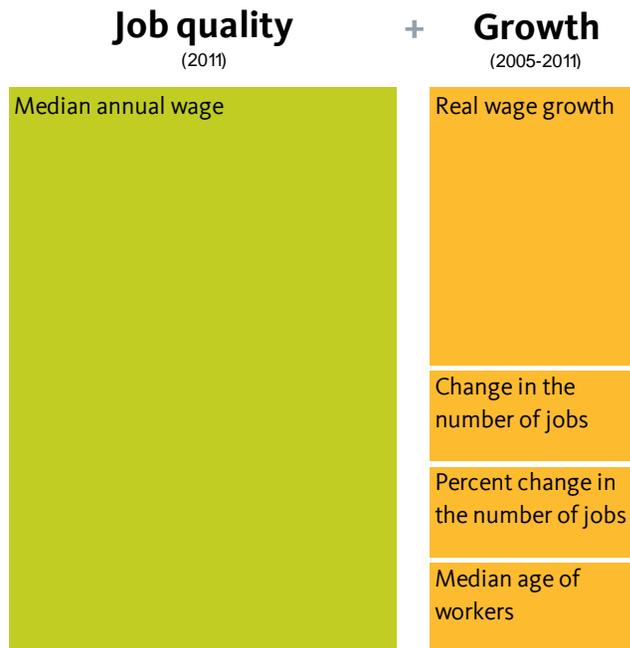
# Economic vitality

## Identifying high-opportunity occupations

Understanding which occupations are strong and competitive in the region can help leaders develop strategies to connect and prepare workers for good jobs. To identify “high-opportunity” occupations in the region, we developed an “**occupation opportunity index**” based on measures of job quality and growth, including median annual wage, wage growth, job growth (in number and share), and median age of workers. A high median age of workers indicates that there will be replacement job openings as older workers retire.

Job quality, measured by the median annual wage, accounted for 2/3 of the occupation opportunity index, and growth accounted for the other 1/3. Within the growth category, half was determined by wage growth and the other half was divided equally between the change in number of jobs, percent change in number of jobs, and median age of workers.

### Occupation opportunity index =



Note: Each indicator was normalized as a cross-occupation z-score before taking a weighted average to derive the index.

# Economic vitality

## Identifying high-opportunity occupations

(continued)

Once the occupation opportunity index score was calculated for each occupation, occupations were sorted into three categories (high, middle, and low opportunity). The average index score is zero, so an occupation with a positive value has an above average score while a negative value represents a below average score.

Because education level plays such a large role in determining access to jobs, we present the occupational analysis for each of three educational attainment levels: workers with a high school degree or less; workers with more than a high-school degree, but less than a BA; and workers with a BA or higher.



Note: The occupation opportunity index and the three broad categories drawn from it are only meant to provide general guidance on the level of opportunity associated with various occupations in the region, and its interpretation should be informed by an examination of individual metrics used in its calculation, which are presented in the tables on the following pages.

# Economic vitality

## High-opportunity occupations for workers with a high school degree or less

Supervisors of production workers, construction and extraction workers, and transportation workers are high-opportunity jobs for workers without postsecondary education

38. Occupation Opportunity Index: Occupations by Opportunity Level for Workers with a High School Degree or Less

Occupation	Employment	Job Quality	Growth			Occupation Opportunity Index	
	(2011)	Median annual wage (2011)	Real wage growth (2011)	Change in number of jobs (2005-11)	% Change in number of jobs (2005-11)		Median age (2010)
<b>High Opportunity</b>							
Supervisors of Production Workers	5,350	\$52,630	0.8%	-890	-14.3%	46	0.30
Supervisors of Construction and Extraction Workers	7,930	\$57,320	-7.0%	-6,350	-44.5%	44	0.25
Supervisors of Transportation and Material Moving Workers	5,050	\$49,829	-1.4%	-470	-8.5%	43	0.16
Other Construction and Related Workers	5,260	\$45,625	5.0%	-440	-7.7%	44	0.13
Water Transportation Workers	4,550	\$43,531	--	--	--	44	0.03
Other Installation, Maintenance, and Repair Occupations	41,340	\$35,478	7.9%	2,430	6.2%	44	-0.10
<b>Middle Opportunity</b>							
Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	23,150	\$37,821	-1.8%	-740	-3.1%	43	-0.19
Baggage Porters, Bellhops, and Concierges	4,470	\$25,782	25.2%	-1,070	-19.3%	44	-0.23
Metal Workers and Plastic Workers	7,970	\$32,559	4.1%	-2,420	-23.3%	46	-0.27
Supervisors of Food Preparation and Serving Workers	14,560	\$36,221	-1.9%	880	6.4%	39	-0.27
Supervisors of Building and Grounds Cleaning and Maintenance Workers	5,150	\$33,062	-2.6%	130	2.6%	44	-0.32
Motor Vehicle Operators	47,490	\$29,919	5.2%	-8,160	-14.7%	45	-0.39
Assemblers and Fabricators	13,470	\$26,117	9.3%	-4,750	-26.1%	44	-0.44
Material Recording, Scheduling, Dispatching, and Distributing Workers	79,460	\$29,157	-3.4%	-1,960	-2.4%	41	-0.50
Printing Workers	3,700	\$30,427	-7.9%	-1,950	-34.5%	44	-0.51
Other Production Occupations	18,390	\$26,648	2.0%	-3,440	-15.8%	43	-0.51
Agricultural Workers	6,930	\$18,843	3.1%	4,750	217.9%	38	-0.53
Food Processing Workers	8,750	\$25,445	-7.3%	1,850	26.8%	45	-0.55
Personal Appearance Workers	8,110	\$23,570	3.7%	-1,020	-11.2%	43	-0.56
Nursing, Psychiatric, and Home Health Aides	32,940	\$22,149	-0.9%	-1,090	-3.2%	46	-0.61
<b>Low Opportunity</b>							
Other Protective Service Workers	45,860	\$23,753	-5.3%	2,030	4.6%	42	-0.63
Construction Trades Workers	47,470	\$34,506	-1.5%	-36,100	-43.2%	40	-0.64
Textile, Apparel, and Furnishings Workers	9,720	\$20,251	-2.6%	-1,760	-15.3%	50	-0.65
Building Cleaning and Pest Control Workers	56,850	\$19,451	-0.9%	-1,100	-1.9%	47	-0.68
Cooks and Food Preparation Workers	49,440	\$21,870	-0.7%	3,690	8.1%	37	-0.68
Grounds Maintenance Workers	20,330	\$21,895	2.6%	-3,710	-15.4%	40	-0.68
Helpers, Construction Trades	2,230	\$24,468	-1.3%	-4,960	-69.0%	38	-0.73
Food and Beverage Serving Workers	109,940	\$18,222	9.1%	2,560	2.4%	29	-0.78
Other Personal Care and Service Workers	25,760	\$20,146	-9.3%	-250	-1.0%	42	-0.81
Material Moving Workers	55,530	\$22,820	4.6%	-25,880	-31.8%	39	-0.83
Retail Sales Workers	159,350	\$19,904	-9.4%	7,230	4.8%	35	-0.84
Animal Care and Service Workers	2,550	\$20,481	-9.8%	700	37.8%	33	-0.88
Other Food Preparation and Serving Related Workers	28,780	\$18,167	2.1%	80	0.3%	27	-0.92
Other Transportation Workers	8,350	\$21,528	-48.3%	5,380	181.1%	38	-1.09

Sources: U.S. Bureau of Labor Statistics; IPUMS. Universe includes all nonfarm wage and salary jobs for which the typical worker is estimated to have less than a high school degree. Analysis reflects the Miami Core Based Statistical Area as defined by the U.S. Office of Management and Budget.

# Economic vitality

## High-opportunity occupations for workers with more than a high school degree but less than a BA

Supervisors of installation, maintenance, and repair workers, sales workers, and office and administrative support workers are high-opportunity occupations for workers with more than a high school degree but less than a BA

39. Occupation Opportunity Index: Occupations by Opportunity Level for Workers with More Than a High School Degree but Less Than a BA

Occupation	Employment (2011)	Job Quality Median annual wage (2011)	Growth			Occupation Opportunity Index		
			Real wage growth (2011)	Change in number of jobs (2005-11)	% Change in number of jobs (2005-11)		Median Age (2010)	
<b>High Opportunity</b>	Supervisors of Installation, Maintenance, and Repair Workers	6,330	\$57,060	-4.0%	280	4.6%	46	0.40
	Supervisors of Sales Workers	28,530	\$49,790	-4.9%	6,430	29.1%	43	0.21
	Supervisors of Office and Administrative Support Workers	24,730	\$48,250	-0.4%	4,570	22.7%	43	0.19
	Drafters, Engineering Technicians, and Mapping Technicians	8,070	\$48,889	4.1%	-3,550	-30.6%	45	0.18
	Electrical and Electronic Equipment Mechanics, Installers, and Repairers	15,210	\$44,177	3.1%	6,020	65.5%	40	0.13
	Occupational Therapy and Physical Therapist Assistants and Aides	2,250	\$44,895	-3.8%	70	3.2%	46	0.04
	Health Technologists and Technicians	47,680	\$41,123	1.3%	2,820	6.3%	42	-0.04
	Other Education, Training, and Library Occupations	11,090	\$30,735	32.7%	-4,260	-27.8%	42	-0.05
<b>Middle Opportunity</b>	Supervisors of Personal Care and Service Workers	2,590	\$38,430	-9.1%	570	28.2%	41	-0.25
	Secretaries and Administrative Assistants	78,840	\$34,127	-4.3%	4,770	6.4%	44	-0.27
	Other Healthcare Support Occupations	25,750	\$29,512	1.0%	5,820	29.2%	37	-0.40
	Media and Communication Equipment Workers	4,940	\$34,065	-11.8%	760	18.2%	40	-0.43
	Financial Clerks	59,330	\$32,324	1.8%	-13,620	-18.7%	42	-0.44
	Information and Record Clerks	117,640	\$28,680	-1.1%	3,970	3.5%	35	-0.51
<b>Low Opportunity</b>	Communications Equipment Operators	2,320	\$23,933	-1.3%	-4,120	-64.0%	38	-0.74
	Other Office and Administrative Support Workers	64,910	\$26,315	1.3%	-24,940	-27.8%	40	-0.75
	Entertainment Attendants and Related Workers	8,570	\$19,434	5.6%	-1,280	-13.0%	33	-0.78
	Law Enforcement Workers	12,860	\$34,880	-40.0%	-7,640	-37.3%	38	-0.89

Sources: U.S. Bureau of Labor Statistics; IPUMS. Universe includes all nonfarm wage and salary jobs for which the typical worker is estimated to have at least a high school degree but less than a BA. Analysis reflects the Miami Core Based Statistical Area as defined by the U.S. Office of Management and Budget.

# Economic vitality

## High-opportunity occupations for workers with a BA degree or higher

Air transportation workers, lawyers, judges, and operations specialties managers are all high-opportunity occupations for workers with a BA degree or higher

### 40. Occupation Opportunity Index: All Levels of Opportunity for Workers with a BA Degree or Higher

Occupation	Employment	Job Quality	Growth			Occupation Opportunity Index	
	(2011)	Median annual wage (2011)	Real wage growth (2011)	Change in number of jobs (2005-11)	% Change in number of jobs (2005-11)		Median Age (2010)
<b>High Opportunity</b>							
Air Transportation Workers	4,230	\$113,052	-2.5%	3,470	456.6%	47	2.48
Lawyers, Judges, and Related Workers	18,780	\$111,898	-1.3%	2,680	16.6%	46	2.07
Operations Specialties Managers	15,550	\$107,546	10.2%	210	1.4%	43	2.01
Top Executives	28,340	\$110,762	-7.3%	3,940	16.1%	47	1.99
Advertising, Marketing, Promotions, Public Relations, and Sales Managers	7,350	\$110,800	-0.9%	-730	-9.0%	42	1.95
Health Diagnosing and Treating Practitioners	81,220	\$84,454	4.0%	8,530	11.7%	46	1.37
Postsecondary Teachers	17,780	\$74,772	14.5%	1,670	10.4%	47	1.17
Other Management Occupations	23,400	\$81,151	1.6%	-1,620	-6.5%	45	1.14
Engineers	13,140	\$78,295	4.4%	210	1.6%	44	1.10
Physical Scientists	2,400	\$67,835	15.2%	160	7.1%	44	0.92
Architects, Surveyors, and Cartographers	2,210	\$67,327	4.3%	-2,240	-50.3%	48	0.76
Computer Occupations	44,240	\$67,002	7.7%	960	2.2%	38	0.73
Mathematical Science Occupations	2,230	\$60,239	6.6%	840	60.4%	46	0.67
Financial Specialists	48,480	\$60,271	2.7%	4,800	11.0%	44	0.59
Business Operations Specialists	64,850	\$57,916	-0.7%	8,950	16.0%	44	0.52
Media and Communication Workers	7,830	\$54,485	3.0%	170	2.2%	44	0.38
Social Scientists and Related Workers	2,170	\$61,065	-6.3%	-3,910	-64.3%	44	0.37
Sales Representatives, Wholesale and Manufacturing	44,350	\$54,918	4.6%	-4,900	-9.9%	44	0.36
Librarians, Curators, and Archivists	2,530	\$50,254	0.1%	90	3.7%	45	0.23
Entertainers and Performers, Sports and Related Workers	7,370	\$44,954	3.4%	2,910	65.2%	38	0.10
Legal Support Workers	12,400	\$46,018	-6.3%	2,060	19.9%	40	0.00
Sales Representatives, Services	43,570	\$47,720	-16.7%	6,420	17.3%	42	-0.02
<b>Middle Opportunity</b>							
Art and Design Workers	8,240	\$40,644	-1.3%	-280	-3.3%	41	-0.13
Specialists	22,600	\$37,851	-7.6%	1,110	5.2%	42	-0.25
Other Teachers and Instructors	3,630	\$32,730	16.1%	-10,240	-73.8%	42	-0.28
Other Sales and Related Workers	18,620	\$35,142	1.3%	-10,560	-36.2%	44	-0.33
Preschool, Primary, Secondary, and Special Education School Teachers	29,650	\$41,029	-11.1%	-20,130	-40.4%	43	-0.40

Sources: U.S. Bureau of Labor Statistics; IPUMS. Universe includes all nonfarm wage and salary jobs for which the typical worker is estimated to have a BA degree or higher. Analysis reflects the Miami Core Based Statistical Area as defined by the U.S. Office of Management and Budget.

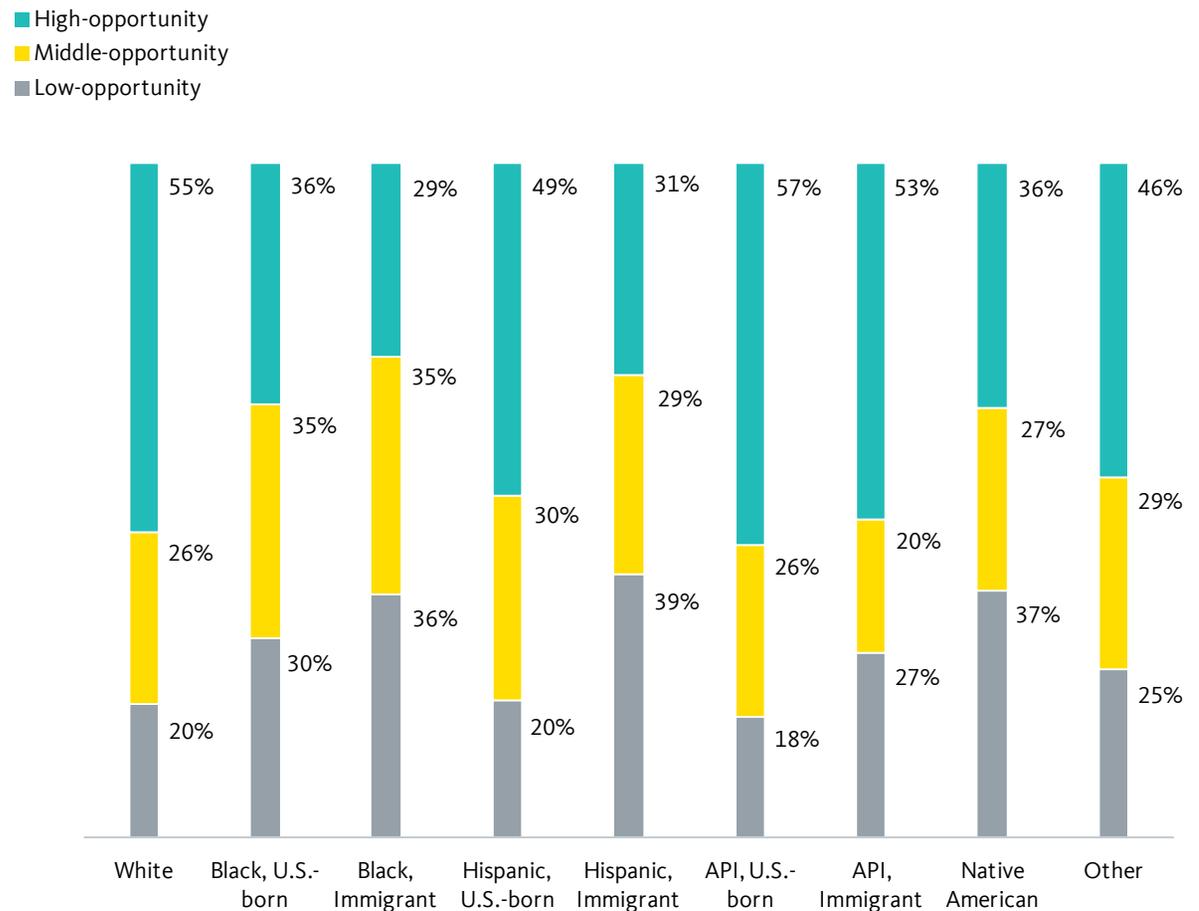
# Economic vitality

## Access to high-opportunity jobs by race/ethnicity/nativity

Examining access to high-opportunity jobs by race/ethnicity and nativity, we find that U.S.-born and immigrant Asian/Pacific Islanders (APIs) and whites are most likely to be employed in the region’s high-opportunity occupations. U.S.-born Hispanics and people of other or mixed racial background have moderate access to high-opportunity occupations. Hispanic and black immigrants are by far the least likely to be in these occupations, followed by U.S.-born blacks and Native Americans. Differences in education levels play a large role in determining access to high-opportunity jobs, but racial discrimination; work experience; social networks; and, for immigrants, legal status and English language ability are also contributing factors.

### Hispanic immigrants, blacks, and Native Americans are least likely to access high-opportunity jobs

41. Opportunity Ranking of Occupations by Race/Ethnicity/Nativity, All Workers



Sources: U.S. Bureau of Labor Statistics; IPUMS. Universe includes the employed civilian non-institutional population ages 25 through 64. While data on workers is from the seven-county region, the opportunity ranking for each worker’s occupation is based on analysis of the Miami Core Based Statistical Area as defined by the U.S. Office of Management and Budget.

