



BROWARD COUNTY ECONOMIC AND LABOR MARKET ANALYSIS

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Executive Summary

Economic Conditions. The biggest concern right now in the economy is inflation. With prices on average rising over 8% in the last year, the Federal Reserve is scrambling to slow down price increases. This will ultimately result in rising interest rates, leading to a decline in consumer spending and business investment. With the first quarter of 2022 coming in at -1.5% real GDP growth, more signals are pointing to a recession sooner rather than later. National and Florida Consumer Confidence has fallen about 25% from a year prior. For Broward County, the job market may be nearing peak employment, with unemployment just 2.5% in April 2022. Active job postings are near all-time highs as employees can demand higher wages or change positions. Average hourly wages in Broward County have risen about 7% from last year.

Demographic Overview. Broward County is projected to experience a shift in its demographic base over the next several years. By 2026, the Hispanic population is projected to become the dominate ethnic group within the county, with the Asian population growing at a significant rate, as well. Perhaps the more meaningful shift through 2026 is the growth in the 70 and up age cohort. The cohort is project to grow by 20% to nearly 300,000 and make-up roughly 14% of the county's total population. The greying of the population will likely have significant impacts to the requisite services demanded throughout the county, such as increased healthcare and a possible softening in demand for childcare services.

Industry Overview. Industry growth is expected to be nearly 15% for Leisure and hospitality over the next decade. This is followed by growth in Education and health services, Professional and business services, Trade, transportation, and utilities, and Financial activities. Further research into these industries provide 10-year growth for:

- Scheduled Air Transportation at 55.6%,
- Clothing Stores at 14.8%,
- Computer System Design Services at 18.4%,
- Restaurants, Amusement, and Recreation at 24.6%,
- Financial Investments Activities at 15.1%,
- Medical Offices of Health Practitioners at 24.9%.

Quality of Life. Broward County currently suffers from affordable housing and childcare issues. As the housing market has exploded since the pandemic, the cost of to purchase a home in the county has become out of reach for many working families. The data suggest housing prices should begin to ease as mortgage rates increase and rents begin to stabilize; however, many first-time buyers are still priced out of the market. Childcare costs are also putting pressure on working families as Broward County is reported to have the most expensive childcare in the state. While these costs have impacted Broward County families, poverty rates throughout the county have declined significantly since 2010. So, while the cost of living has increased, so too have incomes to help offset these increases.

Workforce Strategies. The following highlights the data-driven workforce strategies that could be implemented:

1. The data confirms the high-growth targeted industries CSBD has selected. Marine and construction lagged from employment growth projections but remain a major employer to the region. CareerSource Broward should consider Financial Services or Fintech as a potential addition to high-growth targeted industries.
2. CSBD should work with local employers and training institutions to support a pipeline of talent that is in-demand. Broward County is providing training to the right skills, but an evaluation of training level and employers needs should be addressed. For example, there might be a gap in entry level positions for nursing and aviation mechanics.
3. CSBD should offer workshops and information sessions regarding managing quality of life concerns in Broward County. Unfortunately, affordability for housing and childcare are likely not going to get better. Working with employers to understand the situation and employees (youth) to plan and budget accordingly can support self-sustainability.
4. From a long-term planning perspective, many current in-demand jobs will not be at the same employment levels in a decade. Automation and artificial intelligence will alter the labor market for some skills. This should not be avoided but making career path plans for those likely impacted. In addition, CSBD should make relationships and partnerships with those that will see employment growth.
5. Broward's business community seems interested in local data. CSBD can work with partners (Greater Fort Lauderdale Alliance, Chamber, etc.) to build a dashboard or economic and workforce metrics to identify current conditions.

Introduction

ABLE Operations is tasked with providing CareerSource Broward (CSBD) with labor market analysis and economic forecasts for Broward County, FL. This research is designed to support CSBD and stakeholders in making data-driven policy decisions and guidance towards allocation of resources.

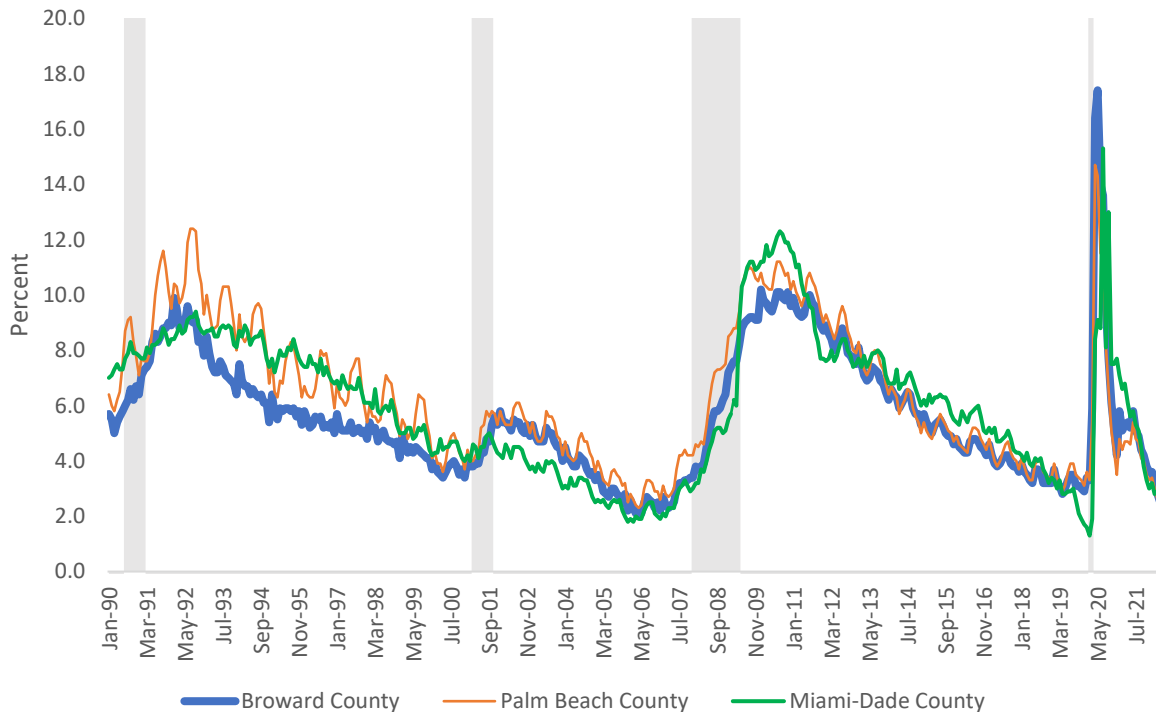
This document will consider a holistic view of the industries, occupations, labor market, and economic conditions throughout Broward County, FL. Where applicable, comparisons will be made to the northern and southern border counties, Palm Beach and Miami-Dade, respectively. In addition, National and State level data may be considered to provide insight. First, current economic conditions will be addressed. This will include macroeconomic and financial variables that support an understanding of where the U.S. and regional economy might be in the business cycle. This will lead into the next section, regarding Broward County and the South Florida business climate. The third section will review a demographic profile for the region. The population will be considered across age, race, and expected growth. Next, an overview of the regions labor market characteristics. This will include data regarding the regional labor market participation, industries, occupations, education and training production, and commute patterns. Consideration will then be given to the quality of life in Broward County and surrounding region. Affordable housing and availability, crime, and transportation will be addressed. Finally, the document will conclude with a summary of the analysis and applicable data-driven strategies for consideration.

Economic Conditions

Unemployment – The unemployment rate is a key gauge of economic and labor market health. Tracking the business cycle, the unemployment rate typically yields lower rates during growth or expansion, and higher rates during slower or declining business activity. **Figure 1** displays the monthly unemployment rate for Broward (blue), Palm Beach (orange), and Miami-Dade (green) counties over the last 32 years. The last four recessions are provided in a gray background. The current unemployment rate for Broward County is 2.5% (April 2022). This is consistent with Palm Beach and Miami-Dade at 2.3% and 2.5%, respectively. However, the trend is declining for Broward, from 5.4% one year earlier, and 17.4% at the peak of the COVID-19 pandemic in March 2020.

Although the unemployment rate is historically low, it does not necessarily describe the entire labor market environment. Many employers are finding it very difficult to find and retain the talent needed. Known as the “Great Resignation”, employees have recently found themselves in a favorable position in the labor market. With job openings at the highest level in twenty years, employees have plenty of opportunities if not satisfied at their current situation. National quit rates, estimated by the Bureau of Labor Statistics (BSL), have more than doubled since the “Great Recession” in 2009.

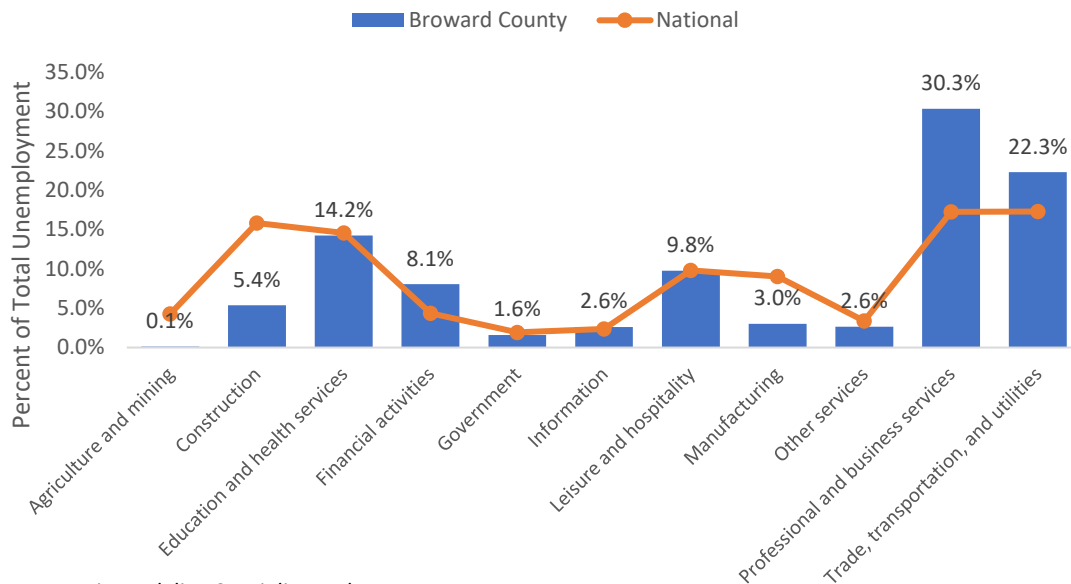
Figure 1. County Unemployment Rate



Source: Florida Department of Economic Opportunity

It is important to note, however, that not all unemployment is due to voluntary resignation. The COVID-19 pandemic instantly forced business to adapt, with some changes having a long-term structural impact. Those that are left unemployed (not voluntarily), likely do not have the necessary skills or training needed to fill open positions. The distribution of unemployment by industry is displayed in **Figure 2**. The orange line with markers represents the U.S. distribution of unemployment, while the blue bars display Broward Counties percentage of total unemployment. For example, manufacturing currently makes up 9% of the roughly 6 million total unemployed in the U.S. In Broward County, manufacturing is only 3% of the roughly 26,176 unemployed. Construction is also well below the national average (15.8%), at just 5.4% of all unemployed in Broward County. It is worth noting that unemployment is distributed in Broward County to Professional and business services, Trade, transportation, and utilities, and Financial activities at rates higher than the national average.

Figure 2. Distribution of Unemployment (Dec 2021)



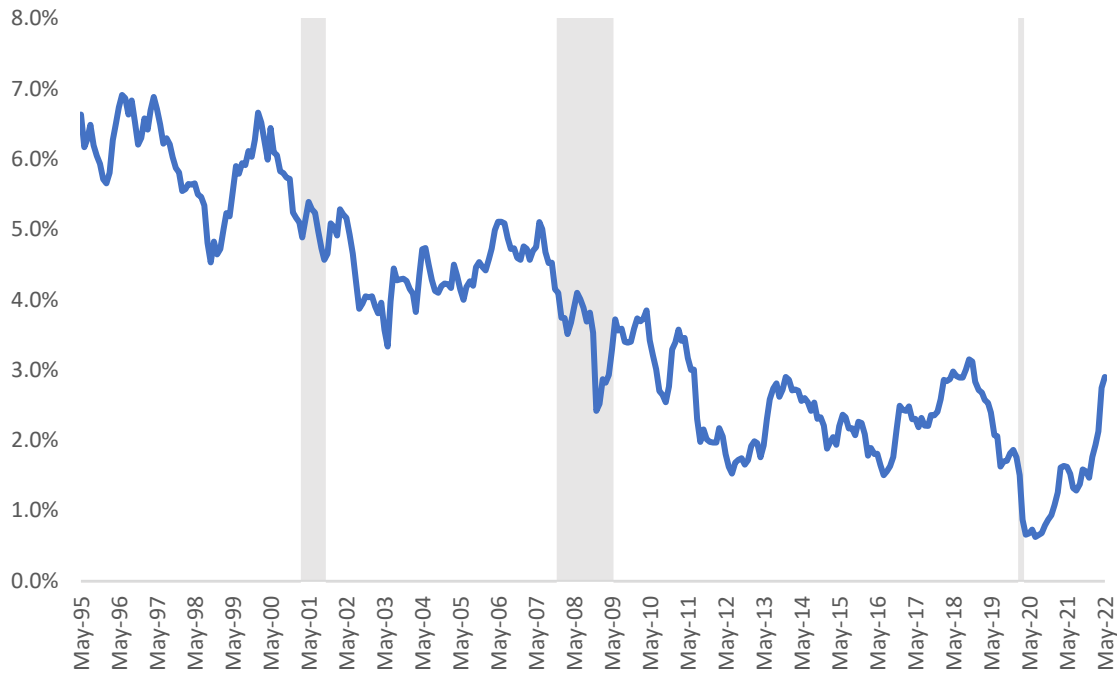
Source: Economic Modeling Specialists Intl.