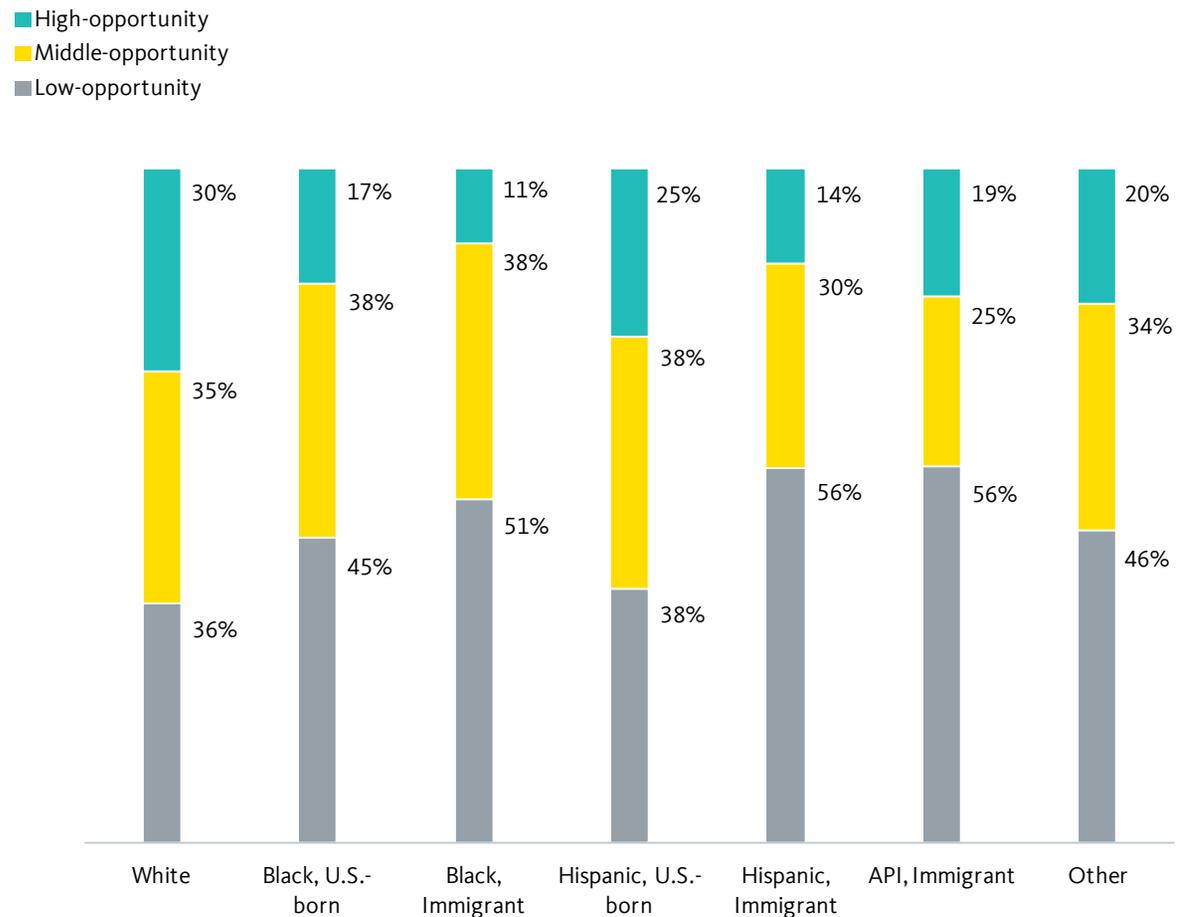
# Economic vitality

## Access to high-opportunity jobs for workers with a high school degree or less

Among workers with low education levels, whites and U.S.-born Hispanics are most likely to be in high-opportunity jobs, followed by people of other or mixed racial backgrounds, API immigrants and U.S.-born blacks. Hispanic and black immigrants are by far the least likely to be in high-opportunity jobs. Blacks (both U.S.-born and immigrant) stand out as having a relatively large representation in both middle- and low-opportunity jobs.

Of those with low education levels, blacks and Hispanic immigrants are least likely to be in high-opportunity jobs

42. Opportunity Ranking of Occupations by Race/Ethnicity/Nativity, Workers with Low Educational Attainment



Sources: U.S. Bureau of Labor Statistics; IPUMS. Universe includes the employed civilian non-institutional population ages 25 through 64 with less than a high school degree. While data on workers is from the seven-county region, the opportunity ranking for each worker's occupation is based on analysis of the Miami Core Based Statistical Area as defined by the U.S. Office of Management and Budget.

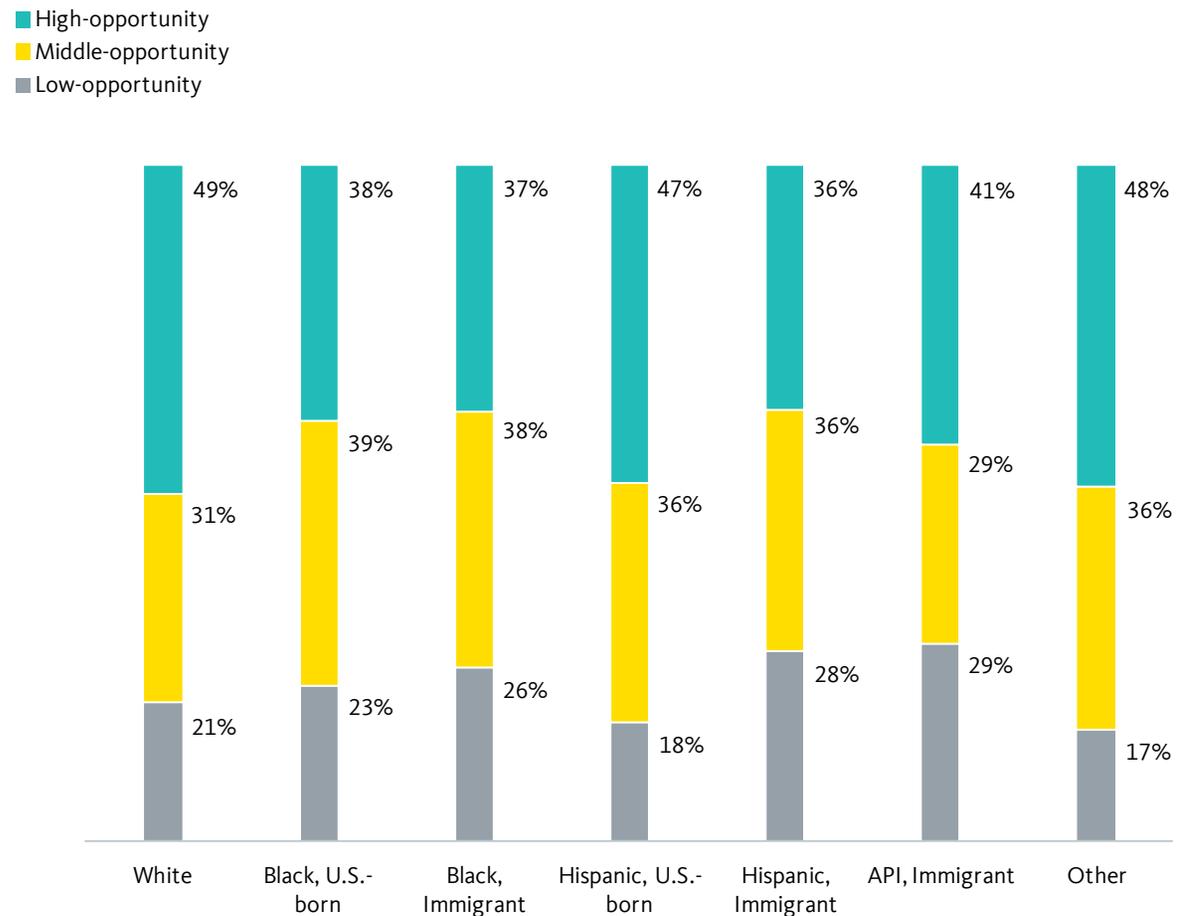
# Economic vitality

## Access to high-opportunity jobs for workers with more than a high school degree but less than a BA

Differences in job opportunity are generally smaller for workers with middle education levels. Whites, people of other or mixed race background and U.S.-born Hispanics are most likely to be found in high-opportunity jobs, while blacks (both U.S.-born and immigrant) are most likely to be in middle-opportunity jobs, and API and Hispanic immigrants are most likely to be in low-opportunity jobs.

Of those with middle education levels, blacks and Hispanic immigrants are least likely to be in high-opportunity jobs

43. Opportunity Ranking of Occupations by Race/Ethnicity/Nativity, Workers with Middle Educational Attainment



Sources: U.S. Bureau of Labor Statistics; IPUMS. Universe includes the employed civilian non-institutional population ages 25 through 64 with at least a high school degree but less than a BA. While data on workers is from the seven-county region, the opportunity ranking for each worker's occupation is based on analysis of the Miami Core Based Statistical Area as defined by the U.S. Office of Management and Budget.

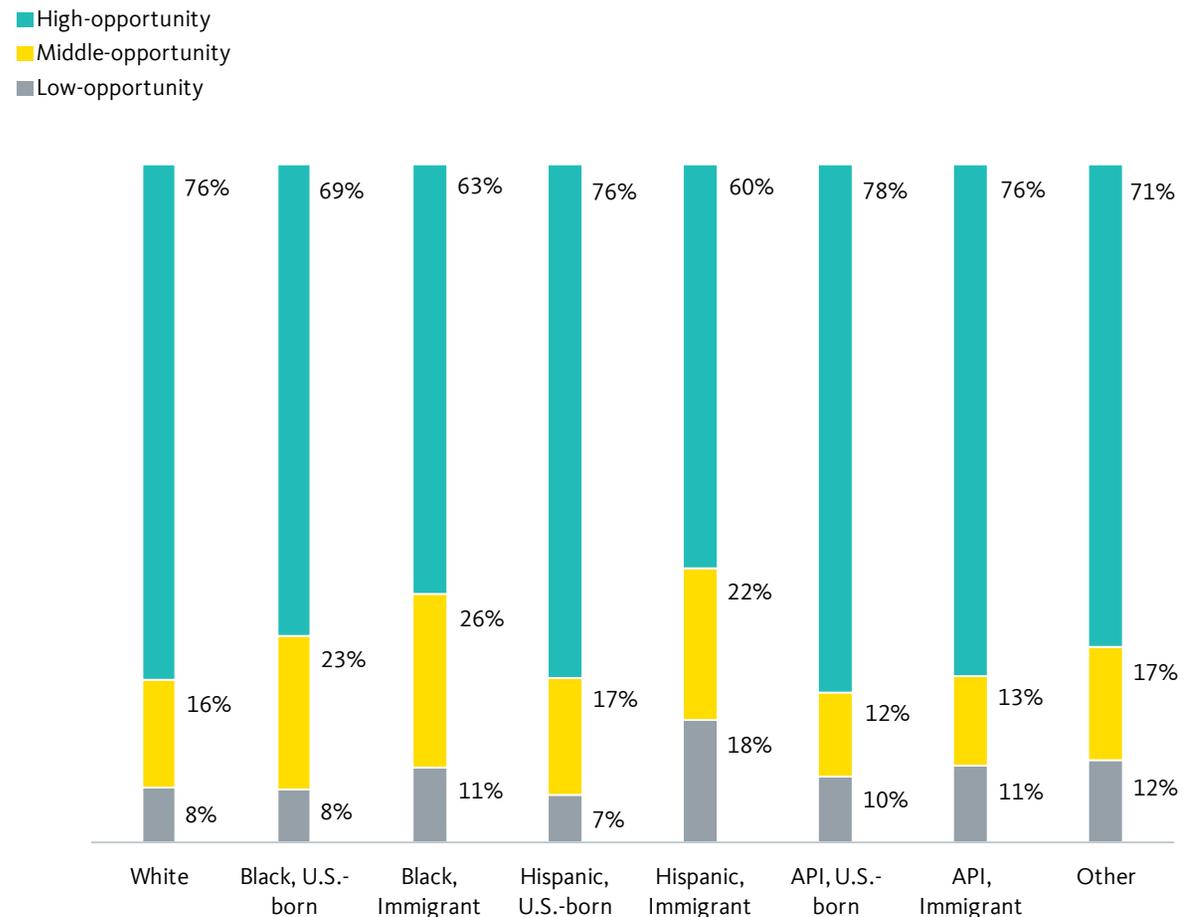
# Economic vitality

## Access to high-opportunity jobs for workers with a BA or higher

Among workers with college degrees, Hispanic immigrants have the least access to high-opportunity jobs and the highest representation in low-opportunity occupations, followed by black immigrants who have somewhat better access to middle- and high-opportunity jobs. Asian/Pacific Islanders (both U.S.-born and immigrant), whites and U.S.-born Hispanics are most likely to be found in high-opportunity jobs. U.S.-born blacks and people of other or mixed race are in the middle in terms of their access to high-opportunity jobs, with U.S.-born blacks having better access to middle-opportunity jobs and people of other or mixed race more likely to be found in low-opportunity jobs.

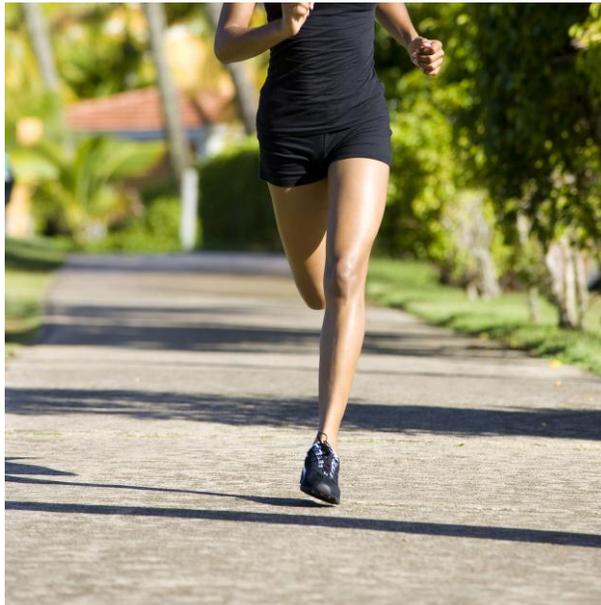
Of those with high education levels, Hispanic and black immigrants are least likely to be in high-opportunity jobs

44. Opportunity Ranking of Occupations by Race/Ethnicity/Nativity, Workers with High Educational Attainment



Sources: U.S. Bureau of Labor Statistics; IPUMS. Universe includes the employed civilian non-institutional population ages 25 through 64 with a BA degree or higher. While data on workers is from the seven-county region, the opportunity ranking for each worker's occupation is based on analysis of the Miami Core Based Statistical Area as defined by the U.S. Office of Management and Budget.

# Readiness



# Readiness

## Highlights

How prepared are the region's residents for the 21st century economy?

- There is a looming skills and education gap for the region's black and Hispanic immigrant populations, whose rates of postsecondary education are lower than the share of future jobs requiring that level of education.
- Educational attainment is increasing for youth of color, but there are still gaps, particularly for Hispanic immigrants and blacks.
- The region has a rising number and relatively high share of youth who are disconnected from school or work, and its black and Hispanic youth are disproportionately likely to be disconnected.
- The region's black population has particularly high rates of obesity and diabetes compared with other racial/ethnic groups.

Share of blacks with an associate's degree or higher:

26%

Hispanic immigrant youth without (and not pursuing) high school degrees:

1 in 5

Disconnected youth rank (out of largest 150 regions):

#37

# Readiness

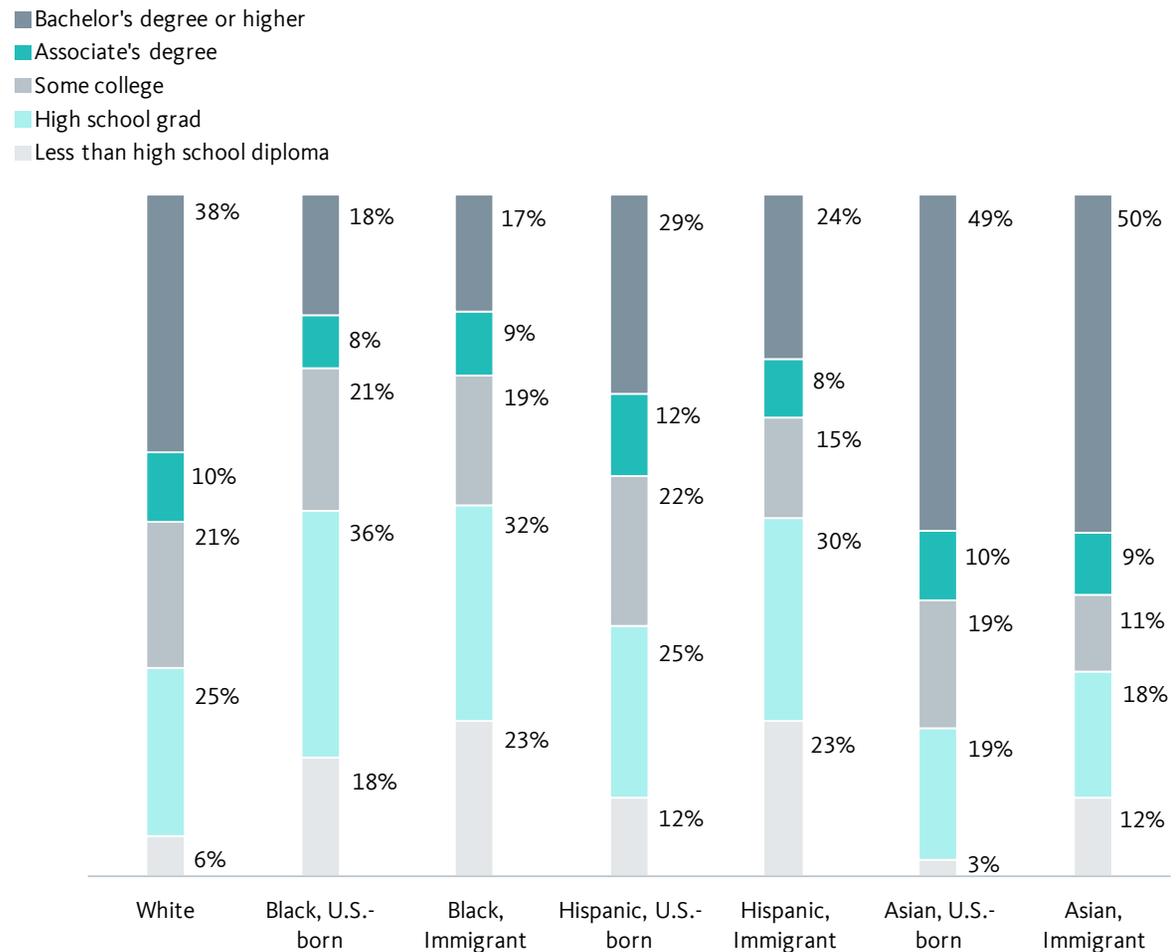
## An education and skills gap for blacks and Hispanic immigrants

According to the Georgetown Center for Education and the Workforce, by 2018 38 percent of Florida’s jobs will require an associate’s degree or above. Today, 39 percent of the region’s workers have that level of education, but there are large differences in educational attainment by race/ethnicity and nativity. Only about 26 percent of blacks (both U.S.-born and immigrant) and 32 percent of Hispanic immigrants have an associate’s degree or higher.