Administrative and support services account for roughly 6,500 current unemployed in Broward County. This includes Office administrative services, Facilities and services to buildings, and Travel arrangement and reservation services. With COVID-19 suddenly driving a remote workforce environment in the first quarter of 2020, along with limited, if any travel, demand for these specific services came to a sudden halt. In addition, approximately 3,300 are unemployed in Retail trade including Department, Home furnishings, and Furniture stores. With the sudden closure of brick and mortar in response to the pandemic, retailers had to adapt quickly to an online only presence, limiting their resources to survive.

These individuals unemployed in the current labor force likely face a difficult transition to obtain in-demand skill sets.

Interest Rates – Interest rates play a pivotal role in both personal consumption and business investment. Considered a cost to raise capital, or the price to finance an automobile or home, lower rates can incentivize investment and consumption in the economy. Over the last decade, consumers and business have become accustomed to a very low-rate environment. This setting has been exacerbated by the accommodating monetary policy in reaction to the “Great Recession” and COVID-19 pandemic, implemented by the Federal Reserve. During this time, the U.S. central bank shifted their focus away from maintaining inflation, to supporting employment and economic growth. However, as the economy started to recover after the pandemic, supply-chain issues and pent-up demand have recently brought inflation back into the picture (to be discussed later). Initially thought of as “transitory”, the Federal Reserve has recently shifted policy to mitigate rising prices. Ultimately, this will result in higher interest rates for business and consumers.

Figure 3. U.S. 10-Year Yield



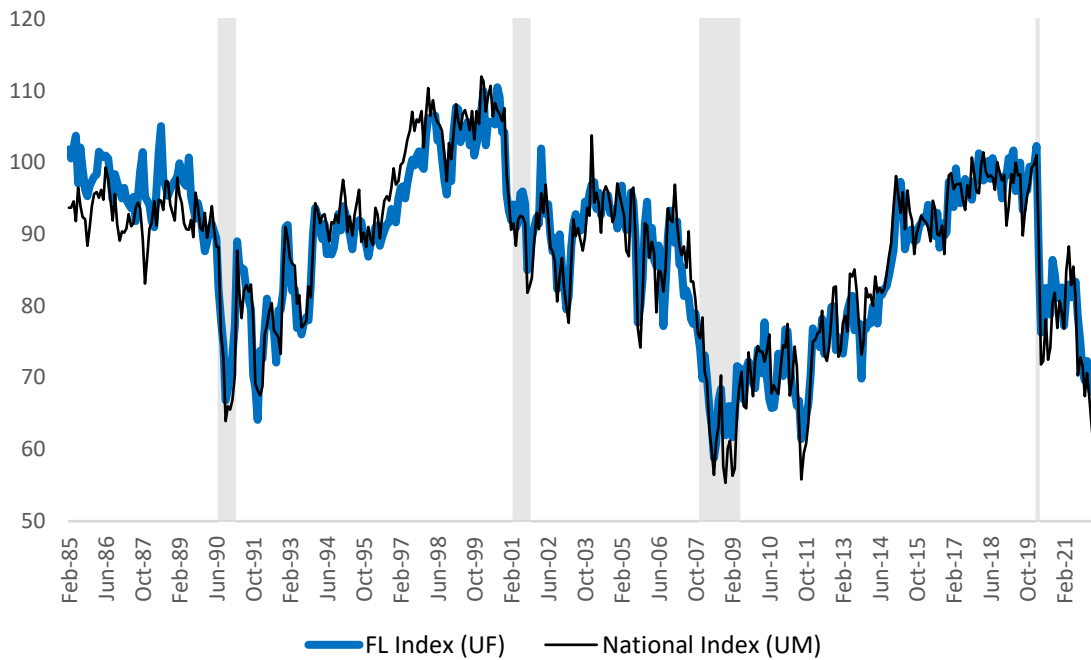
Source: Federal Reserve Economic Data

Figure 3 provides the yield on U.S. 10-yr treasury over the last five years. Although historically, the yield is relatively low, the trend since October 2020 has been rising. The 10-yr treasury can be thought of as a baseline for many financial products, including commercial and residential mortgages.

Consumer Confidence – The University of Michigan surveys consumers each month regarding their financial situation, expectation of upcoming purchases, and thoughts on the economic environment. This survey started in 1946, and the calculated index is referred to as consumer confidence. This metric is considered a leading indicator, giving insight into what might be on the horizon for the U.S. economy. **Figure 4** displays the U.S. Consumer Confidence index (black line) since 1985. As a leading indicator, you can see the decline in consumer confidence before recessions starting in 1990, 2001, and 2007. The index typically begins to recover prior to the recession ending. Consumer confidence peaked at 101.0 in February of 2020, prior to the COVID-19 pandemic. This index fell 29% in two months, to an April 2020 reading of 71.8. This was due to the nationwide shutdown and uncertainty of the total economic impact of COVID-19. As the economy recovered from this shock, consumer confidence grew by 23% over the next year to 88.3 in April 2021. However, this rebound was short lived as inflation, interest rates, and concern over a slowing economy dropped consumer confidence by 33% to the recent 59.4 level announced in March 2022. This is the lowest point since August 2011, and only 7% higher than the lowest point of the “Great Recession”. This

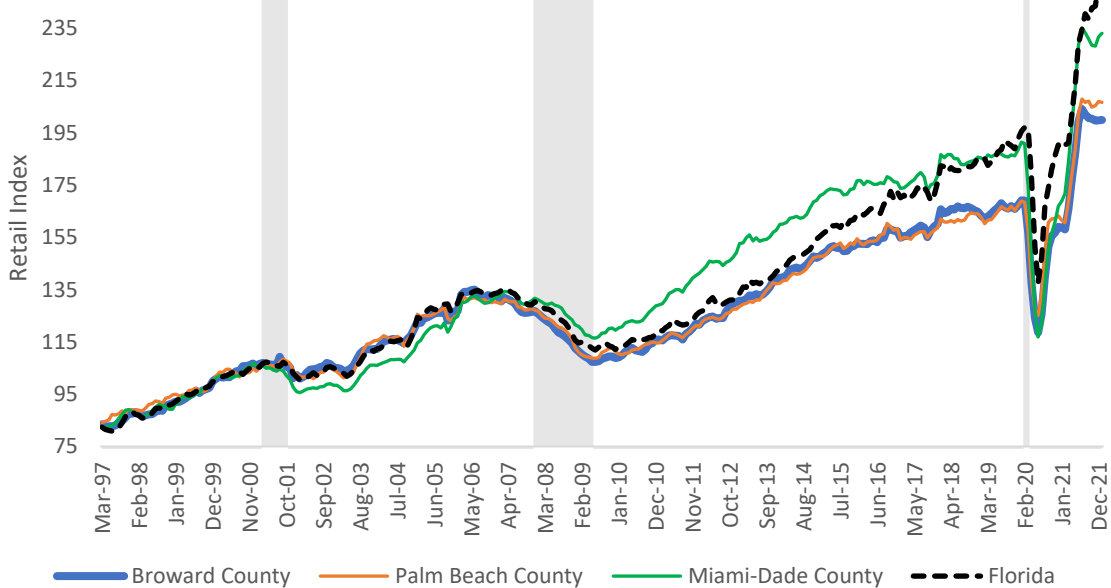
sudden decline in consumer confidence highlights concerned households, and a potential signal of a slowdown in economic activity. In April, the index did rebound to 65.2. In addition to the national index, the University of Florida provides Florida’s Consumer Sentiment index. It is easy to see how correlated these indices are with one another. The most recent reading of the Florida index was 61.5. This is the lowest reading since August 2011.

Figure 4. National and Florida Consumer Sentiment Index



Source: Federal Reserve Economic Data; University of Florida (BEBR)

Figure 5. Retail Sales Index Comparison



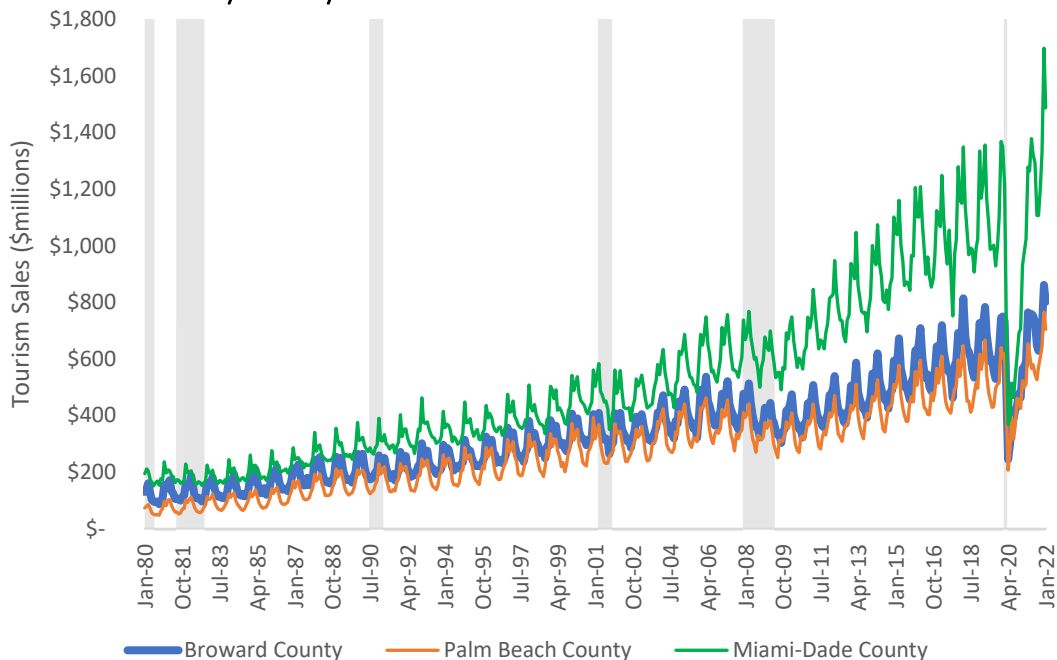
Source: Florida Department of Revenue

Retail Sales – Retail sales also provides insight into the current economic environment. The Florida Department of Revenue (DOR) maintains a database of taxable sales across several categories for each county. Combining multiple expenditures in automobiles, durable goods, tourism, recreation, and consumer nondurables, Florida DOR has created a seasonally adjusted index designed to track retail activity. **Figure 5** displays this index for Broward, Palm Beach, and Miami-Dade Counties. In addition, Florida has been added for reference (dashed line).

One can see that retail activity plateaus prior to a typical recession, with declining expenditures during the economic slowdown. The first quarter of 2020 highlights the sudden impact of COVID-19 and the shutdown on retail in Florida. Broward County experienced a 30% decline in retail activity between February 2020 and June 2020. Miami-Dade County experienced the largest decline over that period at 38%. However, retail activity quickly rebounded to pre-pandemic levels by March 2021. In fact, retail sales surged 72% in Broward County between June 2020 to June 2021 due to pent-up demand and the “re-opening” of the economy. During this year of recovery, Miami-Dade recognized 102% growth in retail activity! Palm Beach and Florida responded with 66% and 63% increases in the retail index, respectively.

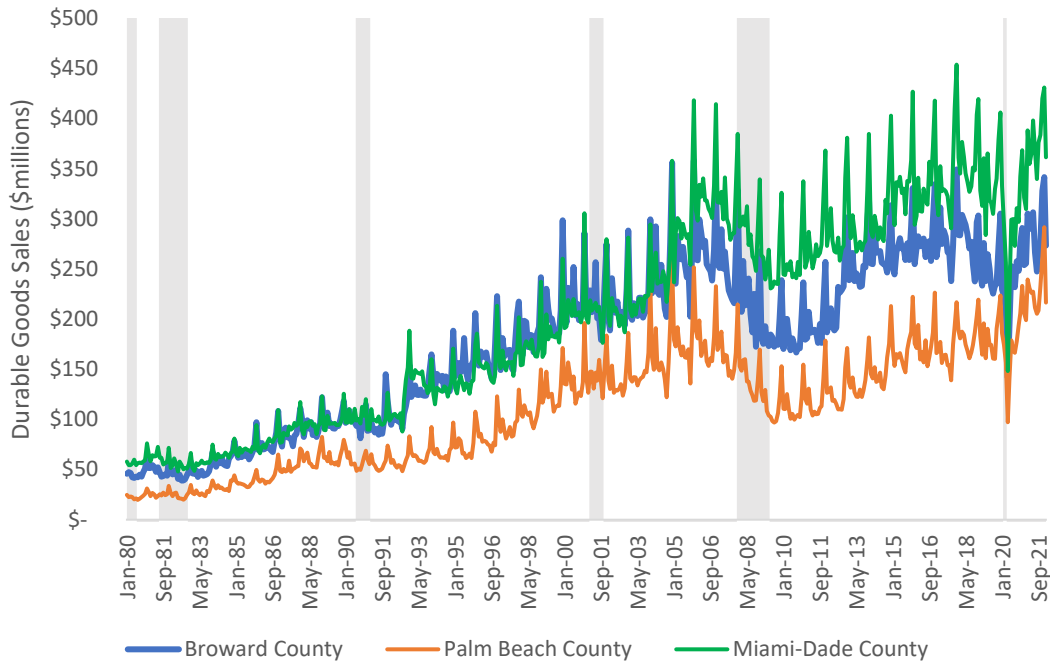
In addition to the retail index, **Figure 6** provides the Tourism Sales for Broward, Palm Beach, and Miami-Dade counties. Unlike the retail index, this data is provided in dollars and not seasonally adjusted. It is apparent over time that these South Florida counties experience higher Tourism Sales during “season”, the months between November through April. Broward County recorded just over \$860 million in tourism sales in December 2021, roughly 15.6% higher than the pre-pandemic sales in December 2019. Miami-Dade County had \$1.7 billion in tourism sales in December 2021, about 24% higher than two years prior. It is important to note

Figure 6. Tourism Sales by County



that these figures are in nominal dollars, and inflation over that period also contributed to the growth.

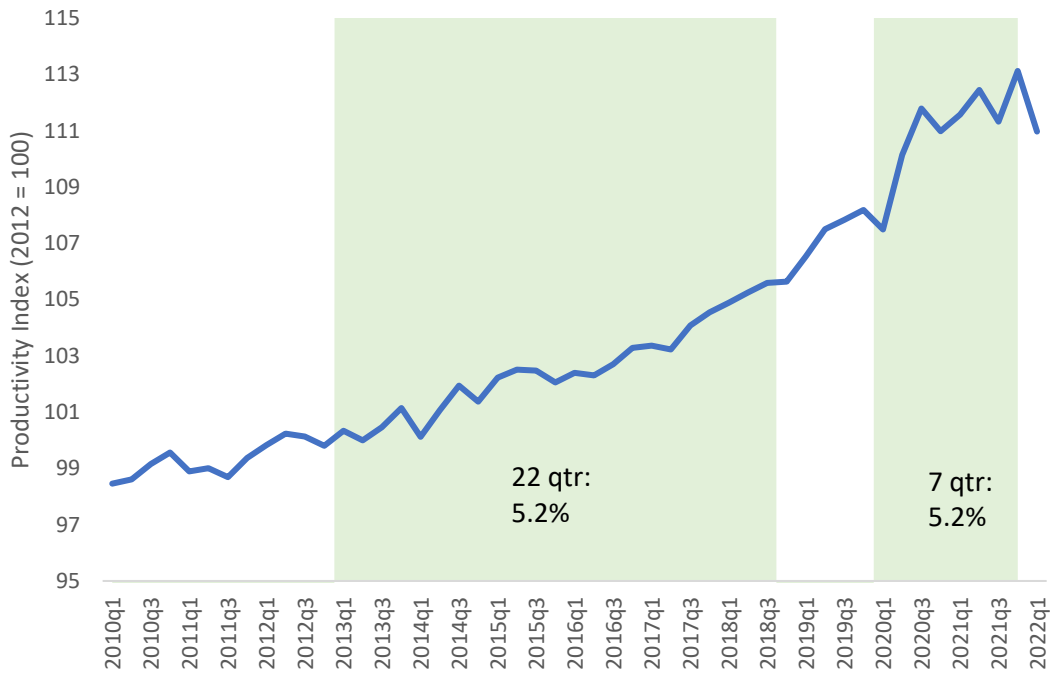
Figure 7. Consumer Durable Goods



Source: Florida Department of Revenue

Finally, **Figure 7** displays the taxable consumer durable goods sales for the South Florida region. Consumer durables include larger purchases such as furniture and appliances. Typically, consumers will delay these purchases during uncertain times. It took almost a decade to recover to the levels prior to the “Great Recession”. This data will be important to monitor regarding economic activity, and likely be one of the first indicators of a potential economic slowdown.

Figure 8. Labor Productivity (Output per Hour)

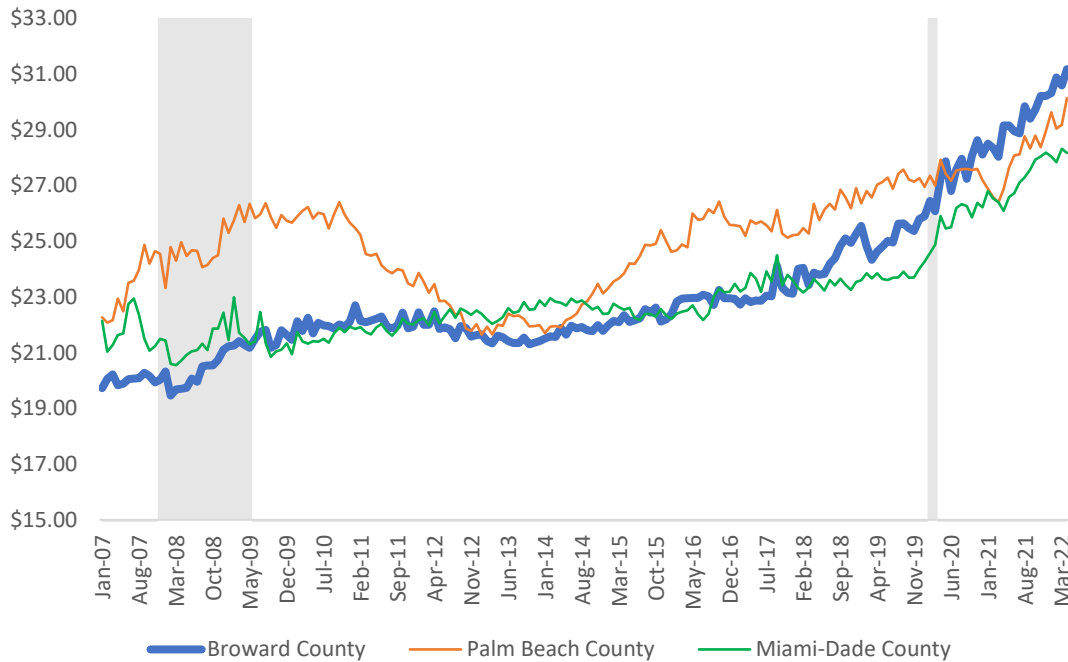


Source: Federal Reserve Economic Data

Productivity – Productivity is measured in the economy as output per labor hour. The Bureau of Labor Statistics (BLS) has tracked this information since 1947. Typically, the health of the economy is measured by Gross Domestic Product (GDP). Real GDP (accounting for inflation) can experience growth through additional resources and/or productivity. This can be accomplished through additional labor, producing more with the labor, or some combination of both. **Figure 8** displays the U.S. productivity indexed over the last 12 years. Since the COVID-19 pandemic, it is believed that business has adapted by “doing more with less”. Employees are expected to take on additional tasks and roles to support the business. This theory regarding increased responsibility is highlighted in the last 7 quarters of 5.2% productivity growth (2020q2 through 2021q4). In comparison, the same increase in productivity took more than three times as long, five and half years (22 quarters) from 2013 through 2018.

Income – Tracking average annual wages is critical to understanding the relative health of a region’s economy as well as its industrial mix. **Figure 9** provides the monthly average wage for Broward, Palm Beach, and Miami-Dade Counties. The trend has been increasing for all three regions, with Broward County leading both Palm Beach and Miami-Dade over the last nineteen months. The last twelve-month average wages have provided Broward County with an average wage close to \$59,850.

Figure 9. Average Hourly Earnings

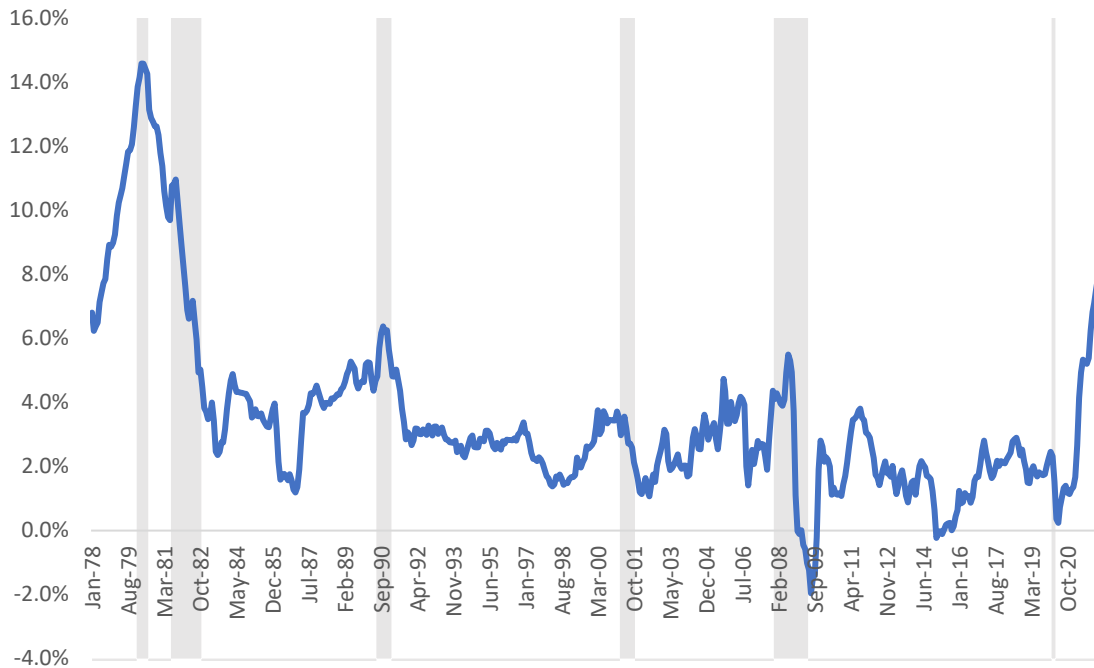


Source: Florida Department of Economic Opportunity

However, the growth in wages should be viewed in the proper context by examining wages and inflation simultaneously. As inflation increases, the buying power of the dollar decrease thus lower the real value of wages earned. Since January 2007, Broward County has outpaced inflation, seeing real wage growth over the 15-year period a total of 11%. Palm Beach and Miami-Dade have observed a decline in real annual wages during that time period.

Inflation – Likely to be considered the biggest economic issue right now for consumers and business is inflation. With the Federal Reserve providing liquidity and expanding the money supply to recover from both the “Great Recession” and COVID-19 pandemic, inflation has recently jumped to uncomfortable levels. While initially thought of to be “transitory”, the Federal Reserve has recently adjusted policy to curtail rising prices (see interest rates). In the recovery following the COVID-19 pandemic, pent-up demand for goods and services in combination with supply-chain issues has led to a surge in prices. **Figure 10** provides annual inflation since 1978 and highlights this recent jump in prices starting in 2021.