While not shown in the graph, people of every race/ethnicity/nativity improved their education levels since 1990. Despite this progress, Hispanics and blacks, who will account for an increasing share of the region’s workforce, are still less prepared for the future economy than their white and Asian counterparts.

There are wide gaps in educational attainment by race, ethnicity, and nativity

45. Educational Attainment by Race/Ethnicity/Nativity, 2006-2010



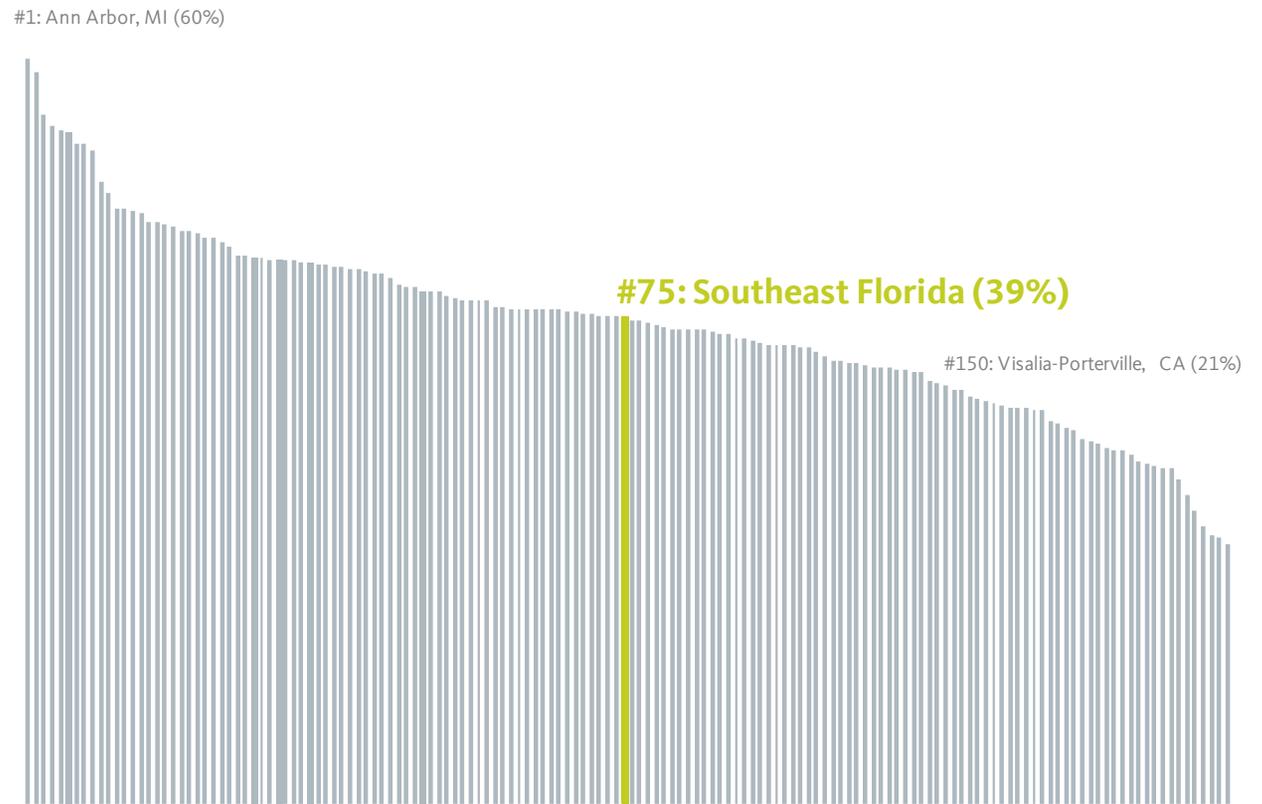
Source: IPUMS. Universe includes all persons ages 25 through 64.

# Readiness

## A high share of less-educated residents

Southeast Florida is about average when it comes to its share of residents with some postsecondary education, ranking 75<sup>th</sup> out of the largest 150 regions. But it has a high share of residents with low levels of education – ranking 31<sup>st</sup> on the share of residents with less than a high school education (14 percent). This puts Southeast Florida ahead of Houston (19 percent) and Dallas (17 percent), but behind Atlanta (11 percent), which rank 13<sup>th</sup>, 18<sup>th</sup> and 65<sup>th</sup>, respectively.

**Southeast Florida has a moderate ranking for residents with an associate's degree or higher compared with other regions**  
**46. Percent of the Population with an Associate's Degree or Higher in 2006-2010: Largest 150 Metros Ranked**



Source: IPUMS. Universe includes all persons ages 25 through 64.

# Readiness

## A mix of high- and low-skill immigrants

Overall, education levels are lower for the region's Hispanic immigrants than its Asian immigrants (not shown), and still lower for its black immigrants. But education levels also vary widely by ancestry.

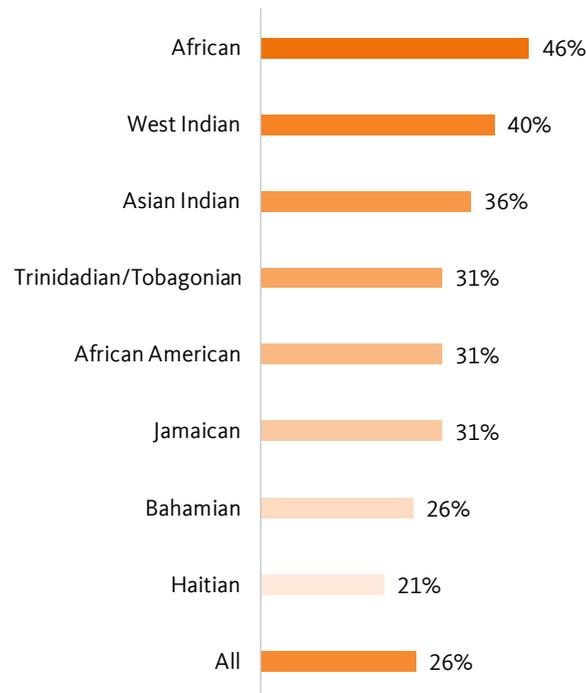
Among Hispanic immigrants, those with origins in Central America and Mexico tend to have low education levels while those descending from South America tend to have moderate to high education levels. The region's many Cuban immigrants have relatively low education levels.

Among black immigrants, those descending from Africa, the West Indies, and India have the highest education levels, while those from the Bahamas and Haiti have lower levels of education.

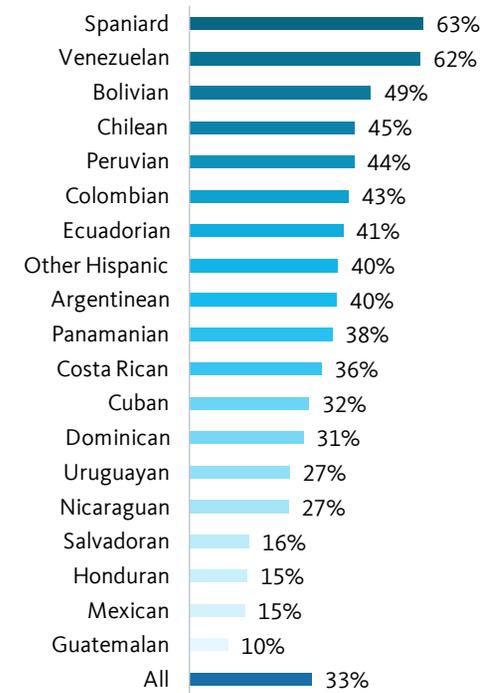
There is also wide variation among Asian immigrants. While only 33 percent of Vietnamese have an associate's degree or higher, for example, 74 percent of Filipinos do.

As a group, Hispanic immigrants have higher education levels than black immigrants, but there is wide variation in educational attainment by ancestry

**47. Black Immigrants, Percent with an Associate's Degree or Higher by Origin, 2006-2010**



**48. Hispanic Immigrants, Percent with an Associate's Degree or Higher by Origin, 2006-2010**



Source: IPUMS. Universe includes all persons ages 25 through 64.

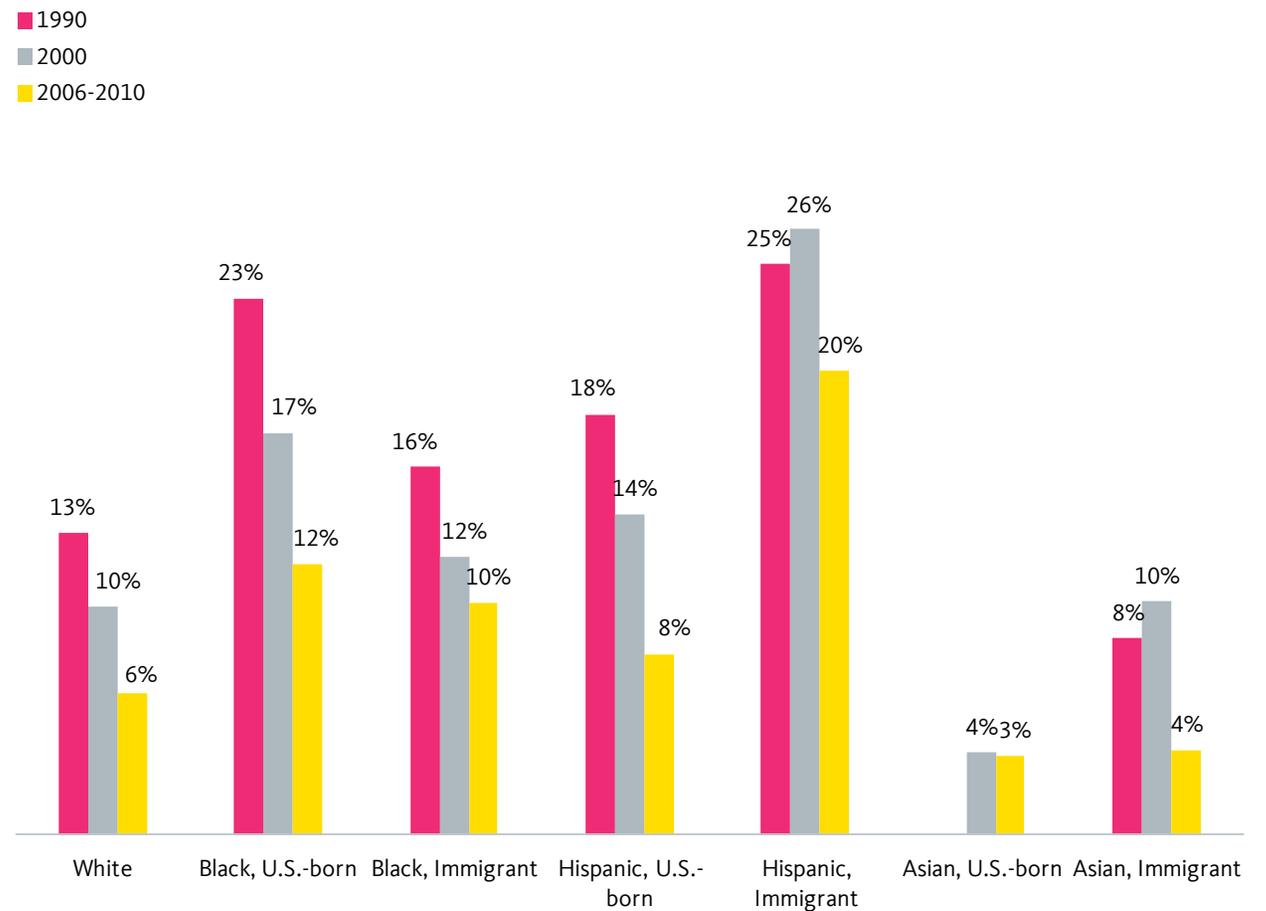
Source: IPUMS. Universe includes all persons ages 25 through 64.

# Readiness

## More youth are getting high school degrees, but Hispanic immigrant and black youth remain behind

The share of youth who do not have a high school education and are not pursuing one has declined considerably since 1990 for all racial/ethnic groups. Despite the overall improvement, youth of color (with the exception of Asians) are still less likely than white youth to finish high school. Immigrant Hispanics have particularly high rates of dropout or non-enrollment, with one in five lacking and not pursuing a high school degree. Interestingly, U.S.-born blacks are slightly more likely than their immigrant counterparts to be lacking and not in pursuit of a high school degree.

The share of youth who are not getting high school degrees has dropped for all groups since 1990  
**49. Percent of 16-24 Year Olds Not Enrolled in School and Without a High School Diploma, 1990 to 2006-2010**



Source: IPUMS.

# Readiness

## Many youth are disconnected from work or school

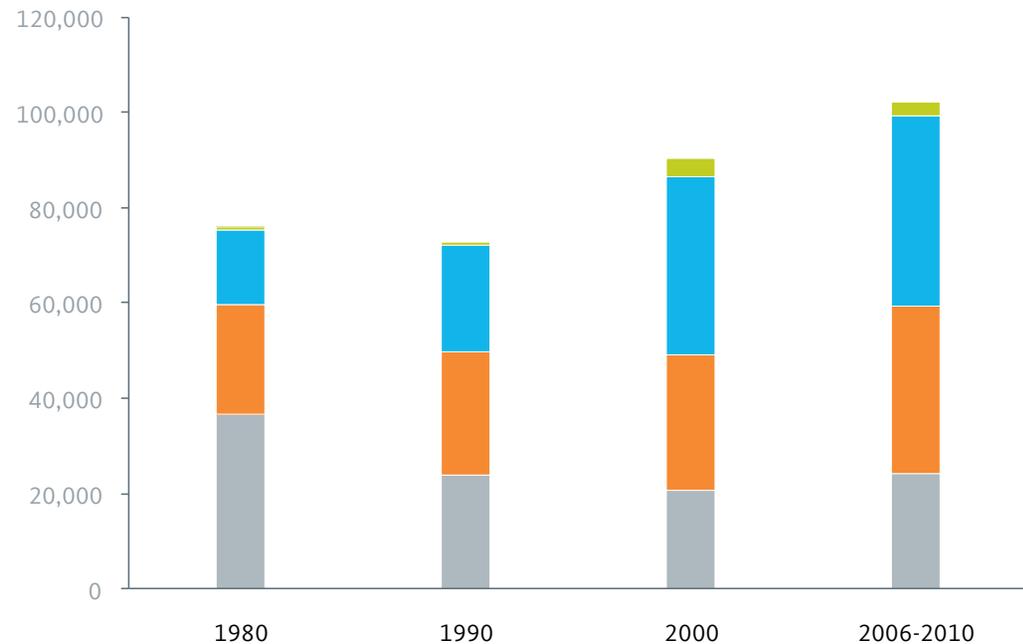
Despite the rise in educational attainment among youth, there are still many youth who are “disconnected” – defined as neither working nor in school. Since 1990, the number of disconnected youth has increased substantially, driven primarily by increases in black and Hispanic youth.

Of the region’s 102,000 disconnected youth, 39 percent are Hispanic, 34 percent are black, and 24 percent are white. As a share of the youth population, blacks have the highest rate of disconnection (20 percent), followed by Hispanics (15 percent), and whites (11 percent).

The number of disconnected youth has increased substantially since 1990

50. Disconnected Youth: 16-24 Year Olds Not in Work or School, 1980 to 2006-2010

- Asian, Native American or Other
- Hispanic
- Black
- White



Source: IPUMS.

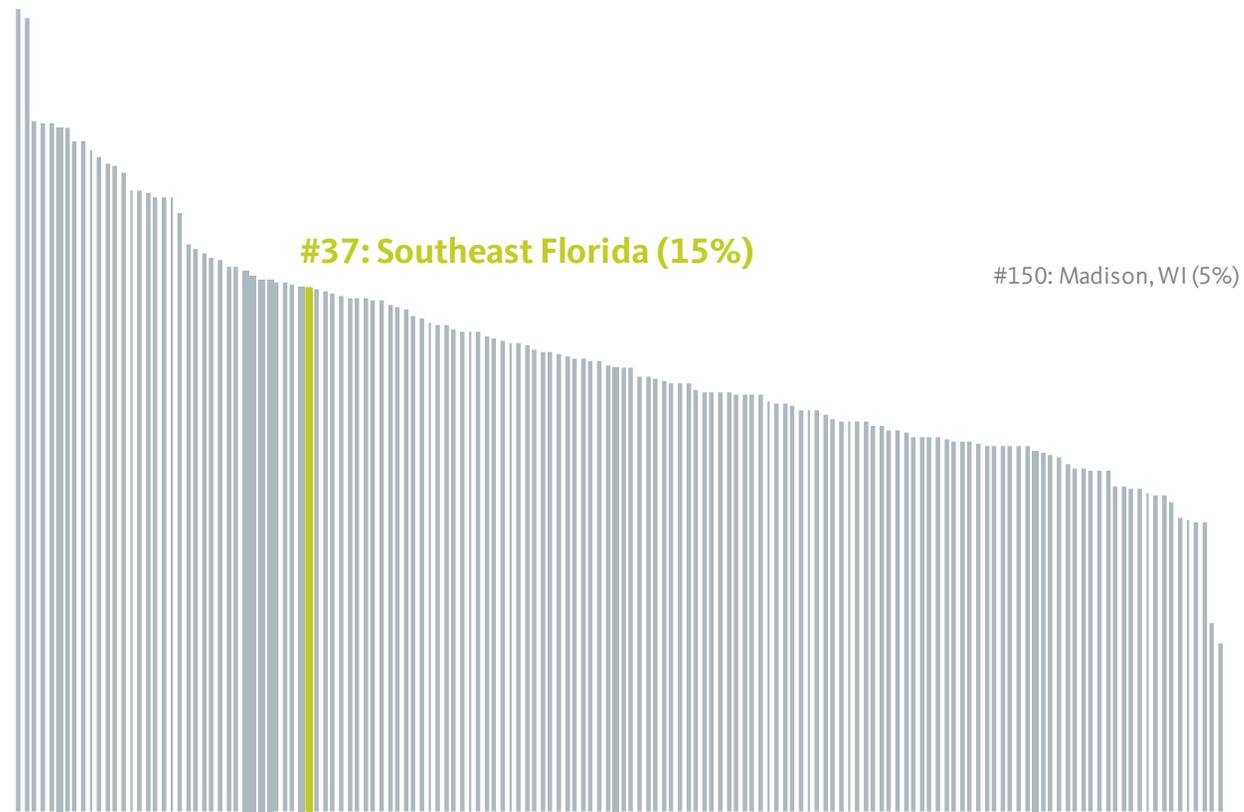
# Readiness

## A high share of disconnected youth

Fifteen percent of youth are disconnected from work or school, ranking the region 37<sup>th</sup> out of the largest 150 metro areas. On this indicator, Southeast Florida fares slightly better than Houston (30<sup>th</sup>), about even with Atlanta (36<sup>th</sup>), and worse than Dallas (46<sup>th</sup>).