Figure 10. Annual Inflation (Consumer Price Index)

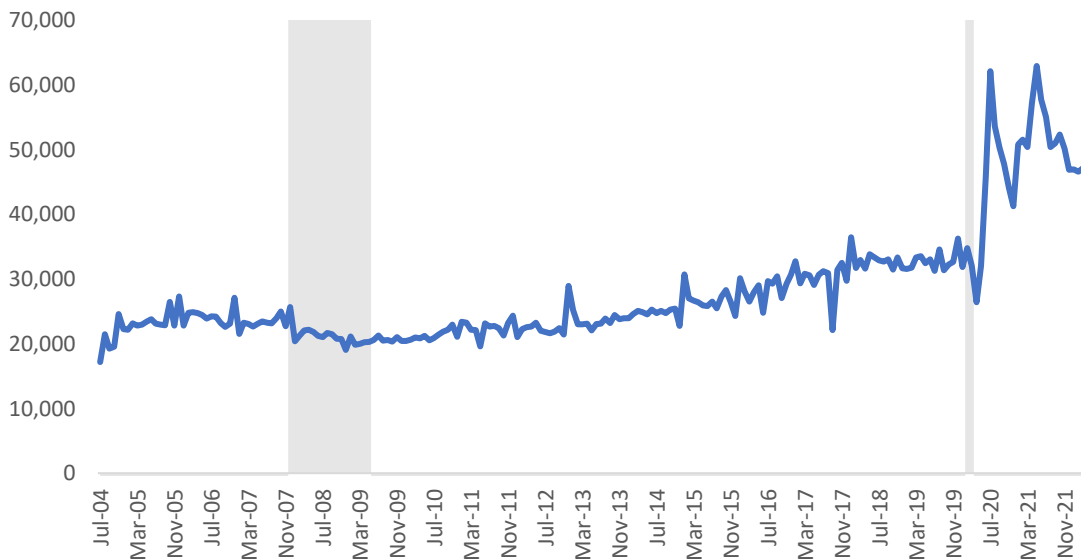


Source: Federal Reserve Economic Data

Business Climate

New Business Applications – The number of new business applications is often used as a proxy for business formation and is an indication of the attractiveness of a region’s business

Figure 11. Florida Business Applications (SA)



Source: Federal Reserve Economic Data

climate, economic vitality, and its entrepreneurial spirit. Pre-pandemic, Florida averaged 303,000 business starts annually. Between 2020 and 2021, the state averaged nearly 570,000 new starts – up over 25% year-over-year. Much of this is likely tied to the Great Resignation experienced nationally where workers are resigning insignificant numbers to either start new ventures or retiree completely, as well as the strong in-migration experienced throughout the state during the last several years.

Figure 12. Distribution of Florida Business Applications

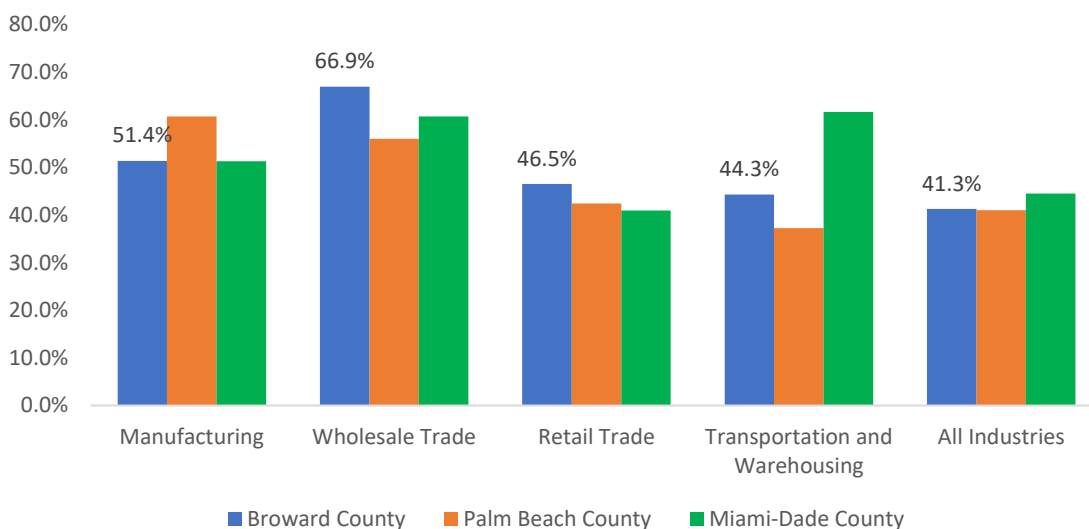
	2005	2020	2020 Population
Broward County	12.7%	14.1%	9.2%
Palm Beach County	8.4%	8.3%	7.0%
Miami-Dade County	18.4%	21.6%	12.8%
Florida	281,702	495,251	21,216,924

Source: U.S. Census Bureau

With respect to business starts for the local region, nearly 45% of all statewide business applications were filed in Broward, Palm Beach, and Miami-Dade counties in 2020. When compared to 2005, Broward and Miami-Dade counties increased their share of applications while Palm Beach County was essentially flat at 8.3%. Moreover, data suggests, when compared to the region’s population distribution, both Broward and Miami-Dade counties’ business climate is of such quality that commercial activity has a greater economic pull than in other counties.

Imports and Exports – Tracking a region’s import/export base is important as exports are what truly grow an economy. As an example, when a manufacturing facility sells its goods outside the region (what is known as an export) new dollars (revenue from the sale) flow into the region and generate new economic activity.

Figure 13. Export Sales, 2021 (%)



Source: Economic Modeling Specialists Intl.

Miami-Dade, Palm Beach, and Broward counties all have roughly similar export levels at roughly 42%. In which industries these exports occur is also a telling sign of the role the county plays in the regional, state, national, and international economies. The wholesaling process is an intermediate step in the distribution of merchandise. Wholesalers are organized to sell or arrange the purchase or sale of (a) goods for resale (i.e., goods sold to other wholesalers or retailers), (b) capital or durable non consumer goods, and (c) raw and intermediate materials and supplies used in production. Broward County exports nearly 67% of all economic output within the Wholesale Trade industry to external markets indicating the county acts plays a role in regional distribution network.

Demographic Overview

Current Population – In 2021, it is estimated that 1.976 million people resided in Broward County. The population has increased 3.3% since 2016. This growth is expected to continue for the next five years, as estimates have total population growth at 4.5%, topping 2.06 million by 2026.

Figure 14. County Population by Age Cohort

Age Bracket	Broward County		Palm Beach County		Miami-Dade County	
	2021 Population	2026 Population	2021 Population	2026 Population	2021 Population	2026 Population
Under 15	340,856	347,792	236,672	249,508	453,992	451,775
15-24 years	218,710	220,319	161,378	166,122	311,928	313,842
25-39 years	395,384	398,172	268,682	283,057	562,215	549,362
40-54 years	395,567	407,654	272,355	283,546	568,962	577,794
55-69 years	378,218	393,376	297,730	314,325	499,191	527,860
70+	247,434	297,051	292,571	340,794	333,361	383,229

Source: Economic Modeling Specialists Intl.

With respect to demographic growth, through 2026 the 70+ demographic is projected to grow by 20% to nearly 300,000. This is by far the driver of Broward County population growth as no other age cohort is project to grow by more than 4%. Both Palm Beach and Miami-Dade are projected to see similar trends but slightly less growth at the 70+ cohort at 16% and 15% respectively.

Figure 15. Population Growth by Race

Race	2021		2026	
	Population	Distribution	Population	Distribution
White	661,655	33.5%	609,093	29.5%
Hispanic	633,620	32.1%	727,906	35.3%
Black	568,564	28.8%	606,296	29.4%
Two or More Races	32,859	1.7%	33,706	1.6%
Asian	74,429	3.8%	82,232	4.0%
American Indian	3,783	0.2%	3,716	0.2%
Pacific Islander	1,259	0.1%	1,414	0.1%

Source: Economic Modeling Specialists Intl.

Population growth by race, proxy for diversity, is also expected to experience significant change through 2026. Three racial groups are projected to make substantial gains Hispanics to grow by 15%, Asian by 10%, and Pacific Islander by 12%. White and American Indian are projected to decline by 8% and 2% respectively. By 2026 the Hispanic population is projected to the make-up just over 35% of the county population, supplant Whites as the largest racial component of the population.

Labor Force Characteristics

Labor Force Participation – Although all three counties have similar age distributions, Broward has a roughly 6% greater labor force participation rate. Labor force participation is an important indicator of a region’s economic health. The rate measures of the working age population, what percentage is currently in the labor force available and willing to work. The indicator does not include those who are retired or otherwise are no longer seeking employment. With roughly the same age distribution, Broward County offers potential employers a larger relative workforce from which to draw labor.

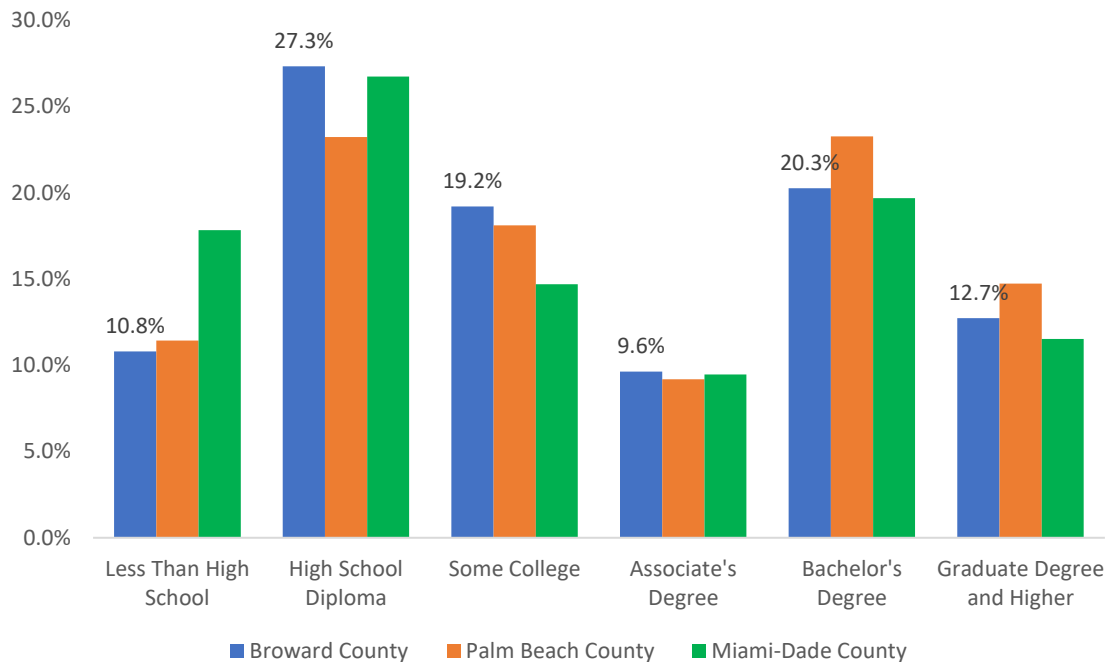
Figure 16. Labor Force Participation

	Broward County	Palm Beach County	Miami-Dade County
Labor Force	1,055,251	760,237	1,320,238
Employed	1,017,099	735,014	1,281,048
Unemployed	38,152	25,223	39,190
Not in Labor Force	544,114	502,155	894,489
Labor Force Participation Rate	66.0%	60.2%	59.6%

Source: Florida Department of Economic Opportunity

Educational Attainment – With respect to the region’s educational attainment, Broward and Miami-Dade are similar in the demographic distribution with two exceptions Miami-Dade has significantly higher percentage of their population with less than a high school education, and Broward has a significantly higher percentage of their population with at least some college. Palm Beach County, however, is the clearly better educated with a greater percentage of their population having either a bachelor’s degree or a graduate degree.

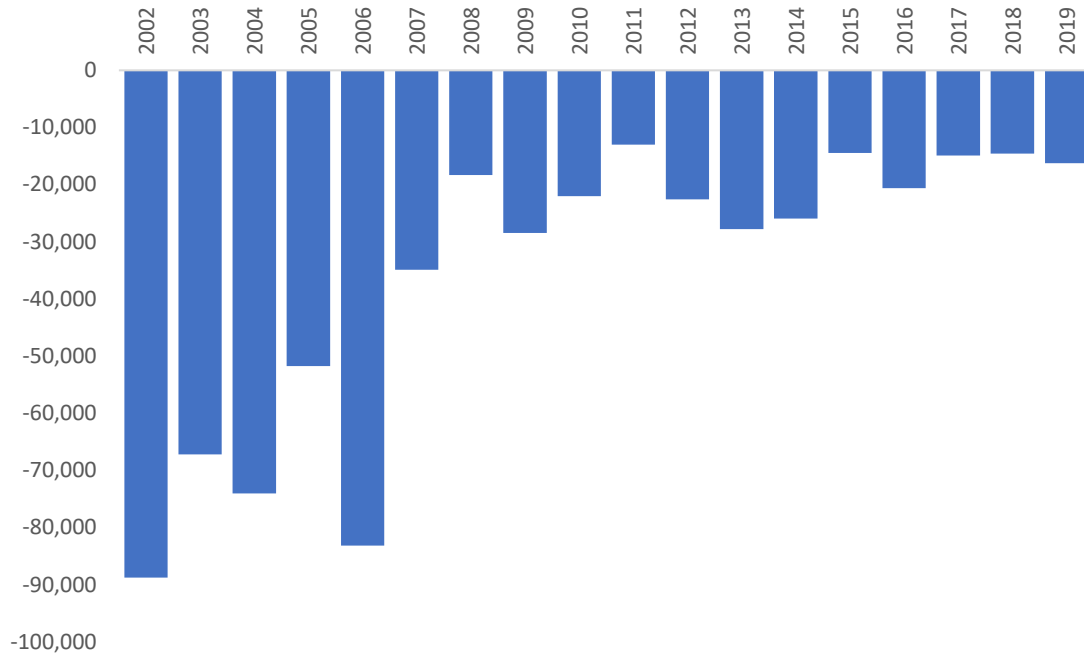
Figure 17. Educational Attainment by County



Source: Economic Modeling Specialists Intl.