**Southeast Florida ranks among the top third of regions in its share of disconnected youth**  
**51. Percent of 16-24 Year Olds Not in Work or School, 2006-2010: Largest 150 Metros Ranked**

#1: Brownsville-Harlingen, TX (23%)



Source: IPUMS.

# Readiness

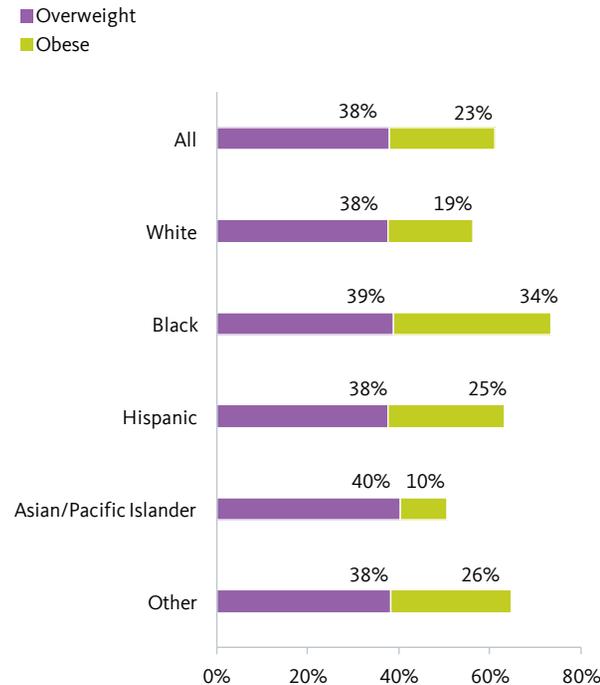
## Health challenges for the region's black population

Obesity, diabetes, and asthma rates among adults in Southeast Florida tend to be slightly lower for the rest of the state and the nation as a whole. The region's blacks have higher rates of obesity (in particular) and diabetes (to some extent) compared with other groups. Hispanics are above average with respect to the obesity measure. Asians have

better than average health indicators across the board. Only one percent of Asians have asthma – way below the regional average of six percent.

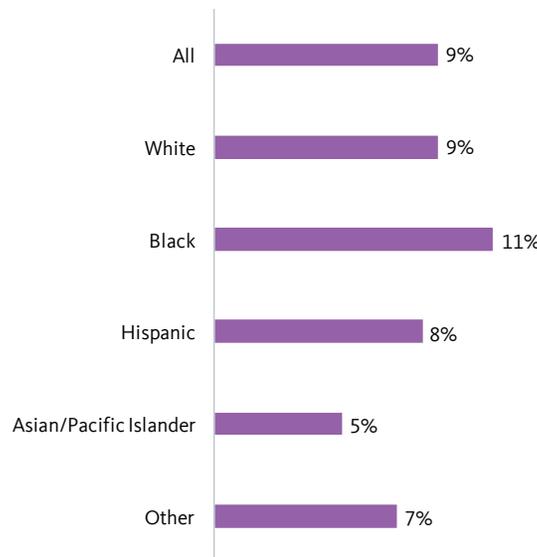
### Blacks face above average obesity and diabetes rates

52. Adult Overweight and Obesity Rates by Race/Ethnicity, 2006-2010



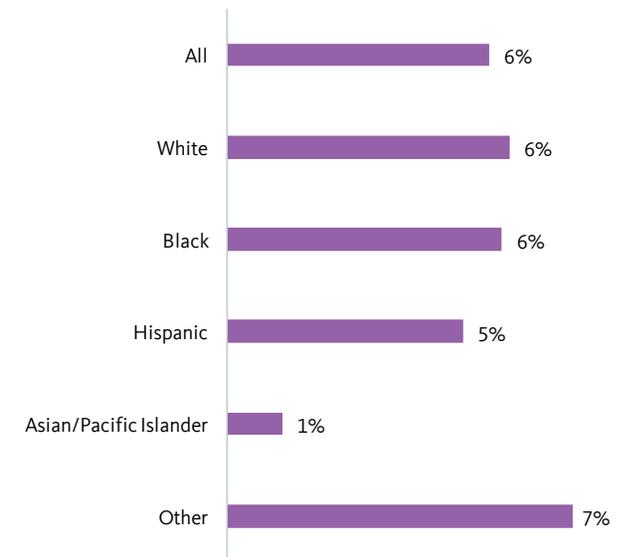
Source: Centers for Disease Control and Prevention. Universe includes adults ages 18 and older.

53. Adult Diabetes Rates by Race/Ethnicity, 2006-2010



Source: Centers for Disease Control and Prevention. Universe includes adults ages 18 and older.

54. Adult Asthma Rates by Race/Ethnicity, 2006-2010



Source: Centers for Disease Control and Prevention. Universe includes adults ages 18 and older.

# Connectedness



# Connectedness

## Highlights

Are the region's residents and neighborhoods connected to one another and to the region's assets and opportunities?

- Residential segregation has been declining over the past few decades, though neighborhoods are still not racially integrated.
- People of color are over five times as likely as whites to live in the region's very high-poverty neighborhoods.
- Many of the neighborhoods with the highest shares of people of color also have the longest commutes and the highest rates of carlessness.
- More of Southeast Florida's residents pay too much for housing than in any other of the largest 150 metros, and people of color have the highest housing burdens.
- Many food deserts are present throughout the region and coastal cities. They are predominantly in people-of-color neighborhoods.

Percent of people of color living in very high-poverty tracts:

5%

Percent of renters who are burdened by housing costs:

62%

Rent and mortgage burdened rank (out of largest 150 regions):

#1

# Connectedness

## Segregation is decreasing

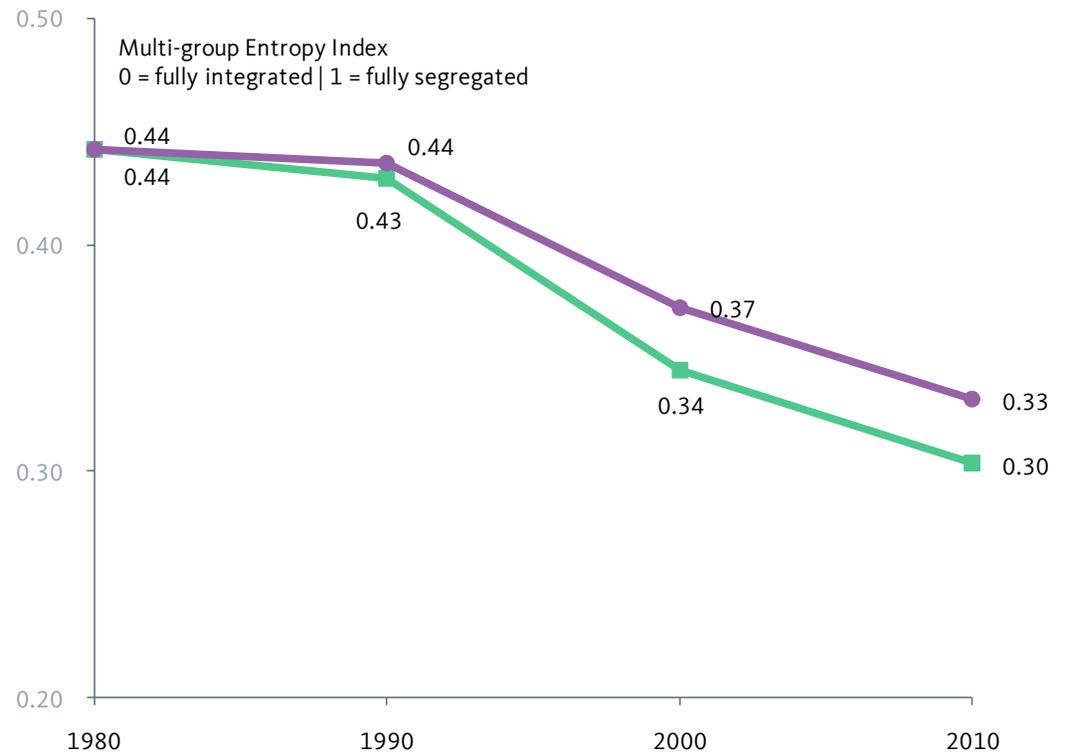
Southeast Florida is less segregated by race/ethnicity than the nation, and segregation has steadily declined over time as the region has become more diverse.

Segregation is measured by the entropy index, which ranges from a value of 0, meaning that all census tracts have the same racial/ethnic composition as the entire metropolitan area (maximum integration), to a high of 1, if all census tracts contained one group only (maximum segregation).

### Residential segregation is decreasing over time at the regional scale

#### 55. Residential Segregation, 1980 to 2010

— Southeast Florida  
— United States



Sources: U.S. Census Bureau; Geolytics. See the "Data and methods" section for details of the residential segregation index calculations.

# Connectedness

## Segregation is decreasing

(continued)

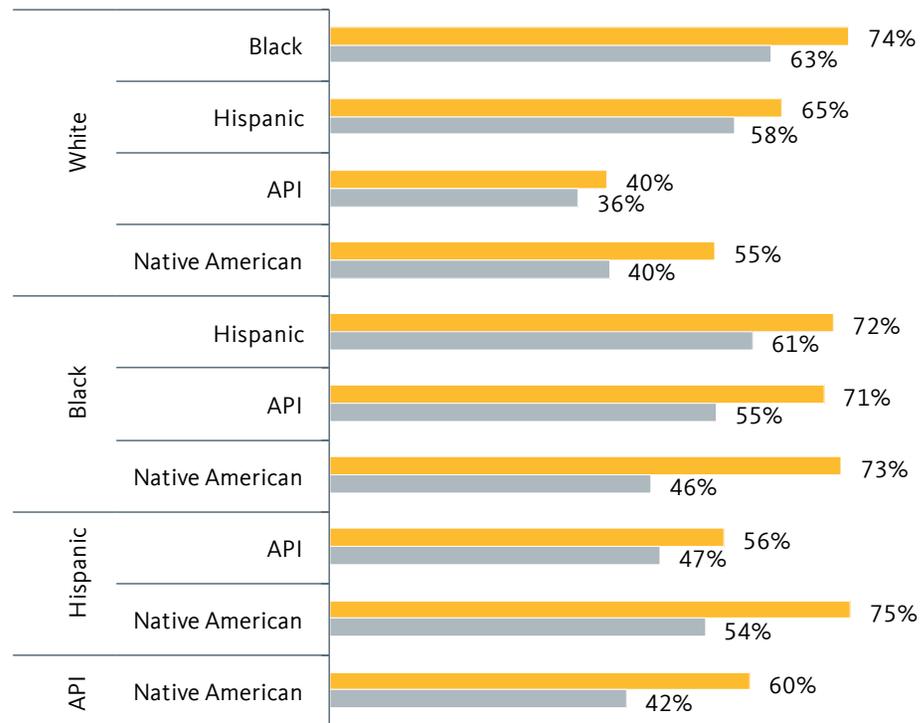
The region’s racial/ethnic groups are becoming more integrated. According to the dissimilarity index, which estimates the share of a given racial/ethnic group that would need to move to a new neighborhood to achieve complete integration, segregation has declined significantly between all groups since 1990.

The dissimilarity index also illustrates how, despite the positive trend, segregation remains. Six out of every ten whites would need to move to achieve integration with blacks or Hispanics. And six out of every ten blacks would need to move to achieve integration with Hispanics.

**Segregation between all groups has decreased since 1990**

**56. Residential Segregation, 1990 and 2010, Measured by the Dissimilarity Index**

■ 1990  
■ 2010



Sources: U.S. Census Bureau; Geolytics. Data reported is the dissimilarity index for each combination of racial/ethnic groups. See the “Data and methods” section for details of the residential segregation index calculations.

# Connectedness

## Concentrated poverty a challenge for communities of color

The share of people living in very high-poverty neighborhoods (those with poverty rates of 40 percent or higher) has remained stable at about three percent since 1980.

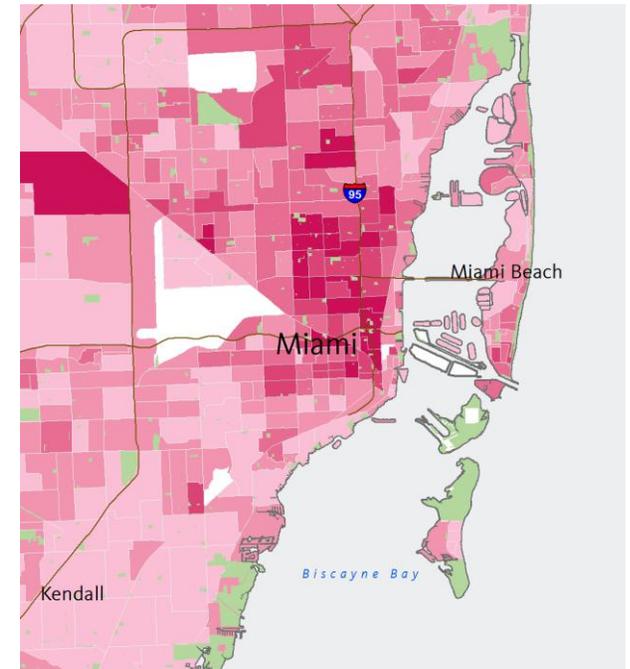
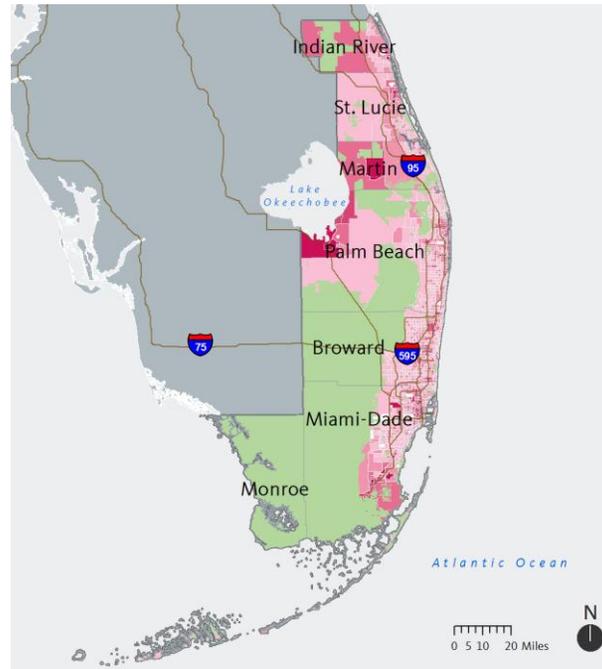
People of color are much more likely to live in neighborhoods with very high poverty levels than whites. Nearly 5 percent of people of color live in very high-poverty tracts compared with 1 percent of whites. In the 20 percent of neighborhoods with the highest shares of people of color (91 percent or more), the average poverty rate is about 23 percent, compared with 12 percent for the region overall.

Very high-poverty neighborhoods are concentrated in the city of Miami, other coastal cities, and west Palm Beach and Martin Counties.

**Neighborhoods of concentrated poverty are found primarily in Miami, other coastal cities, and west Palm Beach and Martin counties**

**57. Percent Population Below the Poverty Level by Census Tract and High People-of-Color Tracts, 2006-2010**

- Less than 10%
- 10% to 19%
- 20% to 29%
- 30% to 39%
- 40% or more
- 91% or more people of color
- Conservation areas and county parks



Source: U.S. Census Bureau. Areas in white are missing data.

# Connectedness

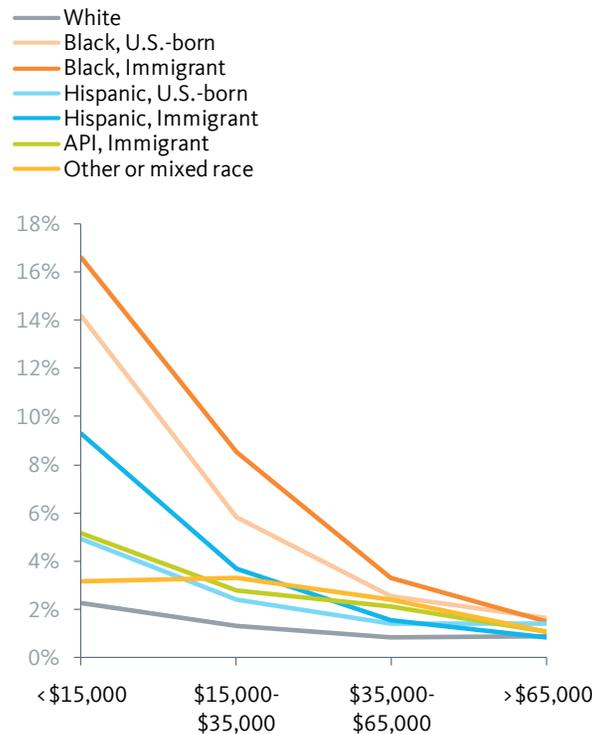
## People of color are more likely to rely on the region's transit system to get to work

Income and race both play a role in determining who uses Southeast Florida's transit system to get to work. Very low-income black (both U.S.-born and immigrant) and Hispanic immigrant residents are most likely to get to work using public transit, but transit use declines rapidly for these groups as incomes increase.

Most households of color are much less likely to own cars than whites and Asians. Black and Hispanic households are the most likely to be carless, followed by Native American households and those of other or mixed racial backgrounds.

### Transit use varies by income and race

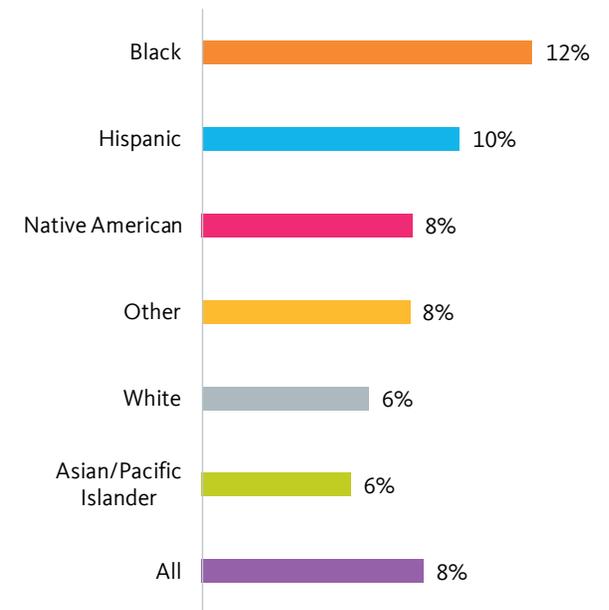
58. Percent Using Public Transit by Annual Earnings and Race/Ethnicity/Nativity, 2006-2010



Source: IPUMS. Universe includes workers ages 16 and older with earnings.