Commute Patterns – A positive sign for Broward County is the increase in the number of net-inflow commuters. **Figure 18** displays an eighteen-year history of net-inflow commuters to their occupation. By net-inflow of commuters, we mean how many more commuters are flowing into Broward County relative to those leaving for work. If a region has more commuters flowing in rather out, it's an indication of job concentration. During 2002, Broward County experienced nearly 90,000 more commuters flowed out of the county than in (a negative net-inflow). At that time, this accounted for roughly 13% of Broward's overall workforce. By 2019, although still a net-negative number, the delta between the number flowing in versus out has reduced to roughly 16,000, indicating Broward's job concentration has increased substantially. This trend has resulted in net jobs leaving Broward to just 1.9% of the workforce.

Figure 18. Commute Patterns Historical Net Inflow, Broward County



Source: U.S. Census Bureau

Industry Overview

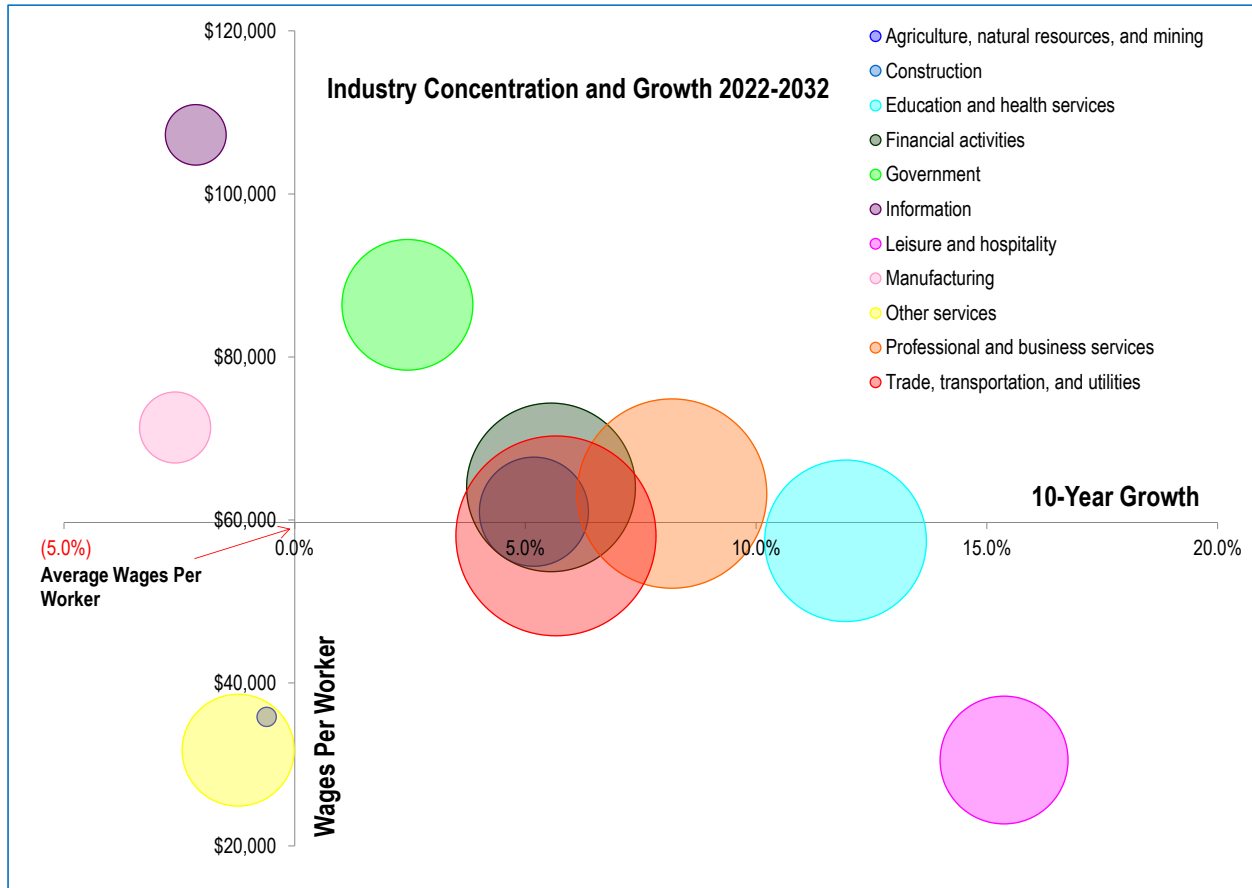
Projected Growth – Broward County is home to approximately 1.2 million jobs (including self-employed estimates). **Figure 19** highlights industry employment, average earnings, and forecasted job growth over the next 10-years. The size of the circle represents total employment in a specific industry (based on color). The vertical axis measures average earnings in each industry for Broward County. The horizontal axis provides expected growth over the next decade. The axes intersect at Broward’s average earnings per job of \$59,672. These earnings are about 1% higher than Florida’s average, and roughly 14% lower than the national average. The upper right quadrant of **Figure 19** represents industries that are expected to grow and have higher earnings relative to Broward County.

For Broward, the largest circle (red) represents *Trade, transportation, and utilities*. Given tourism in the region, retail trade accounts for roughly two-thirds of this industry. This diverse industry overall pays roughly the County average and is expected to grow about 5.7% over the next ten years. **Professional and business services** (orange) is the second largest industry, currently employing almost 220,000 jobs in the County. Pay is above Broward County average and expected to grow at a strong 8.2% over the next decade.

Given the tourism component, it is important to recognize the role of **Leisure and hospitality** (pink) in the County. Although the industry pays average wages well below Broward’s average,

the growth is expected to account for roughly 19.3% of all net new jobs over the next ten years. It is important to note that this industry can support a learning environment and experience to gain some soft skills requested by employers. In addition, there are also many opportunities for career growth and management level occupations.

Figure 19. Broward County Industry Concentration and Growth



Source: Economic Modeling Specialists Intl.; All Class of Workers

Occupation Supply and Demand – Given the growth and wages from the industries provided above, a deeper analysis will focus on detailed industries that also align with CareerSource Broward’s “High-Growth Industries”. These industries identified in **Figure 20** account for roughly 25% of all Broward County jobs and expected to add over 50,000 net new jobs over the next decade. The following is provided for each of the detailed industries

- **2022 Jobs** – how many jobs the industry currently has in Broward County,
- **10-year Job Growth** – expected growth of net new jobs the industry would add in the next 10-years to Broward County,
- **Percent Change** – expected percent growth over 10-years of total jobs in the industry,
- **Average Earnings** – average compensation and profits in the industry per worker.

Figure 20. Detailed Industry Growth

Financial activities	2022 Jobs	10-Yr Job Growth	Percent Change	Avg. Earnings/Job
Other Financial Investment Activities	29,967	4,513	15.1%	\$56,870
Activities Related to Real Estate	33,028	3,816	11.6%	\$46,001
Lessors of Real Estate	27,133	1,782	6.6%	\$55,173
Education and health services	2022 Jobs	10-Yr Job Growth	Percent Change	Avg. Earnings/Job
Offices of Other Health Practitioners	15,213	3,784	24.9%	\$45,473
Officers of Physicians	24,339	1,895	7.8%	\$123,535
Elementary and Secondary Schools	10,968	1,384	12.6%	\$46,896
Home Health Care Services	21,864	1,304	6.0%	\$29,153
Continuing Care / Assisted Living Facilities	6,563	1,293	19.7%	\$32,442
Trade, transportation, and utilities	2022 Jobs	10-Yr Job Growth	Percent Change	Avg. Earnings/Job
Scheduled Air Transportation	9,984	5,551	55.6%	\$107,884
Clothing Stores	8,691	1,288	14.8%	\$27,382
Professional and business services	2022 Jobs	10-Yr Job Growth	Percent Change	Avg. Earnings/Job
Management and Technical Consulting	21,145	3,039	14.4%	\$69,251
Computer Systems Design Services	13,853	2,555	18.4%	\$110,811
Leisure and hospitality	2022 Jobs	10-Yr Job Growth	Percent Change	Avg. Earnings/Job
Restaurants and Other Eating Places	61,904	14,993	24.2%	\$29,431
Other Amusement and Recreation	8,048	2,243	27.9%	\$35,350
Gambling Industries	1,094	829	75.8%	\$44,152

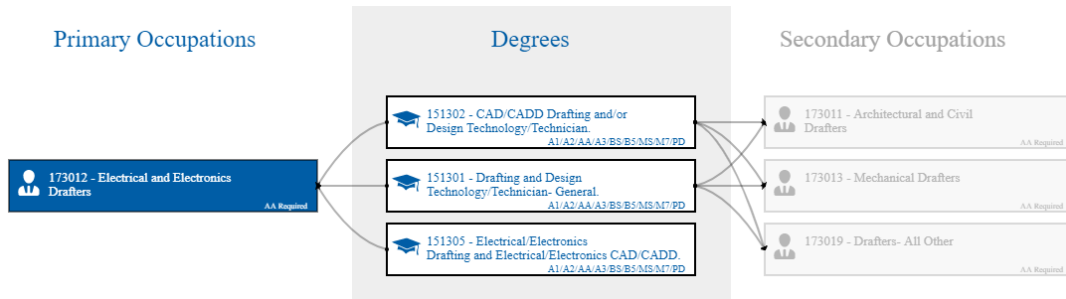
Source: Economic Modeling Specialists Intl.; All Class of Workers

Once these emerging industries are identified, the next focus will consider the skill sets needed. Using staffing patterns, ABLE Operations has identified the talent needs of employers. There are many factors to consider when analyzing supply and demand of a specific occupation. Typically, this process considers expected job openings (demand) relative to potential training programs for those occupations. This can be quite a tough task, as matching Classification of Instructional Programs (CIP) to Standard Occupational Classification (SOC) codes is not straightforward. For example, an individual who obtains an accounting degree may not necessarily become an accountant. The skills that individual has are in demand by other occupations, such as a financial analyst or credit analyst.

Consider the supply and demand for an electrical/electronics drafter (SOC 17-3012). **Figure 21** represents the Primary Occupation, which typically requires and Associates degree. Employers looking to hire an electrical drafter would usually request a degree in CAD/CADD drafting, drafting and design technology, or electrical drafting CAD/CADD (CIP 15.1302, 15.1301, and

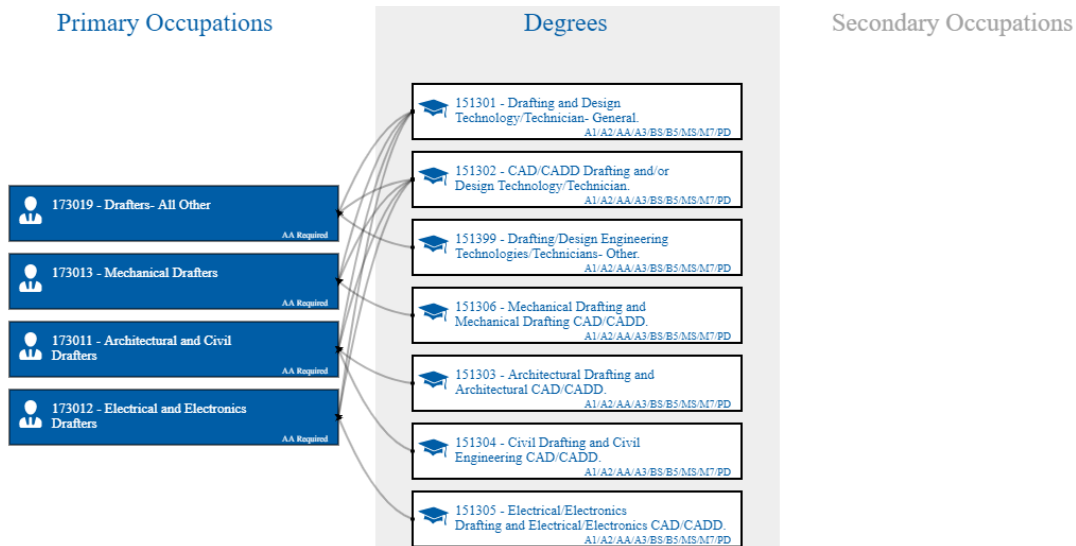
15.1305 respectively located under Degrees). The standard analysis would compare this degree production to demand of electrical drafters. However, other occupations are also looking for these skills, such as architectural/civil, mechanical, and other drafters (Secondary Occupations). This analysis will take a more holistic approach by considering both potential supply (degrees) with potential demand (occupations).

Figure 21. Electrical / Electronics Drafter Occupation to Program Crosswalk



When combining the secondary occupations with the primary, a workforce grouping of skill sets is created. **Figure 22** provides the drafting skills group of four different occupations. Once these four drafting occupations are together it is straightforward to see the seven associated instructional programs. There are no longer any secondary occupations, and a complete grouping is identified with seven instructional programs (typically Associates) as a pipeline of talent for four drafting occupations.

Figure 22. Drafters Occupation to Program Crosswalk



The remainder of this section will consider supply and demand analysis of the occupation groupings ABE Operations identified from the staffing patterns of higher growth industries.

The next five figures provide the supporting occupations for these industries, along with a review of Broward County total jobs, wages, current and longer-term labor supply, and demand analysis.

The following data is provided for each of the occupations identified

- **Total Jobs** – how many current jobs (2022) in this occupation, across all industries in Broward County,
- **Avg Wage** – average annual earnings for this occupation in the highlighted region,
- **Job Postings** – how many estimated unique job postings for that occupation are currently in Broward County (May 2022),
- **Job Seekers** – how many individual resumes CSBD currently has in EmployFlorida.com that identifies that occupation,
- **S/D Ratio** – is a ratio of supply from Job Seekers divided by demand through Job Postings,
- **Annual Openings** – a longer-term outlook as to the expected annual job openings in the region for that occupation,
- **Completions** – graduates of regional training programs that are expected to obtain skillsets associated with the occupation,
- **LT S/D Ratio** – is a ratio of supply numbers from expected completions (graduates) divided by long-term demand.

Financial activities

Figure 23 provides supply and demand analysis for two workforce groupings, including Real Estate and Bookkeeping. In these two groups are a total of eight occupations (four in each). In the Real Estate group, Sales Agents make up roughly half of the group's total jobs in Broward County. There are just over 10,800 employees in this group, which make on average about \$65,000. Currently, there are 263 job postings for these occupations, with about two thirds of them in Community Association Managers. There are currently 41 resumes, in which the job applicant has self-identified the desire to be employed in these occupations. From a long-term perspective, it is expected that over 1,000 job openings will be posted for this group on an annual basis in Broward County. The institutions in the region are expected to graduate 26 students per year in this field, however, it is important to note that no formal training is required for these positions. Therefore, although the supply to demand ratio is low (red), education or training is typically not a barrier to entry. It is important to note, that Broward County provides enough bookkeeping certificate and degree programs (2 years or less of formal education) to support the long-term demand of these occupations.

Given the limited data availability for Broward County, the long-term forecasts are provided for Palm Beach and Miami-Dade in **Figure 23**.

Figure 23 Financial Activities Occupation Overview

Occupation	Broward County								
	Total Jobs	Avg Wage	Job Postings	Job			Annual		LT S/D Ratio
				Seekers	S/D Ratio	Openings	Completions		
Real Estate	10,822	\$ 65,461	263	41	0.16	1,060	26	0.02	
Property, Real Estate, and Community Association Managers	3,551	\$ 61,074	178	19	0.11	295	*	*	
Property Appraisers and Assessors	669	\$ 57,005	73	1	0.01	55	*	*	
Real Estate Brokers	1,283	\$ 83,308	9	2	0.22	140	*	*	
Real Estate Sales Agents	5,320	\$ 65,148	3	19	6.33	570	*	*	
Bookkeeping	11,543	\$ 42,786	502	85	0.17	1,271	1,311	1.03	
Tax Preparers	990	\$ 47,484	9	11	1.22	121	*	*	
Bookkeeping, Accounting, and Auditing Clerks	9,505	\$ 42,175	443	58	0.13	1,047	*	*	
Payroll and Timekeeping Clerks	808	\$ 41,977	49	15	0.31	79	*	*	
Brokerage Clerks	240	\$ 50,367	1	1	1.00	24	*	*	
Occupation	Palm Beach County					Miami-Dade County			
	Avg Wage	Annual		LT S/D		Avg Wage	Annual		LT S/D
		Openings	Completions	Ratio	Openings		Completions	Ratio	
Real Estate	\$ 70,172	849	58	0.07	\$ 67,263	1,747	124	0.07	
Property, Real Estate, and Community Association Managers	\$ 68,056	254	*	*	\$ 63,540	486	*	*	
Property Appraisers and Assessors	\$ 61,623	41	*	*	\$ 59,265	91	*	*	
Real Estate Brokers	\$ 85,589	106	*	*	\$ 84,519	235	*	*	
Real Estate Sales Agents	\$ 69,067	447	*	*	\$ 66,340	935	*	*	
Bookkeeping	\$ 46,870	1,009	35	0.03	\$ 43,565	1,792	83	0.05	
Tax Preparers	\$ 53,010	102	*	*	\$ 49,169	166	*	*	
Bookkeeping, Accounting, and Auditing Clerks	\$ 45,623	809	*	*	\$ 42,616	1,467	*	*	
Payroll and Timekeeping Clerks	\$ 46,161	61	*	*	\$ 42,674	110	*	*	
Brokerage Clerks	\$ 60,233	36	*	*	\$ 56,534	48	*	*	

Source: Economic Modeling Specialists Intl.; All Class of Workers, JobsEQ, Employ Florida

Education and health services

Figure 24 provides the analysis for nursing as part of the Education and health services industry.

Figure 24. Education and Health Services Occupation Overview

Occupation	Broward County								
	Total Jobs	Avg Wage	Job Postings	Job			Annual		LT S/D Ratio
				Seekers	S/D Ratio	Openings	Completions		
Nursing - LPN	10,768	\$ 33,411	613	54	0.09	1,112	405	0.36	
Nursing Assistants	6,007	\$ 26,512	295	37	0.13	727	*	*	
Licensed Practical and Licensed Vocational Nurses	3,155	\$ 45,807	244	5	0.02	248	*	*	
Psychiatric Aides	60	\$ 30,969	*	*	*	10	*	*	
Psychiatric Technicians	1,546	\$ 35,013	74	12	0.16	126	*	*	
Registered Nurses	15,502	\$ 66,772	3,243	10	0.00	887	798	0.90	
Nurse Practitioners	1,288	\$ 97,074	101	2	0.02	127	238	1.87	
Occupation	Palm Beach County					Miami-Dade County			
	Avg Wage	Annual		LT S/D		Avg Wage	Annual		LT S/D
		Openings	Completions	Ratio	Openings		Completions	Ratio	
Nursing - LPN	\$ 33,581	1,240	217	0.17	\$ 34,355	1,824	560	0.31	
Nursing Assistants	\$ 27,068	878	*	*	\$ 28,311	1,307	*	*	
Licensed Practical and Licensed Vocational Nurses	\$ 46,784	290	*	*	\$ 46,914	412	*	*	
Psychiatric Aides	\$ 32,874	7	*	*	\$ 32,477	8	*	*	
Psychiatric Technicians	\$ 34,339	66	*	*	\$ 35,119	97	*	*	
Registered Nurses	\$ 66,555	637	543	0.85	\$ 72,327	1,685	1,314	0.78	
Nurse Practitioners	\$ 92,763	108	141	1.31	\$ 90,906	216	969	4.50	

Source: Economic Modeling Specialists Intl.; All Class of Workers, JobsEQ, Employ Florida

It is important to note that the highest number of job postings currently in Broward County are for Registered Nurses. It is estimated that 3,243 job postings are active for this occupation. The three workforce groupings in this analysis are all nursing related, separated by education or training and experience. The Registered Nurse and Nurse Practitioner, which typically requires a bachelor’s and graduate degree, respectively, are adequately trained in the longer term to meet demand in all three regions (Broward, Palm Beach, and Miami-Dade counties). The gap appears to be in the entry level nursing, which may require a certificate up to an associate’s, across the different regions.

Trade, transportation, and utilities

Air transportation is expected to grow over 50% in the next ten years. This growth is in net-new jobs, making it difficult to find talent as employers must fill positions that are both resigning and through business expansion. Wages are good in this industry, with flight attendants in Broward County making nearly \$50,000 and aircraft maintenance \$63,000. Although **Figure 25** identifies the longer-term gap in aircraft maintenance, there are many students being trained in these skill sets. After reaching out to Broward College, as historically they were training many more in this field, it was discovered that many students have opted into an operations management training program designed for the Aviation/Airway Management/Operations occupation.

Figure 25. Trade, Transportation, and Utilities Occupation Overview

Occupation	Broward County							
	Total Jobs	Avg Wage	Job Postings	Job Seekers	S/D Ratio	Annual Openings	Annual Completions	LT S/D Ratio
Aircraft Maintenance	1,827	\$ 62,947	33	6	0.18	216	2	0.01
Aircraft Mechanics and Service Technicians	1,756	\$ 63,546	31	4	0.13	208	*	*
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	71	\$ 48,218	2	2	1.00	7	*	*
Retail Salespersons	29,243	\$ 27,850	2,048	172	0.08	4,009	*	*
Flight Attendants	2,942	\$ 49,412	2	8	4.00	676	*	*
Occupation	Palm Beach County				Miami-Dade County			
	Avg Wage	Annual Openings	Annual Completions	LT S/D Ratio	Avg Wage	Annual Openings	Annual Completions	LT S/D Ratio
Aircraft Maintenance	\$ 64,213	103	-	0.00	\$ 68,863	369	203	0.55
Aircraft Mechanics and Service Technicians	\$ 67,642	85	*	*	\$ 69,867	355	*	*
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$ 48,538	18	*	*	\$ 40,457	14	*	*
Retail Salespersons	\$ 29,274	2,777	*	*	\$ 30,164	5,214	*	*
Flight Attendants	\$ 48,063	23	*	*	\$ 56,162	768	*	*

Source: Economic Modeling Specialists Intl.; All Class of Workers, JobsEQ, Employ Florida

Professional and business services

Figure 26 highlights the demand for the computer support specialists grouping. These three occupations are in high demand, with currently 765 job postings, and expected annual job openings expected of 553. Broward County has the most completions in this field relative to Palm Beach and Miami-Dade counties, with five different institutions offering programs. Although these programs don't require formal education, it is great to see the institutions offering programs for in-demand skills.