### Households of color are less likely to own cars

59. Percent of Households without a Vehicle by Race/Ethnicity, 2006-2010



Source: IPUMS. Universe includes all households (no group quarters).

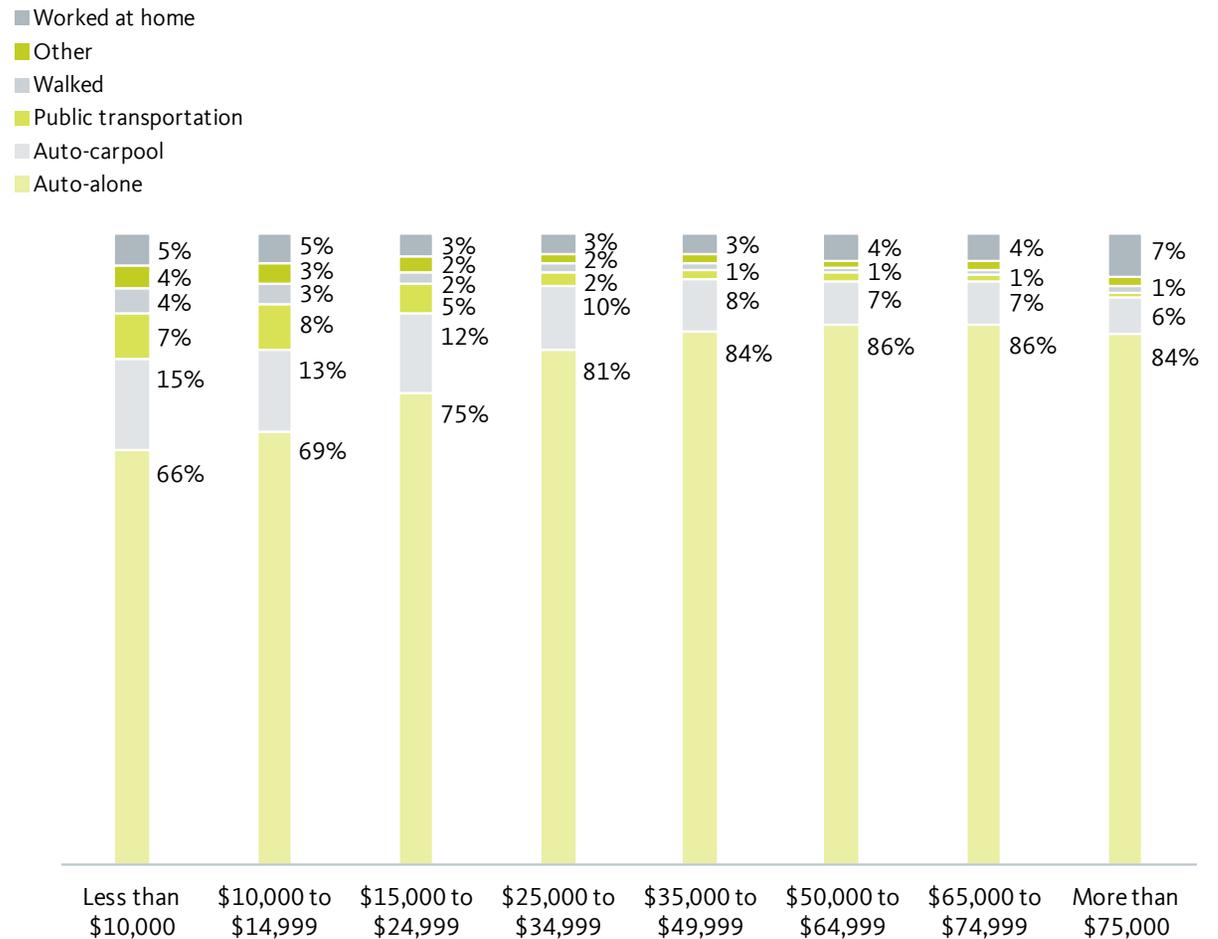
# Connectedness

## Lone commuting increases as income rises

Most residents in the region – 79 percent – drive alone to work, which is about average among the largest 150 metros. Single-driver commuting varies by income, however. Only 67 percent of very low-income workers (earning under \$15,000 per year) drive alone to work, compared with 85 percent of workers who make over \$65,000 a year.

Lower-income residents are less likely to drive alone to work than higher income residents

60. Means of Transportation to Work by Annual Earnings, 2006-2010



Source: U.S. Census Bureau. Universe includes workers ages 16 and older with earnings.

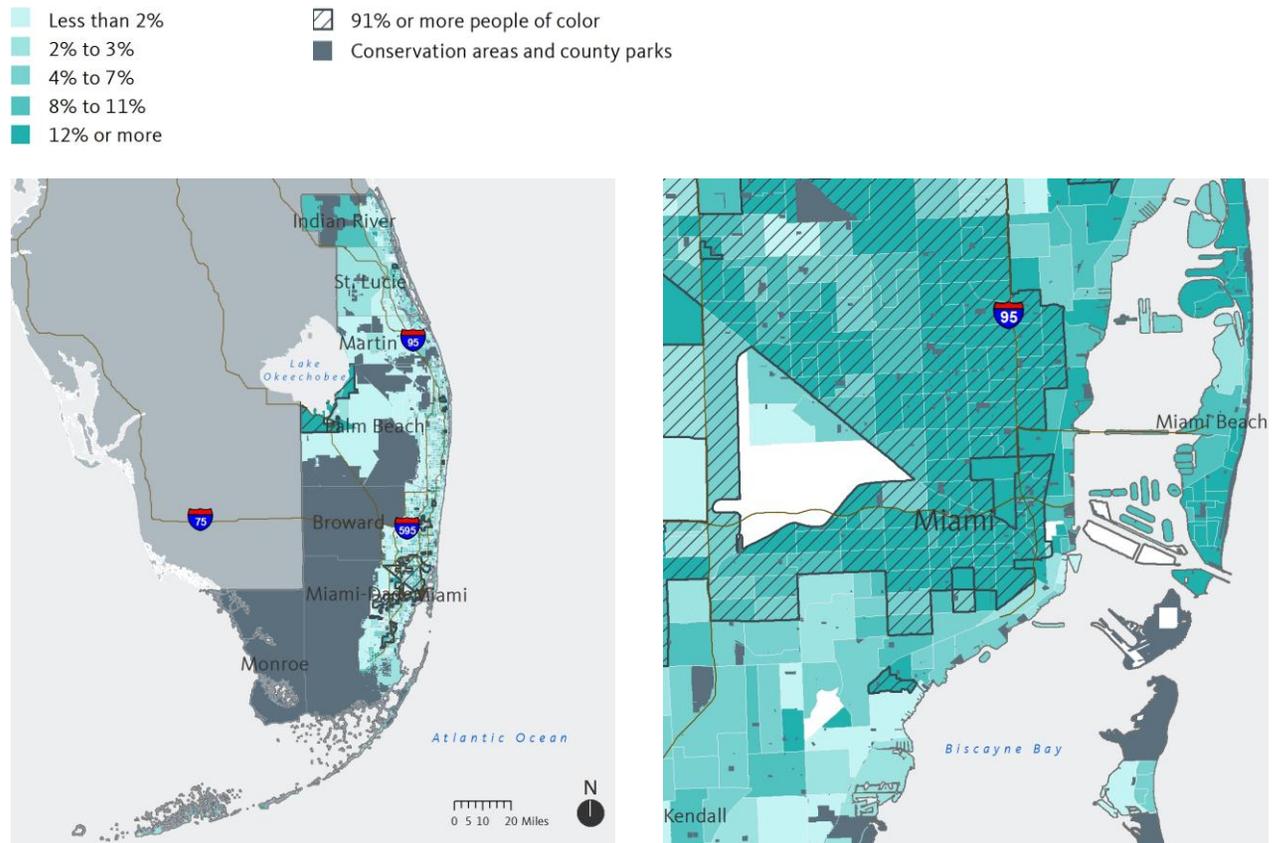
# Connectedness

## Communities of color are more likely to be carless

Although the vast majority of households have access to at least one vehicle, vehicle access varies across the region. Carlessness is particularly high in areas with high concentrations of people of color, which are mostly located in the City of Miami. Neighborhoods with relatively high shares of carless households are found not only in the City of Miami, but also in many of the coastal cities and in the western portions of Palm Beach and Indian River counties.

**Neighborhoods with many carless residents are found in Miami, other coastal cities, and parts of west Palm Beach and Indian River counties**

**61. Percent of Households Without a Vehicle by Census Tract and High People-of-Color Tracts, 2006-2010**



Source: U.S. Census Bureau. Areas in white are missing data.

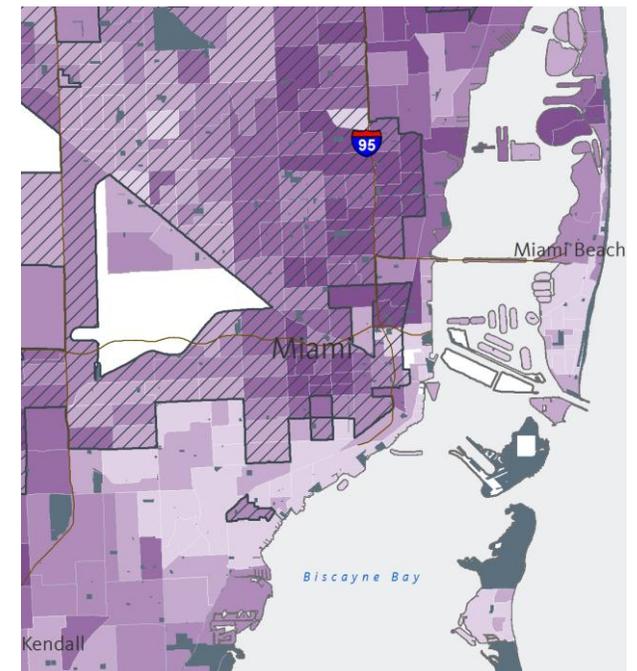
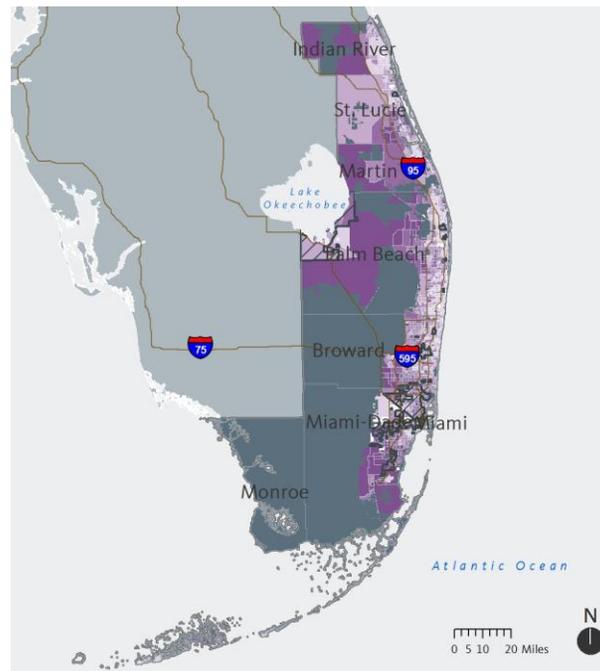
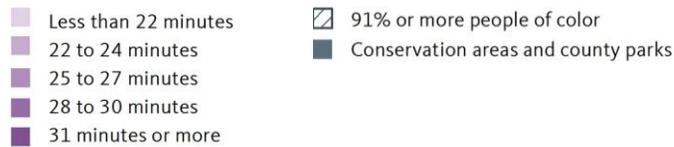
# Connectedness

## Long commutes for urban communities of color and many suburban communities

Workers living in areas west and just south of Miami, as well as the downtown areas of other coastal cities, have the shortest commutes. Many of the neighborhoods with the highest shares of people of color (including in the city of Miami) have medium to long commutes. Workers in parts of Miami-Dade, Palm Beach, Martin, Indian River, and (to a lesser extent) Broward Counties have the longest commutes.

Long commutes most prevalent in urban Miami-Dade County and suburban/rural parts of most other counties

62. Average Travel Time to Work by Census Tract and High People-of-Color Tracts, 2006-2010



Source: U.S. Census Bureau. Areas in white are missing data.

# Connectedness

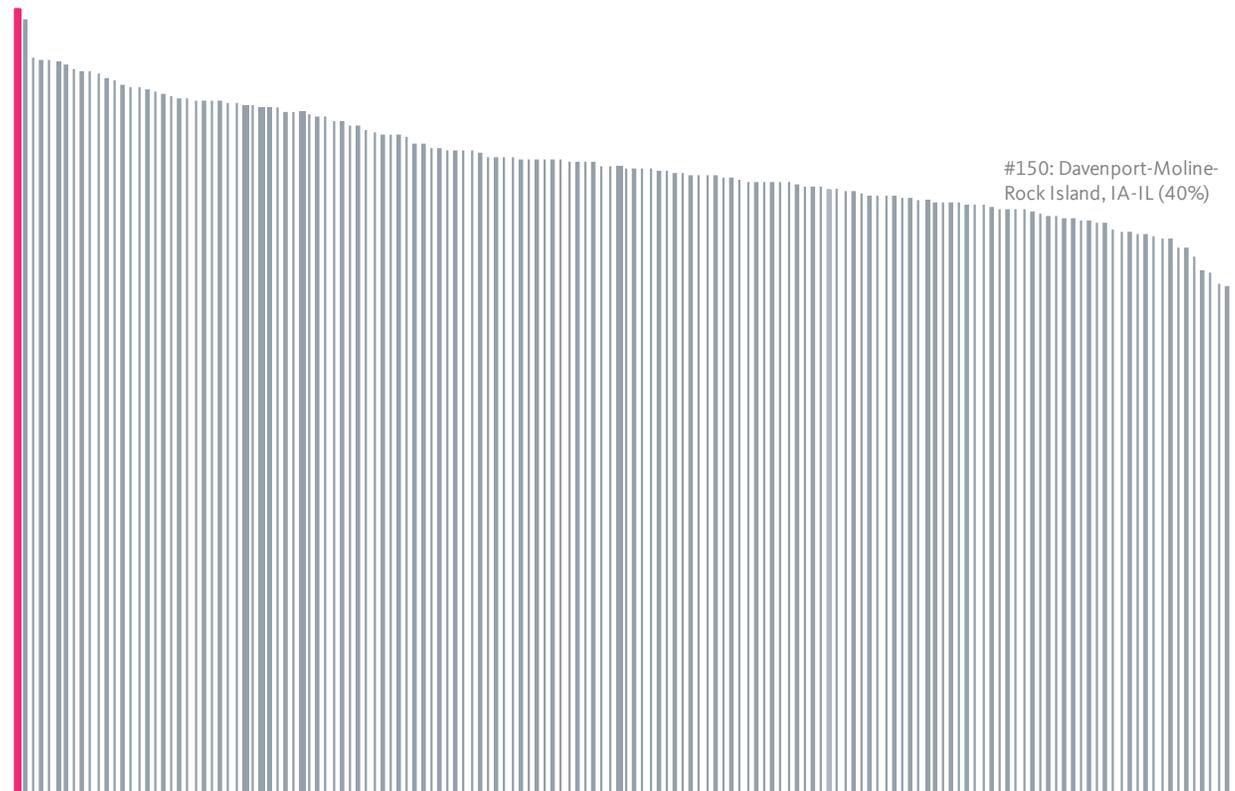
## Highest housing burden in nation

The Southeast Florida region ranks 1<sup>st</sup> among the largest 150 metros in housing burden for both renters and homeowners (defined as spending more than 30 percent of income on housing). While data on housing burden for homeowners in not available for 2000, this represents a relative decline in renter affordability since 2000, when the region ranked 4<sup>th</sup> among the largest 150 metros. Figures from 2006-2010 show that 62 percent of renters are housing burdened (a rise from only 47 percent in 2000), and 46 percent of homeowners are housing burdened. Southeast Florida residents are much more likely to be housing burdened than residents in other similarly sized Southern metros, such as Atlanta, Houston, or Dallas.

**Southeast Florida's tenants face the highest rent burdens among the largest 150 metros**

**63. Share of Households that are Rent Burdened, 2006-2010: Largest 150 Metros Ranked**

**#1: Southeast Florida (62%)**



Source: IPUMS. Universe includes renter-occupied households with cash rent (excludes group quarters).

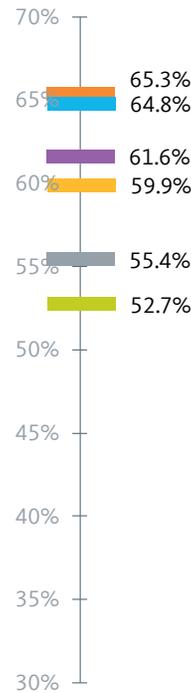
# Connectedness

## Blacks and Hispanics face the highest housing burdens

A majority of renters from all racial/ethnic groups are burdened by their housing costs. Even still, black and Hispanic renters and homeowners have much higher housing burdens than whites, as do people from other and mixed racial backgrounds. Asian homeowners also have higher housing burdens than whites, but this is not the case for Asian renters.

### Blacks and Hispanics have the highest renter housing burden

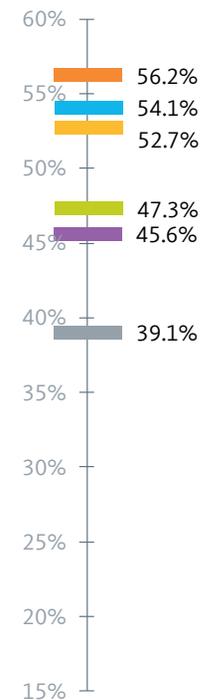
64. Renter Housing Burden by Race/Ethnicity, 2006-2010



Source: IPUMS. Universe includes renter-occupied households with cash rent (excludes group quarters).

### Blacks and Hispanics also have the highest homeowner housing burden

65. Homeowner Housing Burden by Race/Ethnicity, 2006-2010



Source: IPUMS. Universe includes owner-occupied households (excludes group quarters).