Figure 26. Professional and Business Services Occupation Overview

Occupation	Broward County							
	Total Jobs	Avg Wage	Job Postings	Job		Annual		LT S/D
				Seekers	S/D Ratio	Openings	Completions	Ratio
Computer Support Specialists	6,770	\$ 56,898	765	72	0.09	553	288	0.52
Web Developers and Digital Interface Designers	1,300	\$ 63,947	53	7	0.13	116	*	*
Computer User Support Specialists	4,390	\$ 53,196	712	54	0.08	352	*	*
Computer Network Support Specialists	1,079	\$ 63,466	-	11	*	86	*	*

Occupation	Palm Beach County				Miami-Dade County			
	Avg Wage	Annual		LT S/D	Avg Wage	Annual		LT S/D
		Openings	Completions	Ratio		Openings	Completions	Ratio
Computer Support Specialists	\$ 57,670	352	49	0.14	\$ 56,195	665	71	0.11
Web Developers and Digital Interface Designers	\$ 63,583	76	*	*	\$ 61,009	150	*	*
Computer User Support Specialists	\$ 54,117	223	*	*	\$ 52,367	409	*	*
Computer Network Support Specialists	\$ 64,890	53	*	*	\$ 65,181	105	*	*

Source: Economic Modeling Specialists Intl.; All Class of Workers, JobsEQ, Employ Florida

Leisure and hospitality

Figure 27. Leisure and Hospitality Occupation Overview

Occupation	Broward County							
	Total Jobs	Avg Wage	Job Postings	Job		Annual		LT S/D
				Seekers	S/D Ratio	Openings	Completions	Ratio
Restaurant and Food Service	48,487	\$ 23,804	2,484	245	0.10	10,576	*	*
Cooks, Restaurant	9,245	\$ 28,561	449	40	0.09	1,918	*	*
Food Preparation Workers	5,913	\$ 25,455	268	39	0.15	1,028	*	*
Fast Food and Counter Workers	17,960	\$ 20,761	1,057	74	0.07	3,933	*	*
Waiters and Waitresses	13,252	\$ 24,025	466	76	0.16	3,082	*	*
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	2,117	\$ 22,848	244	16	0.07	616	*	*
First-Line Supervisors of Food Preparation and Serving Workers	6,090	\$ 35,299	905	22	0.02	1,040	*	*
Amusement and Recreation Attendants	2,293	\$ 21,484	74	8	0.11	563	*	*

Occupation	Palm Beach				Miami			
	Avg Wage	Annual		LT S/D	Avg Wage	Annual		LT S/D
		Openings	Completions	Ratio		Openings	Completions	Ratio
Restaurant and Food Service	\$ 24,399	9,945	*	*	\$ 26,449	13,066	*	*
Cooks, Restaurant	\$ 29,229	1,899	*	*	\$ 31,547	2,455	*	*
Food Preparation Workers	\$ 25,875	971	*	*	\$ 27,227	1,353	*	*
Fast Food and Counter Workers	\$ 20,911	3,314	*	*	\$ 23,364	4,478	*	*
Waiters and Waitresses	\$ 24,617	3,161	*	*	\$ 26,537	3,986	*	*
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$ 23,200	600	*	*	\$ 25,225	795	*	*
First-Line Supervisors of Food Preparation and Serving Workers	\$ 36,071	937	*	*	\$ 39,345	1,242	*	*
Amusement and Recreation Attendants	\$ 24,127	1,145	*	*	\$ 23,962	705	*	*

Source: Economic Modeling Specialists Intl.; All Class of Workers, JobsEQ, Employ Florida

The Leisure and hospitality industry is expected to see 15% growth over the next decade. **Figure 27** provides this optimistic outlook for 7 different occupations. Although no formal training is required (no longer term supply and demand ratio calculated), it is clear to see the strong demand for these occupations. In this environment, even if all job seekers in Broward County were a good match for the job postings, they would only fill about 10% of the demand.

Top Jobs – The following tables (**Figure 28 and Figure 29**) consider the “top 20 occupations”, or those in highest demand for Broward County. **Figure 28** is sorted by those occupations expected to have the most openings in Broward County over the next decade. This includes job openings due to replacement (jobs due to retirement, turnover, or termination) and new job hires (expansion of business). Most of these jobs fall under Leisure and hospitality and retail trade. In addition to this table, Appendix B provides the occupations with most expected openings for Palm Beach and Miami-Dade counties.

Figure 28. Top 20 Occupations by Total Job Openings, Broward County

Occupations	Avg. Annual Openings	Avg. Hourly Earnings	Current Job Postings
Retail Salespersons	4,009	\$13.93	2,048
Fast Food and Counter Workers	3,933	\$10.38	969
Customer Service Representatives	3,343	\$17.13	988
Cashiers	3,259	\$11.44	247
Waiters and Waitresses	3,082	\$12.01	466
Laborers, Freight, Stock, and Movers	2,443	\$17.24	307
Stockers and Order Fillers	2,316	\$13.75	1,243
Office Clerks, General	2,241	\$17.21	184
Janitors and Cleaners	2,062	\$13.04	633
Cooks, Restaurant	1,918	\$14.28	449
Home Health and Personal Care Aides	1,738	\$11.81	173
Security Guards	1,608	\$13.13	541
General and Operations Managers	1,307	\$54.17	296
Secretaries & Admin Assistants	1,262	\$17.38	867
Landscaping & Groundskeeping	1,083	\$14.93	154
Receptionists and Information Clerks	1,064	\$15.14	519
Maids and Housekeeping Cleaners	1,055	\$12.26	378
Bookkeeping & Accounting Clerks	1,047	\$21.09	443
Supervisors of Food Prep & Servers	1,040	\$17.65	905
Food Preparation Workers	1,028	\$12.73	268

Source: Economic Modeling Specialists Intl.; All Class of Workers

Figure 29 includes the top occupations by net new jobs (expansion of business). This table includes some jobs from leisure and hospitality, but also from Air transportation, Professional and business services, and Financial activities.

Figure 29. Top 20 Occupations by Net New Jobs, Broward County

Occupations	Total Jobs Gained	Avg. Hourly Earnings	Current Job Postings
Cooks, Restaurant	3,653	\$14.28	449
Waiters and Waitresses	3,057	\$12.01	466
Flight Attendants	1,997	\$24.71	2
Security Guards	1,714	\$13.13	541
Home Health and Personal Care Aides	1,675	\$11.81	173
Fast Food and Counter Workers	1,566	\$10.38	969
Laborers, Freight, Stock, and Movers	1,531	\$17.24	307
Software Developers, Analysts and Testers	1,406	\$50.78	796
Passenger Vehicle Drivers	1,078	\$14.76	14
Exercise Trainers and Fitness Instructors	1,017	\$20.40	164
Personal Service Managers	932	\$38.16	32
Supervisors of Food Preparation	908	\$17.65	905
Janitors and Cleaners	899	\$13.04	633
Postsecondary Teachers	880	\$40.01	551
Insurance Sales Agents	809	\$31.87	148
Airline Pilots, Copilots, and Flight Engineers	782	\$104.91	10
Real Estate Sales Agents	775	\$32.57	73
Hairdressers, Hairstylists, & Cosmetologists	758	\$16.25	143
Lawyers	739	\$70.81	154
Management Analysts	729	\$46.58	359

Source: Economic Modeling Specialists Intl.; All Class of Workers

Figure 30 provides the top declining occupations in terms of net new jobs for Broward County. Some of these occupations are potentially in **Figure 30**, as the number of job openings per year is high. However, over the next decade they are expected to see the overall number of jobs in this occupation decline. This is likely due to technology and the use of Artificial Intelligence. For example, it is expected that cashiers have over 3,200 job openings in Broward County on an annual basis. However, over time, more will be resigning or laid off and not replaced.

Figure 30. Top Declining Occupations by Net New Jobs, Broward County

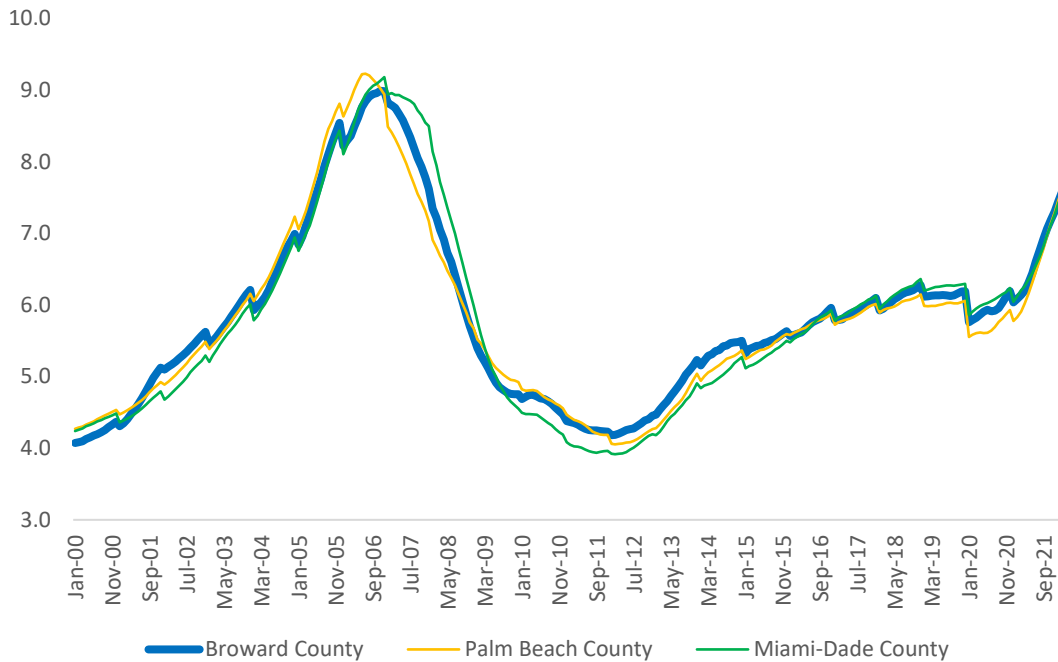
Occupations	Total Jobs Lost	Avg. Hourly Earnings	Current Job Postings
Cashiers	(2,261)	\$11.44	247
Maids and Housekeeping Cleaners	(968)	\$12.26	378
Customer Service Representatives	(697)	\$17.13	988
Travel Agents	(678)	\$22.01	2
Secretaries and Admin Assistants	(668)	\$17.38	867
Retail Salespersons	(622)	\$13.93	2048
Childcare Workers	(573)	\$11.79	78
Office Clerks, General	(455)	\$17.21	184
Tellers	(454)	\$14.70	88
Securities and Financial Sales Agents	(368)	\$38.92	478
Parking Attendants	(367)	\$12.20	140
Hotel, Motel, and Resort Desk Clerks	(338)	\$12.00	231
Executive Secretaries and Admin Assistants	(304)	\$27.44	109
Telemarketers	(302)	\$13.63	23
Preschool Teachers	(296)	\$13.73	286
Supervisors of Office and Admin	(289)	\$29.30	595
Postal Service Mail Carriers	(270)	\$26.37	10
Bill and Account Collectors	(253)	\$18.28	167
Legal Secretaries and Admin Assistants	(234)	\$21.77	31
Laundry and Dry-Cleaning Workers	(226)	\$11.63	38

Source: Economic Modeling Specialists Intl.; All Class of Workers

Quality of Life

Housing – Closely tied to economic cycles is the housing market. **Figure 31** presents the historical median house sale price to median wage ratio since 2000. The ratio represents how many times greater the median house sale value is than the median wage. During the lower end of the housing cycle, the ratio for all three counties is near a 4 multiple, whereas the peak prior to the Great Recession saw multiples of near 9 – meaning the median house sale was 9 times greater than the median wage in all three counties. As of September 2021, the ratio has increased substantially since the trough of the Great Recession to nearly an 8 multiple, putting pressure on lower income working families.

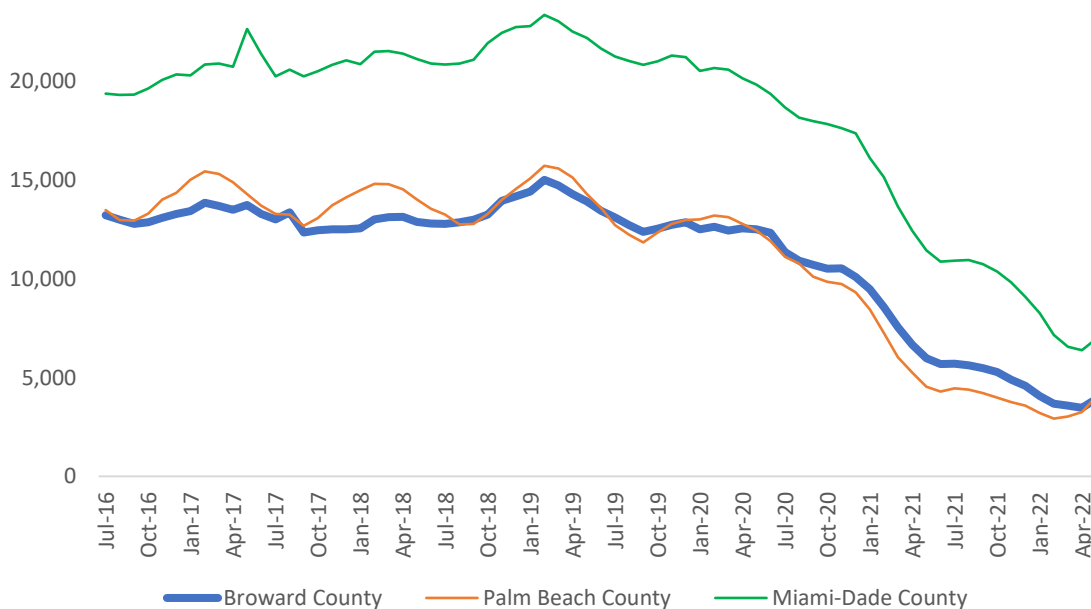
Figure 31. Median House Sale to Median Wage Ratio



Source: Zillow Real Estate Data; Florida Department of Economic Opportunity

In conjunction with increasing housing to wage costs, is a marketed decline in active listings. Per the graph below (**Figure 32**), active listings across the three counties have declined considerably since the pandemic. As the housing market becomes more active the supply of homes for sale generally declines and apply upward pressure on prices as supply is constrained. In these