# Connectedness

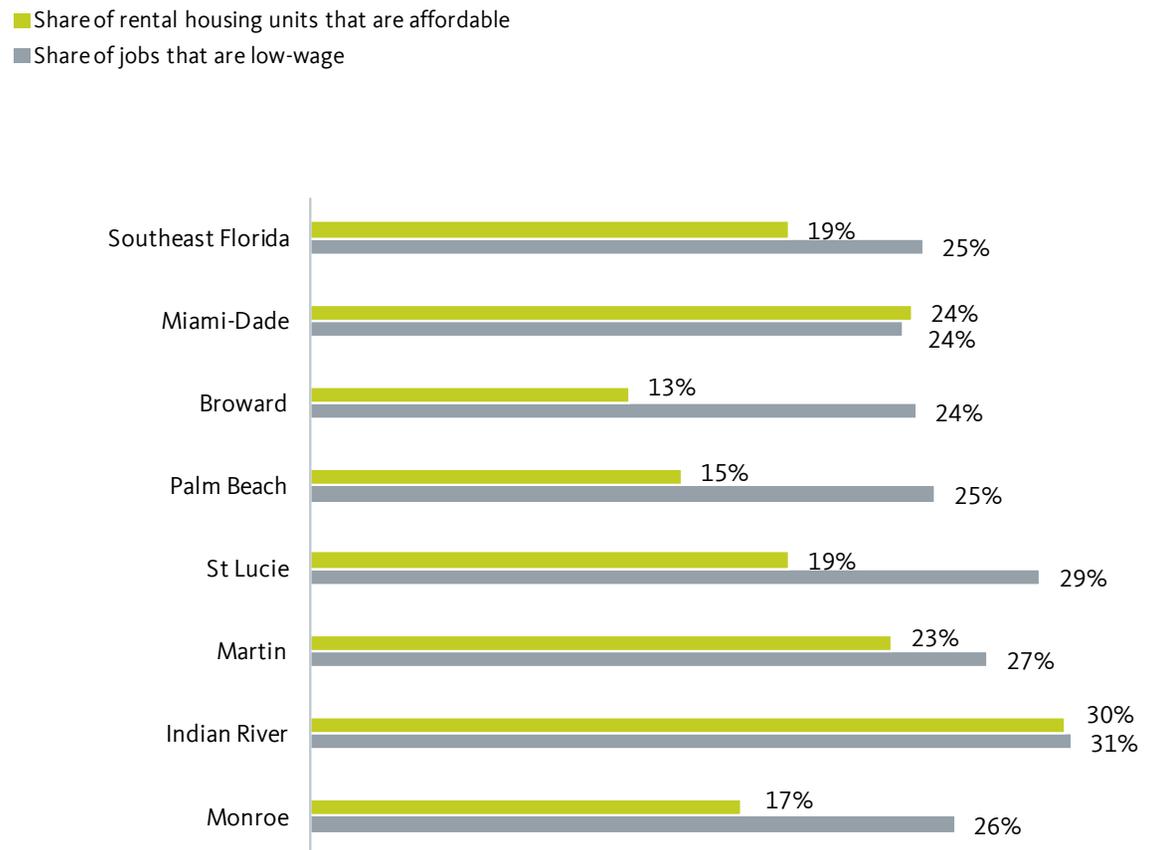
## Jobs-housing mismatch for low-wage workers in some parts of the region

Across the region, 25 percent of jobs are low-wage (paying \$1,250 per month or less) and 19 percent of rental units are affordable for low-wage households (defined as having rent of \$749 per month or less, which would be 30 percent or less of two low-wage workers' incomes). Compared with other large regions, Southeast Florida does not have a particularly high concentration of low-wage jobs, but it does have a particularly low share of affordable rentals, with Broward and Palm Beach counties both having much lower than average shares of affordable rentals (13 and 15 percent).

Comparing affordable rentals to low-wage jobs, Broward, Palm Beach, St. Lucie and Monroe counties stand out as having much higher shares of low-wage jobs than affordable rentals while Miami-Dade and Indian River have a similar share of each.

**Broward, Palm Beach, St. Lucie and Monroe counties have large low-wage jobs/affordable rental housing gaps**

**66. Low-Wage Jobs and Affordable Rental Housing by County**



Source: U.S. Census Bureau.

# Connectedness

## Jobs-housing mismatch for low-wage workers in some parts of the region

(continued)

A low-wage jobs to affordable rental housing ratio in a county with a higher than regional average ratio indicates a lower availability of affordable rental housing for low-wage workers in that county relative to the region overall.

Broward, Palm Beach, Martin, and Monroe counties all have higher ratios than the regional average, indicating a potentially significant shortage of affordable units. Miami-Dade’s ratio is the only one that is well below the regional average.

All counties except Miami-Dade and Indian River appear to have affordable rental housing shortages

67. Low-wage Jobs, Affordable Rental Housing, and Jobs-Housing Ratios by County

	Jobs (2010)		Housing (2006-10)			Jobs-Housing Ratios	
	All	Low-wage	All	Rental*	Affordable Rental*	All Jobs: All Housing	Low-wage Jobs: Affordable Rentals
Miami-Dade	938,014	223,804	827,556	334,497	81,030	1.1	2.8
Broward	695,631	169,685	668,898	196,802	25,343	1.0	6.7
Palm Beach	485,188	122,146	523,150	131,542	19,728	0.9	6.2
St Lucie	62,459	18,350	103,103	23,912	4,617	0.6	4.0
Martin	51,578	14,066	59,203	11,411	2,675	0.9	5.3
Indian River	44,289	13,566	57,560	12,529	3,803	0.8	3.6
Monroe	30,274	7,851	29,791	9,854	1,709	1.0	4.6
<b>Southeast Florida</b>	<b>2,307,433</b>	<b>569,468</b>	<b>2,269,261</b>	<b>720,547</b>	<b>138,905</b>	<b>1.0</b>	<b>4.1</b>

\*Includes only those units paid for in cash rent.

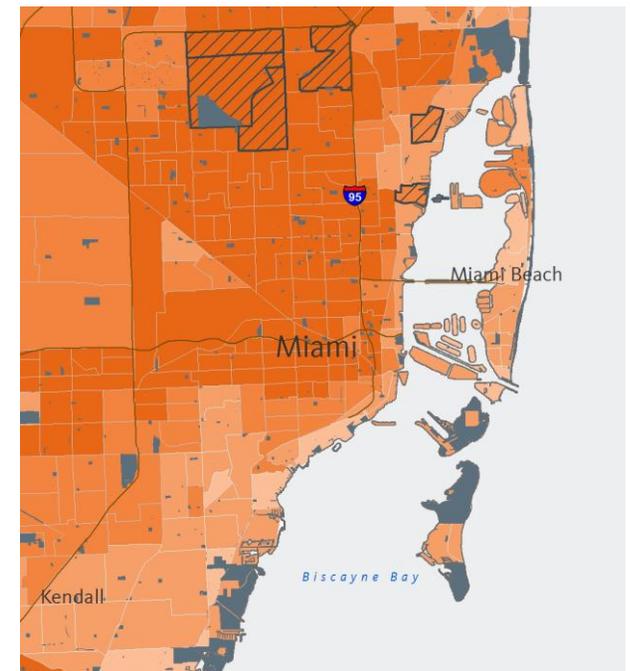
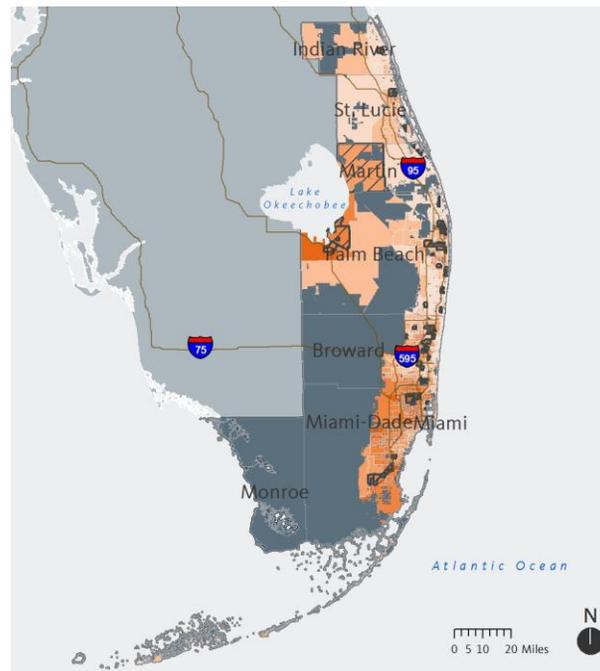
# Connectedness

## Food deserts are primarily in urban communities of color and rural areas

The region's food deserts, defined as low-income census tracts where a substantial number or share of residents have low access to a supermarket or large grocery store, are primarily found in neighborhoods that have high shares of people of color. The region's food deserts are located in western Palm Beach and Martin counties, northern Miami, and dispersed areas throughout the major coastal cities.

Food deserts are dispersed throughout the region, in both rural and urban areas

68. Percent People of Color by Census Tract, 2010, and Food Desert Tracts



Sources: Geolytics; U.S. Department of Agriculture. See the "Data and methods" section for details.

# Connectedness

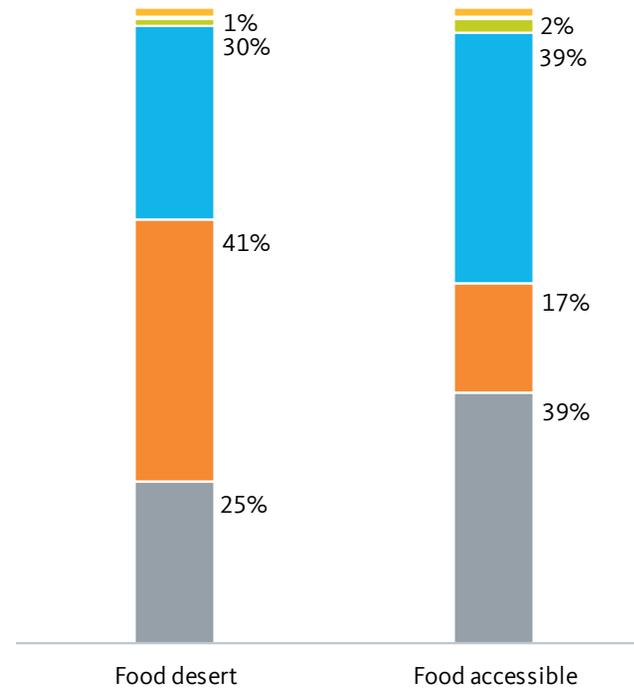
## Food deserts are primarily in urban communities of color and rural areas

(continued)

The region’s food deserts are home to higher shares of people of color compared with the other neighborhoods in the region. Blacks and Hispanics make up a much higher share of the population in food deserts (71 percent) than in areas with better food access (56 percent).

**People of color are more likely to live in food deserts**  
**69. Racial/Ethnic Composition of Food Environments, 2010**

- Other
- Native American
- Asian/Pacific Islander
- Hispanic
- Black
- White



Sources: U.S. Census Bureau; U.S. Department of Agriculture. See the “Data and methods” section for details.

# Implications



# Implications

## Building a more equitable region

Although Southeast Florida's economy is growing, that growth is highly unequal and it is not translating into widespread prosperity for the region's residents. Only the highest earners have seen income gains and there are wide racial gaps in employment; income; health; and access to transportation, affordable housing, and healthy food. At the same time, the region is becoming more racially and ethnically diverse, and communities of color are contributing all of its population growth. Reversing the trend of growing inequality and better connecting its communities of color to jobs, housing, transportation, healthy neighborhoods, and quality education and training opportunities are critical to the region's long-term health, competitiveness, and quality of life.

Thankfully, the region's leaders in the public, private, and community sectors are working – increasingly in concert – to advance strategies that counter these trends and set the region on the course of equitable growth. Based on this analysis of equity indicators, PolicyLink and PERE suggest the following areas of focus

as they continue to evolve their strategies and launch new efforts:

### **Bridge the racial generation gap.**

Bridging the racial generation gap between youth of color and a predominantly white senior population is important to the region's long-term economic growth and prosperity. The region needs high-quality public schools and workforce training programs to prepare its emerging workforce for the jobs of tomorrow, and support from seniors will be necessary to make those public investments. Multigenerational communities, which “make cities and neighborhoods accessible, safe, and inclusive for children, youth, families, adults, and the elderly,” can help to foster relationships and understanding.<sup>1</sup> Such communities allow seniors to age in place while providing safe and healthy environments for families to raise children. Southeast Florida can also facilitate social interaction between residents of all ages through thoughtful investments in community facilities and public spaces. Promoting active and accessible public

engagement in local and regional planning processes will also help the state build the diverse leadership it needs to succeed in the future.

### **Grow good jobs.**

A robust strategy for growing jobs that match the educational profiles of its workforce and provide family-supporting wages, benefits, and career ladders would reduce unemployment and working poverty. Focusing economic and workforce development efforts on the industry sectors and occupations that show signs of strength and pay living wages can help grow the “high-opportunity” jobs that anchor a broad middle class. Supporting policies and growth strategies that ensure strong and rising wages, especially for low-wage workers, is also important for reducing inequality and working poverty. Our analysis of strong industries in the region suggests that health care and wholesale trade are sectors in which public and private investment could help grow middle-wage jobs, and that boosting wages in the accommodation and food services sector

# Implications

## Building a more equitable region

(continued)

would have a large payoff for many families.

### Connect unemployed and low-wage workers to careers in high-growth industries.

Strengthening the pathways into good jobs for communities of color, disconnected youth, unemployed and underemployed adults, and low-wage workers will help manifest the potential of the region's residents to participate in the economy and contribute to economic growth. Workforce partnerships between employers, community colleges, unions, nonprofit training providers, and workforce agencies are a proven strategy to connect workers who have lower education levels and face employment barriers with advanced training, education, and other work supports that lead to careers. Our occupations analysis also shows that there are promising job opportunities for workers without college degrees in the infrastructure sector. Public investments in infrastructure, coupled with local hiring and construction career pathways strategies targeted to disadvantaged workers, can increase job

access and incomes.

### Strengthen educational pathways.

Low educational attainment for blacks and Hispanics remains a critical issue for the region, even as the region's public, private, nonprofit, and educational leaders have made progress over the last few decades to close racial gaps. The high number of youth not in school or work highlights the importance of increasing high school and associate degree graduation rates throughout the region.

### Increase housing affordability.

With the highest housing burden rates among the largest 150 metros for both renters and homeowners, the Southeast Florida region needs to incentivize and prioritize the development and preservation of housing affordable to lower-income residents and co-located with transportation and economic development investments. Our analysis of low-wage jobs and affordable rentals indicates that some counties in the region need to provide much more affordable rental housing in order to provide low-wage workers with an

opportunity to live near work and reduce their commute time and associated costs.

### Create healthier neighborhoods.

Ensuring that the region's neighborhoods promote health – by making it possible, easy, and affordable to choose a healthy diet and be physically active – would help close health gaps for people of color, create more vibrant places, strengthen economic productivity, and reduce health-care costs. Implementing healthy neighborhoods strategies such as complete streets for all users, access to healthy food, and pedestrian-friendly community design in low-income communities of color can foster healthy, active living among the groups who are most at risk for preventable diseases.

### Expand transportation choices and mobility.

The region's public transportation system plays an important role in connecting its communities of color to jobs and other economic opportunities located throughout the region. By coordinating transportation

# Implications

## Building a more equitable region

(continued)

investments with housing, education, and economic development investments, the region can more effectively revitalize neighborhoods and reduce concentrated poverty, segregation, and housing and transportation burdens.

### Ensure diverse civic participation and leadership.

Given the region's rapid demographic shifts, it is important to take deliberate steps to ensure that all of Southeast Florida's racial and ethnic communities can actively participate in local and regional planning processes. The public, private, and philanthropic sectors should support leadership development and capacity-building efforts focused on the region's growing diverse communities to build the region's multicultural and multiracial regional leadership.

### Conclusion

Implementing a growth model that is driven by equity – just and fair inclusion into a society in which everyone can participate

and prosper – is Southeast Florida's path to shared economic prosperity and community vitality. Through concerted investments and proactive policies, the region can leverage its rising diversity as an economic asset, and prepare all of its workers to lead it into the next economy.

# Data and methods

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# Data and methods

## Data source summary and regional geography

Unless otherwise noted, all of the data and analyses presented in this equity profile are the product of PolicyLink and the USC Program for Environmental and Regional Equity (PERE).

The specific data sources are listed in the table on the right. Unless otherwise noted, the data used to represent the region was assembled to match the seven-county regional definition used by the Southeast Florida Regional Partnership, and includes the following counties: Miami-Dade, Broward, Palm Beach, St. Lucie, Martin, Indian River, and Monroe.

While much of the data and analyses presented in this equity profile are fairly intuitive, in the following pages we describe some of the estimation techniques and adjustments made in creating the underlying database, and provide more detail on terms and methodology used. Finally, the reader should bear in mind that while only a single region is profiled here, many of the analytical choices in generating the underlying data and

Source	Dataset
Integrated Public Use Microdata Series (IPUMS)	1980 5% State Sample
	1990 5% Sample
	2000 5% Sample
	2006 through 2010 American Community Survey (ACS), pooled single-year, 1%, samples
	2010 American Community Survey
U.S. Census Bureau	1980 Summary Tape File 1 (STF1)
	1980 Summary Tape File 2 (STF2)
	1980 Summary Tape File 3 (STF3)
	1990 Summary Tape File 2A (STF2A)
	1990 Modified Age/Race, Sex and Hispanic Origin File (MARS)
	1990 Summary Tape File 4 (STF4)
	2000 Summary File 1 (SF1)
	2000 Summary File 3 (SF3)
	2010 ACS 5-year Summary File (2010 5-year ACS)
	2010 Summary File 1 (SF1)
	2010 Local Employment Dynamics, LODES 6
	2008 National Population Projections
	Cartographic Boundary Files, 2000 Census Block Groups
	Cartographic Boundary Files, 2000 Census Block Tracts
2010 TIGER/Line Shapefiles, 2010 Census Tracts	
2010 TIGER/Line Shapefiles, 2010 Counties	
Geolytics	1980 Long Form in 2000 Boundaries
	1990 Long Form in 2000 Boundaries
	2010 Summary File 1 in 2000 Boundaries
U.S. Department of Agriculture	Food Desert Locator
Woods & Poole Economics	2011 Complete Economic and Demographic Data Source
U.S. Bureau of Economic Analysis	Gross Domestic Product by State, 1979 through 2010
	Gross Domestic Product by Metropolitan Area, 1979 through 2010
	Local Area Personal Income Accounts, CA30: regional economic profile, 1979 through 2010
U.S. Bureau of Labor Statistics	Quarterly Census of Employment and Wages
	Local Area Unemployment Statistics
	Occupational Employment Statistics
Centers for Disease Control and Prevention	Behavioral Risk Factor Surveillance System

# Data and methods

## Data source summary and regional geography

(continued)

analyses were made with an eye toward replicating the analyses in other regions and the ability to update them over time. Thus, while there may be regionally specific data available that is more recent and/or illuminating than what is presented here, a necessary and often painful choice was made (given our love of all data!) to disregard such sources to serve the higher purpose of comparability and replicability over time.

# Data and methods

## Selected terms and general notes

### Broad racial/ethnic origin

In all of the analyses presented, all categorization of people by race/ethnicity and nativity is based on individual responses to various census surveys. All people included in our analyses were first assigned to one of six mutually exclusive racial/ethnic categories, depending on their response to two separate questions on race and Hispanic origin as follows:

- “White” and “non-Hispanic white” are used to refer to all people who identify as white alone and do not identify as being of Hispanic origin.
- “Black” and “African American” are used to refer to all people who identify as black or African American alone and do not identify as being of Hispanic origin.
- “Hispanic” and “Latino” are used to refer to all people who identify as being of Hispanic origin, regardless of racial identification.
- “Asian,” “Asian/Pacific Islander,” and “API” are used to refer to all people who identify as Asian or Pacific Islander alone and do not identify as being of Hispanic origin.

- “Native American” and “Native American and Alaskan Native” are used to refer to all people who identify as Native American or Alaskan Native alone and do not identify as being of Hispanic origin.
- “Other” and “other or mixed race” are used to refer to all people who identify with a single racial category not included above, or identify with multiple racial categories, and do not identify as being of Hispanic origin.
- “People of color” or “POC” is used to refer to all people who do not identify as non-Hispanic white.

### Nativity

The term “U.S.-born” refers to all people who identify as being born in the United States (including U.S. territories and outlying areas), or born abroad of American parents. The term “immigrant” refers to all people who identify as being born abroad, outside of the United States, of non-American parents.

### Detailed racial/ethnic ancestry

Given the diversity of ethnic origin and substantial presence of immigrants among the Latino, Asian and black populations, we sometimes present data for more detailed racial/ethnic categories within these groups. In order to maintain consistency with the broad racial/ethnic categories, and to enable the examination of second-and-higher generation immigrants, these more detailed categories (referred to as “origin” or “ancestry”) are drawn from the same two questions on race and Hispanic origin. For example, while country-of-origin information could have been used to identify Filipinos among the Asian population or Salvadorans among the Latino population, it could only do so for immigrants, leaving only the broad “Asian” and “Latino” racial/ethnic categories for the U.S.-born population. For the black population, however, responses to the question on race do not provide sufficient detail to identify subgroups within the black population so we utilize the first response to the question on ancestry. While these methodological choices make little

# Data and methods

## Selected terms and general notes

(continued)

difference in the numbers of immigrants by detailed origin we report – i.e., the vast majority of immigrants from El Salvador mark “Salvadoran” under Hispanic origin – it is an important point of clarification.

### Other selected terms

Below we provide some definitions and clarification around some of the terms used in the equity profile:

- The terms “region,” “metropolitan area,” “metro area,” and “metro,” are used interchangeably to refer to the geographic areas defined as Metropolitan Statistical Areas by the U.S. Office of Management and Budget, as well as to the region that is the subject of this profile as defined above.
- The term “neighborhood” is used at various points throughout the equity profile. While in the introductory portion of the profile this term is meant to be interpreted in the colloquial sense, in relation to any data analysis it refers to census tracts.
- The term “communities of color” generally refers to distinct groups defined by

race/ethnicity among people of color.

- The term “very high-poverty neighborhood” refers to census tracts with a poverty rate of greater than or equal to 40 percent.
- The term “high POC tracts” (or “high people-of-color tracts”) refers to census tracts in which people of color account for 91 percent of the population or more.
- The term “full-time” workers refers to all persons in the IPUMS microdata who reported working at least 45 or 50 weeks (depending on the year of the data) and usually worked at least 35 hours per week during the year prior to the survey. A change in the “weeks worked” question in the 2008 ACS, as compared with prior years of the ACS and the long form of the decennial census, caused a dramatic rise in the share of respondents indicating that they worked at least 50 weeks during the year prior to the survey. To make our data on full-time workers more comparable over time, we applied a slightly different definition in 2008 and later than in earlier years: in 2008 and later, the “weeks worked” cutoff is at

least 50 weeks while in 2007 and earlier it is 45 weeks. The 45-week cutoff was found to produce a national trend in the incidence of full-time work over the 2005-2010 period that was most consistent with that found using data from the March Supplement of the Current Population Survey, which did not experience a change to the relevant survey questions. For more information, see [http://www.census.gov/acs/www/Downloads/methodology/content\\_test/P6b\\_Weeks\\_Worked\\_Final\\_Report.pdf](http://www.census.gov/acs/www/Downloads/methodology/content_test/P6b_Weeks_Worked_Final_Report.pdf).

### General notes on analyses

Below we provide some general notes about the analysis conducted:

- At several points in the profile we present rankings comparing the profiled region to the “largest 150 metros” or “largest 150 regions,” and refer in the text to how the profiled region compares with these metros. In all such instances, we are referring to the largest 150 metropolitan statistical areas in terms of 2010 population. If the geography of the profiled region does not conform to the “official” metro area definitions used by

# Data and methods

## Selected terms and general notes

(continued)

the U.S. Office of Management and Budget, then we substitute the “custom” profiled region in place of the best corresponding official metro area. For example, for the profile created for the seven-county area served by the Southeast Florida Regional Partnership, we substitute the seven-county region in for the official three-county Miami-Fort Lauderdale-West Palm Beach metro area.

In regard to monetary measures (income, earnings, wages, etc.) the term “real” indicates the data has been adjusted for inflation. All inflation adjustments are based on the Consumer Price Index for all Urban Consumers (CPI-U) from the U.S. Bureau of Labor Statistics, available at:  
<ftp://ftp.bls.gov/pub/special.requests/cpi/cpiait.txt>.

- Some may wonder why the graph on page 32 indicates the years 1979, 1989, and 1999 rather than the actual survey years from which the information is drawn (1980, 1990, and 2000, respectively). This is because income information in the decennial census for those years is reported

for the year prior to the survey. While seemingly inconsistent, the actual survey years are indicated in the graphs on page 36 depicting rates of poverty and working poverty, as these measures are partly based on family composition and work efforts at the time of the survey, in addition to income from the year prior to the survey.

# Data and methods

## Summary measures from IPUMS microdata

### About IPUMS microdata

Although a variety of data sources were used, much of our analyses is based on a unique dataset created using microdata samples (i.e., “individual-level” data) from the Integrated Public Use Microdata Series (IPUMS), for four points in time: 1980, 1990, 2000, and 2006 through 2010 “pooled” together. While the 1980 through 2000 files are based on the decennial census and cover about 5 percent of the U.S. population each, the 2006 through 2010 files are from the American Community Survey (ACS) and cover only about 1 percent of the U.S. population each. Five years of ACS data were pooled together to improve the statistical reliability and to achieve a sample size that is comparable to that available in previous years. Survey weights were adjusted as necessary to produce estimates that represent an average over the 2006 through 2010 period.

Compared with the more commonly used census “summary files,” which include a limited set of summary tabulations of population and housing characteristics, use of

the microdata samples allows for the flexibility to create more illuminating metrics of equity and inclusion, and provide a more nuanced view of groups defined by age, race/ethnicity, and nativity in each region of the United States.

### A note on sample size

While the IPUMS microdata allows for the tabulation of detailed population characteristics, it is important to keep in mind that because such tabulations are based on samples, they are subject to a margin of error and should be regarded as estimates – particularly in smaller regions and for smaller demographic subgroups. In an effort to avoid reporting highly unreliable estimates, we do not report any estimates that are based on a universe of fewer than 100 individual survey respondents (i.e., unweighted  $N < 100$ ).

### Geography of IPUMS microdata

A key limitation of the IPUMS microdata is geographic detail: each year of the data has a particular “lowest-level” of geography associated with the individuals included,

known as the Public Use Microdata Area (PUMA) or “County Groups” in 1980. PUMAs are generally drawn to contain a population of about 100,000, and vary greatly in size from being fairly small in densely populated urban areas, to very large in rural areas, often with one or more counties contained in a single PUMA.

The major challenge for our purposes is that PUMAs do not neatly align with the boundaries of metropolitan areas, often with several PUMAs entirely contained within the core of the metropolitan area but several other, more peripheral PUMAs straddling the metropolitan area boundary.

The map of 2000 PUMAs shown on the following page illustrates the geographic issue, using the Southeast Florida region as an example. Each PUMA is given a unique color, and overlaid on the PUMAs are county boundaries and the boundaries of the Southeast Florida region.

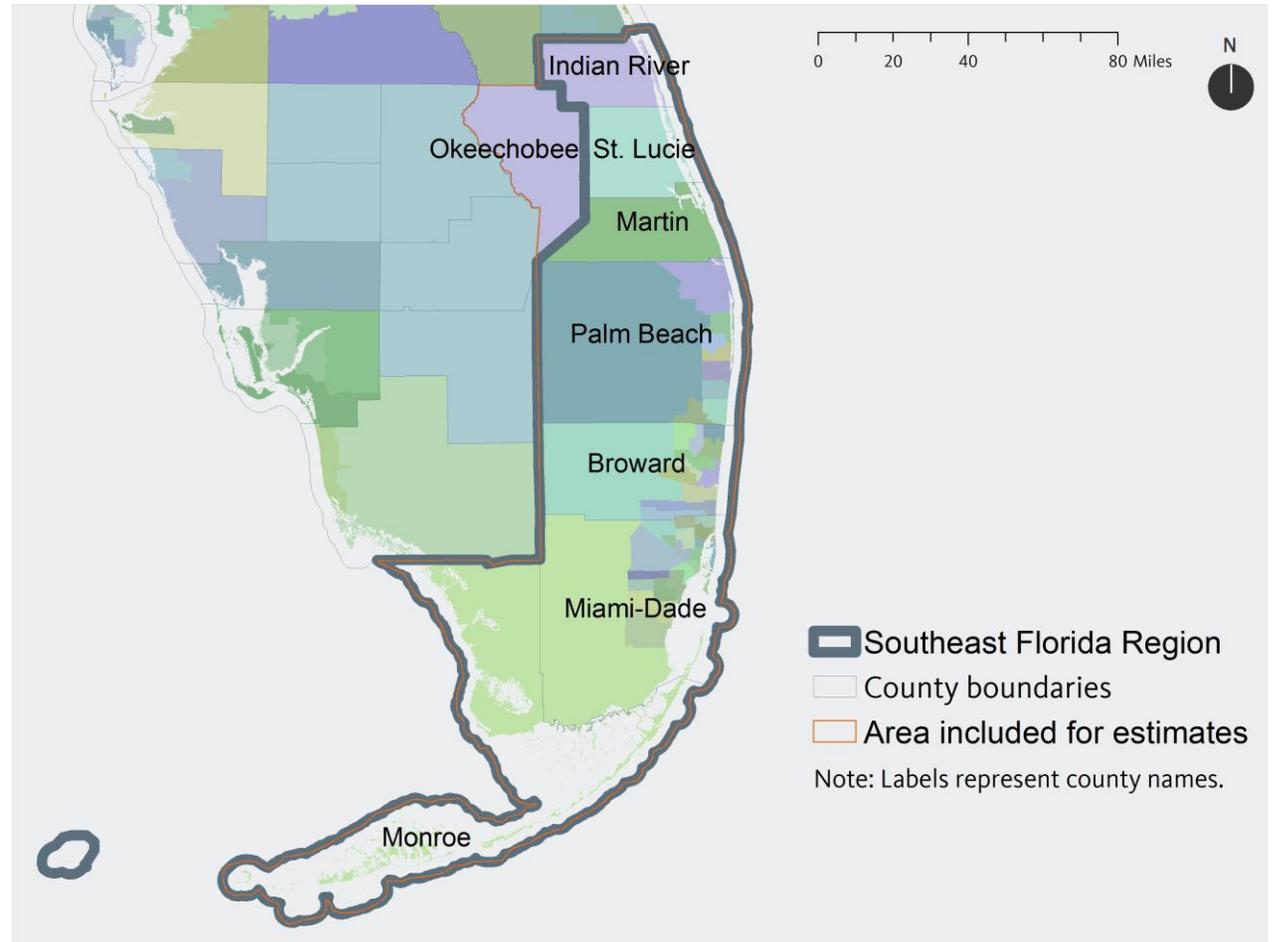
# Data and methods

## Summary measures from IPUMS microdata

(continued)

The area outlined in orange is the area that was used to generate summary measures for the region from the 2000 microdata. As can be seen, the area used for estimation approximates the region but does not match it perfectly. In particular, Okeechobee County falls outside the region but is included because it is part of the same PUMA that contains Indian River County, which is a part of the region.

Adding to the challenge is that while the same PUMAs were used for both the 2000 and 2006-2010 microdata, the 1980 and 1990 microdata each have their own distinct PUMA geographies. Thus, in order to summarize measures at the regional level, we had to first create a set of geographic crosswalks between the PUMAs and the region for each year of microdata, down-weighting appropriately when PUMAs extended beyond the regional boundary.



# Data and methods

## Summary measures from IPUMS microdata

(continued)

### PUMA-to-region crosswalk

To create a geographic crosswalk between PUMAs and the region for the 1980, 1990, 2000, and 2006-2010 microdata, we estimated the share of each PUMA’s population that fell inside the region using population information for each year from Geolytics at the 2000 census block group level of geography (2010 population information was used for the 2006-2010 geographic crosswalk). If the share was at least 50 percent, then the PUMAs were assigned to the region and included in generating our regional summary measures. For most PUMAs assigned to the region, the share was 100 percent – and we refer to these below as “completely contained” PUMAs. For the remaining PUMAs, the share was somewhere between 50 and 100 percent, and this share was used as the “PUMA adjustment factor” to adjust downward the survey weights for individuals included in such PUMAs in the microdata when estimating regional summary measures. For example, in the map shown earlier, the PUMA containing Okeechobee and Indian River Counties was

estimated to have 76 percent of its population falling inside the region (in Indian River County), and 24 percent outside the region (in Okeechobee County). Because we cannot identify where individuals in microdata in this PUMA live – we only know their PUMA – we downweighted all individuals from this PUMA by 24 percent (multiplying their survey weights by 0.76) when making estimates for the region. Finally, we made one final adjustment to the individual survey weights in the microdata to ensure that the weighted sum of the population from the PUMAs assigned to the region matched the regional total population that we got from the official census summary files for each year. We calculated a “regional adjustment factor” that was equal to the total population count we got for the region from the 2000 Census Summary File 1 divided by the weighted sum of the population across the included PUMAs (after applying the PUMA adjustment factor described earlier). Thus, the final adjusted survey weight we used to make all regional estimates was equal to the product of the original survey weight in

the IPUMS microdata, the PUMA adjustment factor, and the regional adjustment factor. The table below summarizes the characteristics of the geographic fit for the Southeast Florida region for each year of the microdata.

	1980	1990	2000	2006-2010
Percentage of regional population from "completely contained" PUMAs	1.0000	0.9633	0.9795	0.9776
Regional adjustment factor	0.9960	1.0183	0.9999	1.0005

# Data and methods

## Adjustments made to census summary data on race/ethnicity by age

Demographic change and what is referred to as the “racial generation gap” (pages 24-25) are important elements of the equity profile. Due to their centrality, care was taken to generate consistent estimates of people by race/ethnicity and age group (under 18, 18-64, and over 64) for the years 1980, 1990, 2000, and 2010, at the county level, which was then aggregated to the regional level and higher. The racial/ethnic groups include non-Hispanic white, non-Hispanic black, Hispanic/Latino, non-Hispanic Asian and Pacific Islander, non-Hispanic Native American/Alaskan Native, and non-Hispanic other (including other single race alone and those identifying as multiracial). While for 2000 and 2010, this information is readily available in SF1 of each year, for 1980 and 1990, estimates had to be made to ensure consistency over time, drawing on two different summary files for each year.

For 1980, while information on total population by race/ethnicity for all ages combined was available at the county level for all the requisite groups in STF1, for

race/ethnicity by age group we had to look to STF2, where it was only available for non-Hispanic white, non-Hispanic black, Hispanic, and the remainder of the population. To estimate the number non-Hispanic Asian and Pacific Islanders, non-Hispanic Native Americans/Alaskan Natives, and non-Hispanic others among the remainder for each age group, we applied the distribution of these three groups from the overall county population (of all ages) from STF1.

For 1990, population by race/ethnicity at the county level was taken from STF2A, while population by race/ethnicity taken from the 1990 Modified Age Race Sex (MARS) file – a special tabulation of people by age, race, sex, and Hispanic origin. However, to be consistent with the way race is categorized by the Office of Management and Budget’s (OMB) Directive 15, the MARS file allocates all persons identifying as “other race” or multiracial to a specific race. After confirming that population totals by county were consistent between the MARS file and STF2A, we calculated the number of “other race” or

multiracial that had been added to each racial/ethnic group in each county (for all ages combined) by subtracting the number that is reported in STF2A for the corresponding group. We then derived the share of each racial/ethnic group in the MARS file that was made up of “other race” or multiracial people and applied this share to estimate the number of people by race/ethnicity and age group exclusive of the “other race” and multiracial, and finally number of the “other race” and multiracial by age group.

# Data and methods

## Adjustments made to demographic projections

### National projections

On page 22, national projections of the non-Hispanic white share of the population are shown. These are based on the latest national projections from the U.S. Census Bureau of the population by race/ethnicity at the time of the analysis (the 2008 National Population Projections). However, because those projections are based on the 2000 Census and the 2010 Census has since been released, we made some minor adjustments to incorporate the recently released 2010 Census results and to ensure consistency in the racial/ethnic categories included in our historical analysis of demographic change.

As noted above, while our categorization of race/ethnicity includes a non-Hispanic other category (including other single race alone and those identifying as multiracial), the 2008 National Population Projections follow OMB 1997 guidelines and essentially distribute the non-Hispanic other single race alone group across the other defined racial ethnic categories. Specifically, we compared the percentage of the total population composed

of each racial/ethnic group in the projected data for 2010 to the actual percentage reported by the 2010 Census. We subtracted the projected percentage from the actual percentage for each group to derive an adjustment factor, and carried this adjustment factor forward by adding it to the projected percentage for each group in each projection year.

Finally, we applied the adjusted population distribution by race/ethnicity to the total projected population from the 2008 National Population Projections to get the projected number of people by race/ethnicity.

# Data and methods

## Adjustments made to demographic projections

(continued)

### County and regional projections

On page 23, projections of the racial/ethnic composition by region and county are also presented. These are based on initial county-level projections from Woods & Poole Economics, Inc. However, given that they were made prior to the release of the 2010 Census, and they use a different categorization of race than we use, a careful set of adjustments were made to incorporate the recently released 2010 Census results and to ensure consistency with the racial/ethnic categories included in our historical analysis of demographic change. Once all adjustments were made at the county level, the results were aggregated to produce a final set of projections at the regional and state levels.

Similar to the 1990 MARS file described above, the Woods & Poole projection follows the OMB Directive 15 race categorization, assigning all persons identifying as “other race” or multiracial to one of the five mutually exclusive race categories: white, black, Latino, Asian/Pacific Islander, or Native American. Thus, we first generated an adjusted version

of the county-level Woods & Poole projections that removed the other and multiracial group from each of these five categories. This was done by comparing the Woods & Poole projections for 2010 to the actual 2010 Census results, figuring out the share of each racial ethnic group in the Woods & Poole data that was composed of others and multiracials in 2010, and applying it forward to later projection years. From these projections we calculated the county-level distribution by race/ethnicity in each projection year for the five groups (white, black, Latino, Asian/Pacific Islander, and Native American), exclusive of others and multiracials.

To estimate the county-level other and multiracial share of the population in each projection year, we then generated a simple straight-line projection of this share using information from SF1 of the 2000 and 2010 Census. Keeping the projected other and multiracial share fixed, we allocated the remaining population share to each of the other five racial/ethnic groups by applying the

racial/ethnic distribution implied by our adjusted Woods & Poole projections for each county and projection year.

The result was a set of adjusted projections for the six-group racial/ethnic distribution in each county, which was then applied to projections of the total population by county from Woods & Poole to get projections of the number of people for each of the six racial/ethnic groups. Finally, these county-level projections were adjusted to match our adjusted national projections by race/ethnicity using a simple Iterative Proportional Fitting (IPF) procedure.

# Data and methods

## Estimates and adjustments made to BEA data on GDP, GRP, and GSP

The data presented on page 28 on national Gross Domestic Product (GDP) and its analogous regional measure, Gross Regional Product (GRP) – both referred to as GRP in the text – is based on data from the U.S. Bureau of Economic Analysis (BEA). However, due to changes in the estimation procedure used for the national (and state-level) data in 1997, a lack of metropolitan area estimates prior to 2001, and no available county-level estimates for any year, a variety of adjustments and estimates were made to produce a consistent series at the national, state, metropolitan area, and county levels from 1969 to 2010. Because the regional definition used for this particular equity profile does not match the official metropolitan area definition used by BEA, the GRP data reported is an aggregation of our final county-level estimate of gross product across the counties contained in the region.

### **Adjustments at the state and national levels**

While data on Gross State Product (GSP) are not reported directly in the equity profile, they were used in making estimates of gross

product at the county level for all years and at the regional level prior to 2001, so we applied the same adjustments to the data that were applied to the national GDP data. Given a change in BEA's estimation of gross product at the state and national levels from a Standard Industrial Classification (SIC) basis to a North American Industry Classification System (NAICS) basis in 1997, data prior to 1997 were adjusted to avoid any erratic shifts in gross product in that year. While the change to NAICS basis occurred in 1997, BEA also provides estimates under a SIC basis in that year. Our adjustment involved figuring the 1997 ratio of NAICS-based gross product to SIC-based gross product for each state and the nation, and multiplying it by the SIC-based gross product in all years prior to 1997 to get our final estimate of gross product at the state and national levels.

### **County and metropolitan area estimates**

To generate county-level estimates for all years, and metropolitan-area estimates prior to 2001, a more complicated estimation procedure was followed. First, an initial set of

county estimates for each year was generated by taking our final state-level estimates and allocating gross product to the counties in each state in proportion to total earnings of employees working in each county – a BEA variable that is available for all counties and years. Next, the initial county estimates were aggregated to metropolitan area level, and were compared with BEA's official metropolitan area estimates for 2001 and later. They were found to be very close, with a correlation coefficient very close to one (0.9997). Despite the near-perfect correlation, we still used the official BEA estimates in our final data series for 2001 and later. However, to avoid any erratic shifts in gross product during the years up until 2001, we made the same sort of adjustment to our estimates of gross product at the metropolitan area level that was made to the state and national data – we figured the 2001 ratio of the official BEA estimate to our initial estimate, and multiplied it by our initial estimates for 2000 and earlier to get our final estimate of gross product at the metropolitan area level.

# Data and methods

## Estimates and adjustments made to BEA data on GDP, GRP, and GSP

(continued)

We then generated a second iteration of county-level estimates – just for counties included in metropolitan areas – by taking the final metropolitan-area-level estimates and allocating gross product to the counties in each metropolitan area in proportion to total earnings of employees working in each county. Next, we calculated the difference between our final estimate of gross product for each state and the sum of our second-iteration county-level gross product estimates for metropolitan counties contained in the state (that is, counties contained in metropolitan areas). This difference, total nonmetropolitan gross product by state, was then allocated to the nonmetropolitan counties in each state, once again using total earnings of employees working in each county as the basis for allocation. Finally, one last set of adjustments was made to the county-level estimates to ensure that the sum of gross product across the counties contained in each metropolitan area agreed with our final estimate of gross product by metropolitan area, and that the sum of gross product across the counties contained in state agreed with

our final estimate of gross product by state. This was done using a simple IPF procedure.

# Data and methods

## Middle class analysis

Page 35 of the equity profile shows a decline in the share of households falling in the middle class in the region over the past four decades. To analyze middle-class decline, we began with the regional household income distribution in 1979 – the year for which income is reported in the 1980 Census (and the 1980 IPUMS microdata). The middle 40 percent of households were defined as “middle class,” and the upper and lower bounds in terms of household income (adjusted for inflation to be in 2010 dollars) that contained the middle 40 percent of households were identified. We then adjusted these bounds over time to increase (or decrease) at the same rate as real average household income growth, identifying the share of households falling above, below, and in between the adjusted bounds as the upper, lower, and middle class, respectively, for each year shown. Thus, the analysis of the size of the middle class examined the share of households enjoying the same relative standard of living in each year as the middle 40 percent of households did in 1979.

## Data and methods

# Assembling a complete dataset on employment and wages by industry

We report analyses of jobs and wages by industry and “industry strength” on pages 41-44. These analyses were based on a industry-level dataset constructed using two-digit NAICS industries from the Bureau of Labor Statistics’ Quarterly Census of Employment and Wages (QCEW). Due to some missing (or nondisclosed) data at the county and regional levels, we supplemented our dataset using information from Woods & Poole Economics’ Complete Economic and Demographic Data Source (CEDDS), which contains complete jobs and wages data for broad, two-digit NAICS industries at multiple geographic levels. (Proprietary issues barred us from using CEDDS directly, so we instead used it to complete the QCEW dataset.) While we refer to counties in describing the process for “filling in” missing QCEW data below, the same process was used for the regional and state levels of geography.

Given differences in the methodology underlying the two data sources (in addition to the proprietary issue), it would not be appropriate to simply “plug in” corresponding

CEDDS data directly to fill in the QCEW data for nondisclosed industries. Therefore, our approach was to first calculate the number of jobs and total wages from nondisclosed industries in each county, and then distribute those amounts across the nondisclosed industries in proportion to their reported numbers in the CEDDS data.

To make for a more accurate application of the CEDDS, we made some adjustments to it to better align it with the QCEW. One of the challenges of using CEDDS as a “filler dataset” is that it includes all workers, while QCEW includes only wage and salary workers. To normalize the CEDDS data universe, we applied both a national and regional wage and salary adjustment factor; given the strong regional variation in the share of workers who are wage and salary, both adjustments were necessary. Second, while the QCEW data is available on an annual basis, the CEDDS is available on a decadal basis until 1995, at which point it becomes available on an annual basis. For the 1990-1995 period, we estimated the CEDDS annual jobs and wages

figures using a straight-line approach. Finally, we standardized the CEDDS industry codes to match the NAICS codes used in the QCEW.

It is important to note that not all counties and regions were missing data at the two-digit NAICS level in the QCEW, and the majority of larger counties and regions with missing data were only missing data for a small number of industries and only in certain years. Moreover, when data is missing it is often for smaller industries. Thus, the estimation procedure described is not likely to greatly affect our analysis of industries, particularly for larger counties and regions.

## Data and methods

# Change in jobs and wages by industry/wage level, 1990 to 2010

The analysis presented on pages 41-42 uses our filled-in QCEW dataset (for more on the creation of this dataset, see the previous page, “Assembling a complete dataset on employment and wages by industry”), and seeks to track shifts in regional industrial job composition and wage growth over time by industry wage level.

Using 1990 as the base year, we classified broad industries (at the two-digit NAICS level) into three wage categories: low, medium, and high wage. An industry’s wage category was based on its average annual wage, and each of the three categories contained approximately one-third of all private industries in the region.

We applied the 1990 industry wage category classification across all the years in the dataset, so that the industries within each category remained the same over time. This way, we could track the broad trajectory of jobs and wages in low-, medium-, and high-wage industries.

This approach was adapted from a method used in a Brookings Institution report, *Building From Strength: Creating Opportunity in Greater Baltimore's Next Economy*. For more information, see:

<http://www.brookings.edu/research/reports/2012/04/26-baltimore-economy-vey>.

While we initially sought to conduct the analysis at a more detailed NAICS level, the large amount of missing data at the three to six-digit NAICS levels (which could not be resolved with the method that was applied to generate our filled-in two-digit QCEW dataset) prevented us from doing so.

# Data and methods

## Analysis of occupations by opportunity level

Pages 45-53 of the equity profile present an analysis of “occupational opportunity.” The analysis seeks to identify occupations in the region that are of “high opportunity” for workers, but also to associate each occupation with a “typical” level of education that is held by workers in that occupation, so that specific occupations can be examined by their associated opportunity level for workers with different levels of educational attainment. In addition, once each occupation in the region is defined as being of either high, medium, or low opportunity, based on the “Occupation Opportunity Index,” this general level of opportunity associated with jobs held by workers with different education levels and backgrounds by race/ethnicity/nativity is examined, in an effort to better understand differences in access to high-opportunity occupations in the region while holding broad levels of educational attainment constant.

There are several aspects of this analysis that warrant further clarification. First, the “Occupation Opportunity Index” that is

constructed is based on a measure of job quality and set of growth measures, with the job quality measure weighted twice as much as all of the growth measures combined. This weighting scheme was applied both because we believe pay is a more direct measure of “opportunity” than the other available measures, and because it is more stable than most of the other growth measures, which are calculated over a relatively short period (2005-2011). For example, an increase from \$6 per hour to \$12 per hour is fantastic wage growth (100 percent), but most would not consider a \$12-per-hour job as a “high-opportunity” occupation.

Second, all measures used to calculate the “Occupation Opportunity Index” are based on data for Metropolitan Statistical Areas from the Occupational Employment Statistics (OES) program of the U.S. Bureau of Labor Statistics (BLS), with one exception: median age by occupation. This measure, included among the growth metrics because it indicates the potential for job openings due to replacements as older workers retire, is

estimated for each occupation from the same pooled 2006-2010 IPUMS American Community Survey (ACS) microdata file that is used for many other analyses (for the employed civilian noninstitutional population ages 16 and older). The median age measure is also based on data for Metropolitan Statistical Areas (to be consistent with the geography of the OES data), except in cases for which there were fewer than 30 individual survey respondents (i.e., unweighted  $N < 30$ ) in an occupation; in these cases, the median age estimate is based on national data.

Third, the level of occupational detail at which the analysis was conducted, and at which the lists of occupations are reported, is the three-digit Standard Occupational Classification (SOC) level. While data of considerably more detail is available in the OES, it was necessary to aggregate the OES data to the three-digit SOC level in order to associate education levels with the occupations. This information is not available in the OES data, and was estimated using 2010 IPUMS ACS microdata. Given differences in between the two

# Data and methods

## Analysis of occupations by opportunity level

(continued)

datasets in the way occupations are coded, the three-digit SOC level was the most detailed level at which a consistent crosswalk could be established.

Fourth, while most of the data used in the analysis are regionally specific, information on the education level of “typical workers” in each occupation, which is used to divide occupations in the region into the three groups by education level (as presented on pages 47-49), was estimated using national 2010 IPUMS ACS microdata (for the employed civilian noninstitutional population ages 16 and older). Although regionally specific data would seem to be the better choice, given the level of occupational detail at which the analysis is conducted, the sample sizes for many occupations would be too small for statistical reliability. And, while using pooled 2006-2010 data would increase the sample size, it would still not be sufficient for many regions, so national 2010 data were chosen given the balance of currency and sample size for each occupation.

The implicit assumption in using national data is that the occupations examined are of sufficient detail that there is not great variation in the typical educational level of workers in any given occupation from region to region. While this may not hold true in reality, we would note that a similar approach was used by Jonathan Rothwell and Alan Berube of the Brookings Institution in *Education, Demand, and Unemployment in Metropolitan America* (Washington D.C.: Brookings Institution, September 2011).

We should also note that the BLS does publish national information on typical education needed for entry by occupation. However, in comparing this data with the typical education levels of actual workers by occupation that were estimated using ACS data, there were important differences, with the BLS levels notably lower (as expected). The levels estimated from the ACS were determined to be the appropriate choice for our analysis as they provide a more realistic measure of the level of educational attainment necessary to be a viable job

candidate – even if the typical requirement for entry is lower.

Fifth, it is worthwhile to clarify an important distinction between the lists of occupations by typical education of workers and opportunity level, presented on pages 47-49, and the charts depicting the opportunity level associated with jobs held by workers with different education levels and backgrounds by race/ethnicity/nativity, presented on pages 50-53. While the former are based on the national estimates of typical education levels by occupation, with each occupation assigned to one of the three broad education levels described, the latter are based on actual education levels of workers in the region (as estimated using 2006-2010 IPUMS ACS microdata), who may be employed in any occupation, regardless of its associated “typical” education level.

Lastly, it should be noted that for all of the occupational analysis, it was an intentional decision to keep the categorizations by education and opportunity level fairly broad,

## Data and methods

# Analysis of occupations by opportunity level

(continued)

with three categories applied to each. For the categorization of occupations, this was done so that each occupation could be more justifiably assigned to a single typical education level; even with the three broad categories some occupations had a fairly even distribution of workers across them nationally, but, for the most part, a large majority fell in one of the three categories. In regard to the three broad categories of opportunity level, and education levels of workers shown on pages 50-53, this was kept broad to ensure reasonably large sample sizes in the 2006-2010 IPUMS ACS microdata that were used for the analysis.

# Data and methods

## Health data and analysis

Health data in this study were taken from the Behavioral Risk Factor Surveillance System (BRFSS) database, housed in the Centers for Disease Control and Prevention. The BRFSS database is created from randomized telephone surveys conducted by states, which then incorporate their results into the database on a monthly basis.

The results of this survey are self-reported and the population includes all related adults, unrelated adults, roomers, and domestic workers who live at the residence. The survey does not include adult family members who are currently living elsewhere, such as at college, a military base, a nursing home, or a correctional facility.

The most detailed level of geography associated with individuals in the BRFSS data is the county. Using the county-level data as building blocks, we created additional estimates for the region, state, and United States.

While the data allow for the tabulation of

personal health characteristics, it is important to keep in mind that because such tabulations are based on samples, they are subject to a margin of error and should be regarded as estimates – particularly in smaller regions and for smaller demographic subgroups.

To increase statistical reliability, we combined five years of survey data, for the years 2006 through 2010. As an additional effort to avoid reporting potentially misleading estimates, we do not report any estimates that are based on a universe of fewer than 100 individual survey respondents (i.e., unweighted  $N < 100$ ). This is similar to, but more stringent than, a rule indicated in the documentation for the 2010 BRFSS data of not reporting (or interpreting) percentages based on a denominator of fewer than 50 respondents. Even with this sample size restriction, regional estimates for smaller demographic subgroups should be regarded with particular care.

For more information and access to the BRFSS database, please visit <http://www.cdc.gov/brfss/index.htm>.

# Data and methods

## Measures of diversity and segregation

In the equity profile we refer to a measure of racial/ethnic diversity (the “diversity score” on page 16) and several measures of residential segregation by race/ethnicity (the “multi-group entropy index” on page 65 and the “dissimilarity index” on page 66). While the common interpretation of these measures is included in the text of the profile, the data used to calculate them, and the sources of the specific formulas that were applied, are described below.

All of these measures are based on census-tract-level data for 1980, 1990, 2000, and 2010 from Geolytics. While the data originate from the decennial censuses of each year, an advantage of the Geolytics data we use is that (with the exception of 2000) they have been “re-shaped” to be expressed in 2000 census tracts boundaries, and so the underlying geography for our calculations is consistent over time; the census tract boundaries of the original decennial census data change with each release, which could potentially cause a change in the value of residential segregation indices even if no actual change in residential

segregation occurred. In addition, while most of the racial/ethnic categories for which indices are calculated are consistent with all other analyses presented in this profile, there is one exception. Given limitations of the tract-level data released in the 1980 Census, Native Americans are combined with Asians and Pacific Islanders in that year. For this reason, we set 1990 as the base year (rather than 1980) in the chart on page 66, but keep the 1980 data in other analyses of residential segregation as this minor inconsistency in the data is not likely to affect the analyses.

The formulas for the diversity score and the multi-group entropy index were drawn from a 2004 report by John Iceland of the University of Maryland, *The Multigroup Entropy Index (Also Known as Theil’s H or the Information Theory Index)* available at [http://www.census.gov/housing/patterns/about/multigroup\\_entropy.pdf](http://www.census.gov/housing/patterns/about/multigroup_entropy.pdf). In that report, the formula used to calculate the diversity score (referred to as the “entropy score” in the report), appears on page 7, while the formulas used to calculate the multi-group entropy

index (referred to as the “entropy index” in the report), appear on page 8.

The formula for the other measure of residential segregation, the dissimilarity index, is well established, and is made available by the U.S. Census Bureau at [http://www.census.gov/hhes/www/housing/housing\\_patterns/app\\_b.html](http://www.census.gov/hhes/www/housing/housing_patterns/app_b.html).

# Data and methods

## Food desert analysis

There are many ways to define a food desert or to measure access to food. The U.S. Department of Agriculture's (USDA's) Healthy Foods Financing Initiative working group defines a food desert as a low-income census tract where a substantial number or share of residents have low access to a supermarket or large grocery store.

To qualify as a “low-income community,” a census tract must have either 1) a poverty rate of 20 percent or higher, OR 2) a median family income at or below 80 percent of the statewide or metropolitan area median family income (in the case of urban tracts, the “area median” income applied is the greater of the metro area median or the state median; for rural tracts, the “area median” applied is always the state median).

To qualify as a “low-access community,” at least 500 people and/or at least 33 percent of a census tracts' population must reside more than one mile from a supermarket or large grocery store (for rural census tracts, the distance is more than 10 miles).

The USDA's data on population and income are derived from block-level data from the 2000 Census of Population and Housing, which is allocated to a 1-km square grid where it can be matched with data on food access from the [Socioeconomic Data and Applications Center](#).

An inventory of supermarkets and large grocery stores (defined as having at least \$2 million in annual sales and similar food departments as those found in a supermarket) was created by the USDA from a directory. The directory consisted of stores authorized to receive Supplemental Nutrition Assistance Program (SNAP) benefits, and was supplemented with data from Trade Dimensions TDLinX (a Nielsen company), a proprietary supermarket store listing – both for the year 2006.

The USDA has released a food desert locator (<http://www.ers.usda.gov/data-products/food-desert-locator.aspx>) that shows census tracts considered food deserts by the USDA.

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