Figure 32. Housing Inventory (Active Listings)

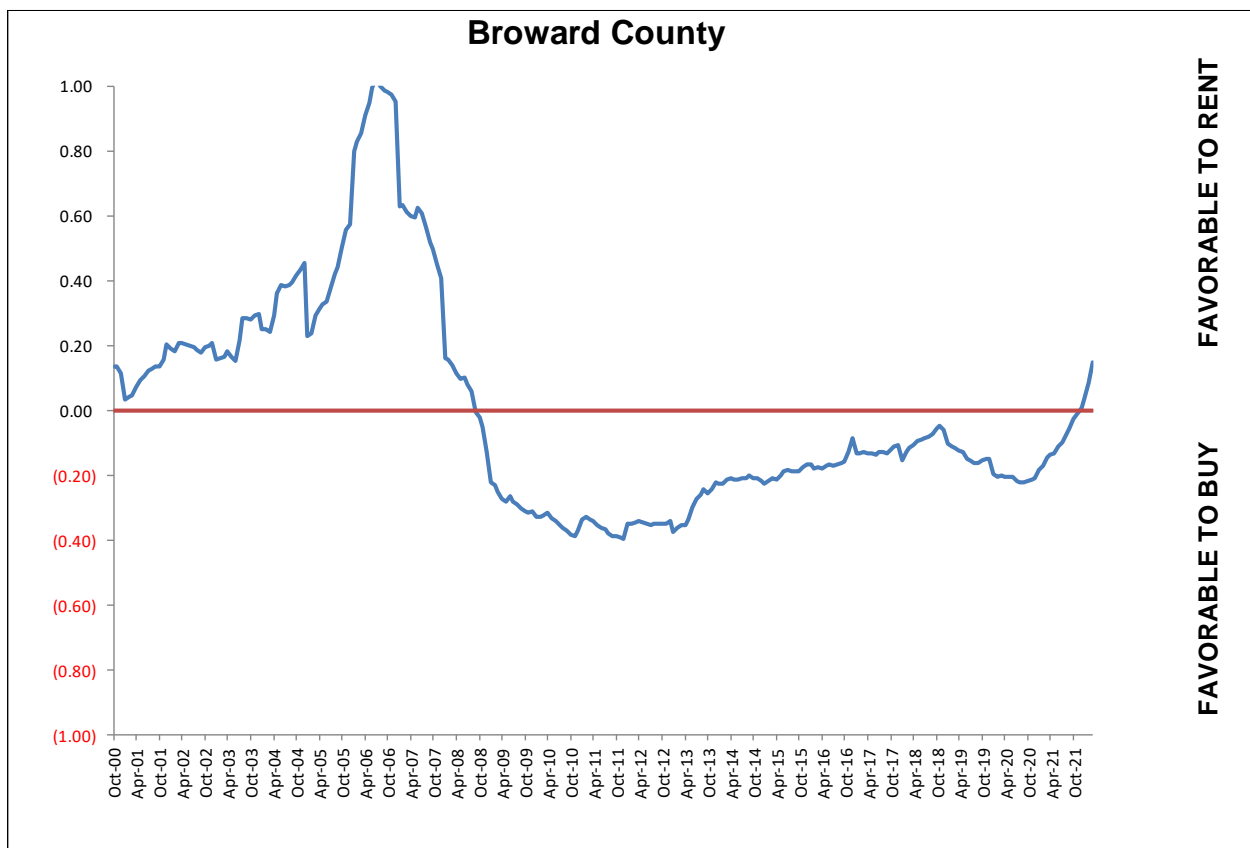


Source: Federal Reserve Economic Data

circumstances, either a slowdown in the economy or increasing supply faster than demand are generally the fastest ways to balance the market.

Given the current upswing in the housing market, a useful metric for working families to monitor is the Rent vs Own Index. What the index provides is the percentage of ownership cost under or above rental costs for a given month. For ownership, the index considers down payments, insurance, taxes, mortgage rates, and other common ownership costs. For rental, it considers rents and rental insurance. **Figure 33** presents the index as it has historically countered the housing market. As the housing market heats up, supply becomes constrained, and the cost of ownership increases making rentals more attractive. The other component to consider is mortgage rates. Leading up to the Great Recession, mortgage rates hovered around 6%, but had since declined to a post-pandemic low of roughly 2.75%. Over the last year, with interest rates rising so too have mortgage rates which certainly impact housing ownership costs for a new buyer. While housing appreciation has occurred over the last several years because rents have also increased, it has only been over the last few months of 2021 and into 2022 that renting has become more affordable as mortgage rates continue to rise.

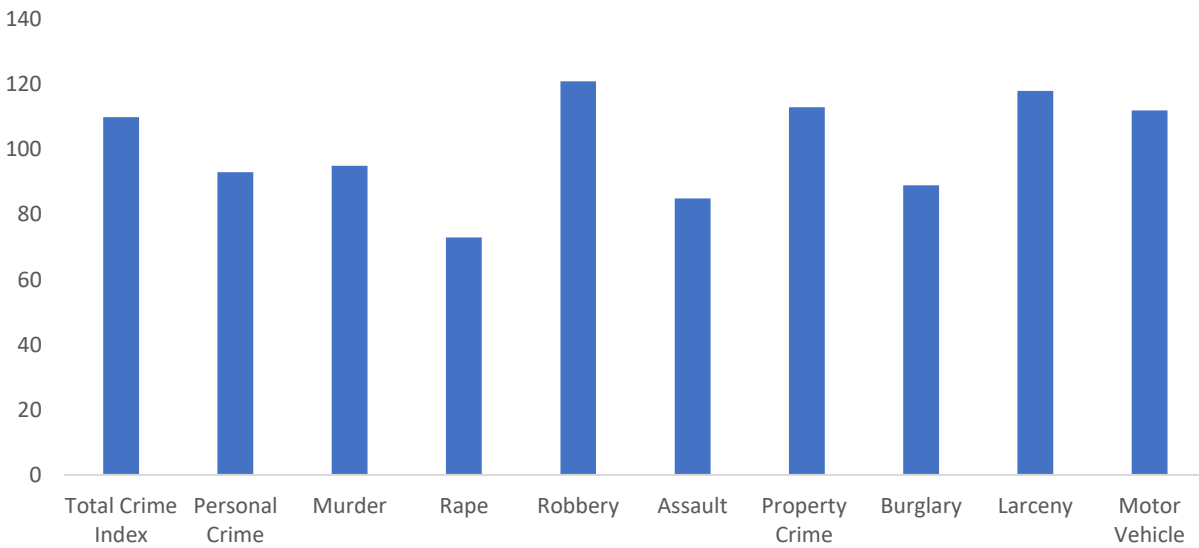
Figure 33. Broward County Rent vs. Own Index



Source: U.S Bureau of Labor Statistics; Zillow Real Estate Data, Federal Reserve Economic Data

Crime – In addition to housing affordability, crime and poverty rates are good metric to monitor when assessing a region’s quality of life. **Figure 34** presents the crime rate index for Broward County. A value of 100 indicates the region is on par with the US with any value greater than 100 meaning the region has a greater crime rate in than the US average. The index is broken into several categories ranging from personal crime to robbery to motor vehicle incidents. The first metric provides an aggregate estimation of total crime which was nearly 10% greater in Broward than the nation.

Figure 34. 2021 Crime Rate Index, Broward County

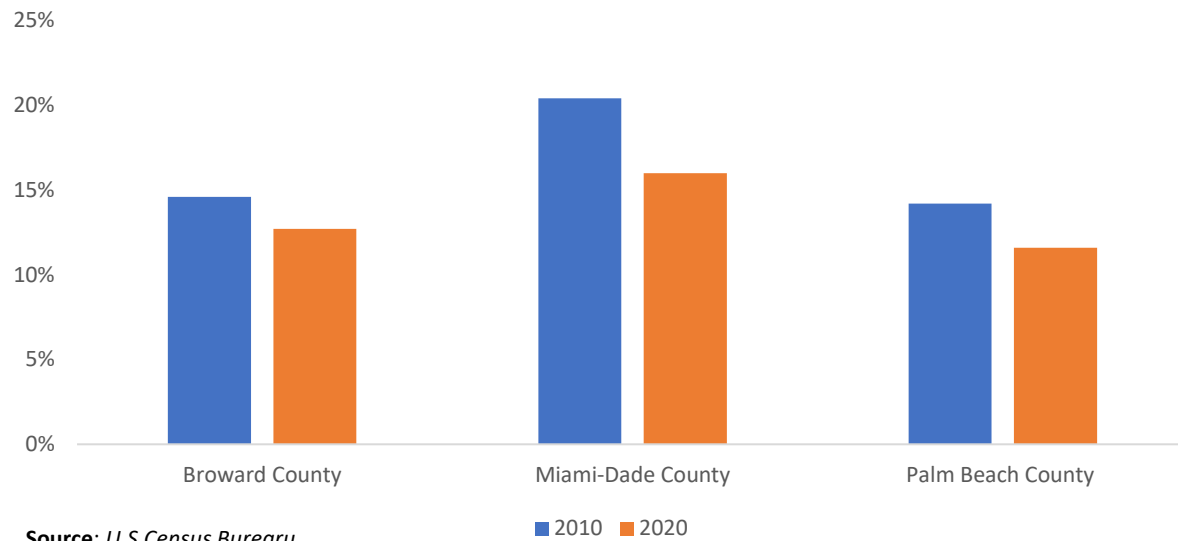


Source: U.S Census Bureau

However, only four of the nine crime components scored above a 100, meaning they had an outsized impact on robbery, property crime, larceny, and motor vehicle crime drove the total crime rate. Components with values less than the nation included personal crime, murder, rape, assault, and burglary were all well below the national average.

Poverty – Poverty rates are also critical to establishing a region’s quality of life. For Broward, Miami-Dade, and Palm Beach, significant process has been made in bring poverty rates down since 2010. Broward improved its poverty rate by 13% while Miami-Dade and Palm Beach improved their rates by 22% and 18%, respectively. It should be noted that 2010 was the depth of the Great Recession so higher poverty rates were to be expected as unemployment rates were still relatively high. As the economy improved and unemployment rates receded, so too did poverty rates in each county.

Figure 35. Change in Poverty Rates, 2010 - 2020



Transportation – Broward County offers an expansive multi-modal transportation system that includes nearly a dozen different modes of travel. These modes include air, public transportation, rail, sea, and roadways to name a few. The Fort Lauderdale/Hollywood International (FLL) Airport experienced nearly 18 million enplanements in 2018 with over 80,000 passengers daily. Broward’s public transportation includes local and express bus services as well as community shuttles. Rail includes both freight and passenger. With the opening of the Intermodal Container Transfer Facility (ICTF) at Port Everglades in 2014, the county now has a means of providing more efficient transfers of freight from vessels to trains and trucks. Located within the largest Foreign Trade Zone in Florida, Port Everglades is the primary storage and distribution seaport for refined petroleum products in South Florida. Finally, the county’s roadway system is extensive with nearly 5,130 miles of public roads, including local neighborhood roads, collectors, arterials, and high-capacity freeways. Combined, the county’s transportation network, although not perfect, allows Broward County to compete internationally for business and provides a lifeline to the Florida economy.

Childcare – The availability and cost of childcare is a significant concern for many working-class families, as it can consume a large portion of the household income. For many lower income families with two parents, the increasing costs of childcare can determine whether or not both parents work, or one needs to stay home with the children. A 2018 USA Today article reported Broward County as the most expensive county in all of Florida for childcare.¹ The article

¹ Suneson, Grant. "Counties with the most expensive childcare cost in every state." *USA Today*, October 3, 2018: <https://www.usatoday.com/story/money/personalfinance/2018/10/03/counties-most-expensive-child-care-state/37965223/>.

reported the annual child care cost was just under \$8,500 in a county where the median family income was just over \$64,300 annually. That’s over 13% of the median income.

Looking at the number of childcare workers relative the local childcare population offers additional insights into a county’s performance.² As of 2022, Broward County has approximately 13.7 child under the age of 5 for every childcare worker in employed in the county. This is roughly on par with Palm Beach and considerably higher than Miami-Dade. Given Broward County has a higher labor force participation rate than the other counties, the demand for childcare is likely higher than in Palm Beach County but the child to ratios are the nearly the same. The higher ratio also supports the USA Today article claiming Broward has the most expensive childcare services in the state.

Figure 36. Population Less than 5 years to Daycare Workers

	Broward County	Palm Beach County	Miami-Dade County
2022 Jobs in Childcare Services	7,939	5,705	14,735
Population < 5 yrs of age	108,859	76,959	151,984
Child in County per Worker	13.7	13.5	10.31

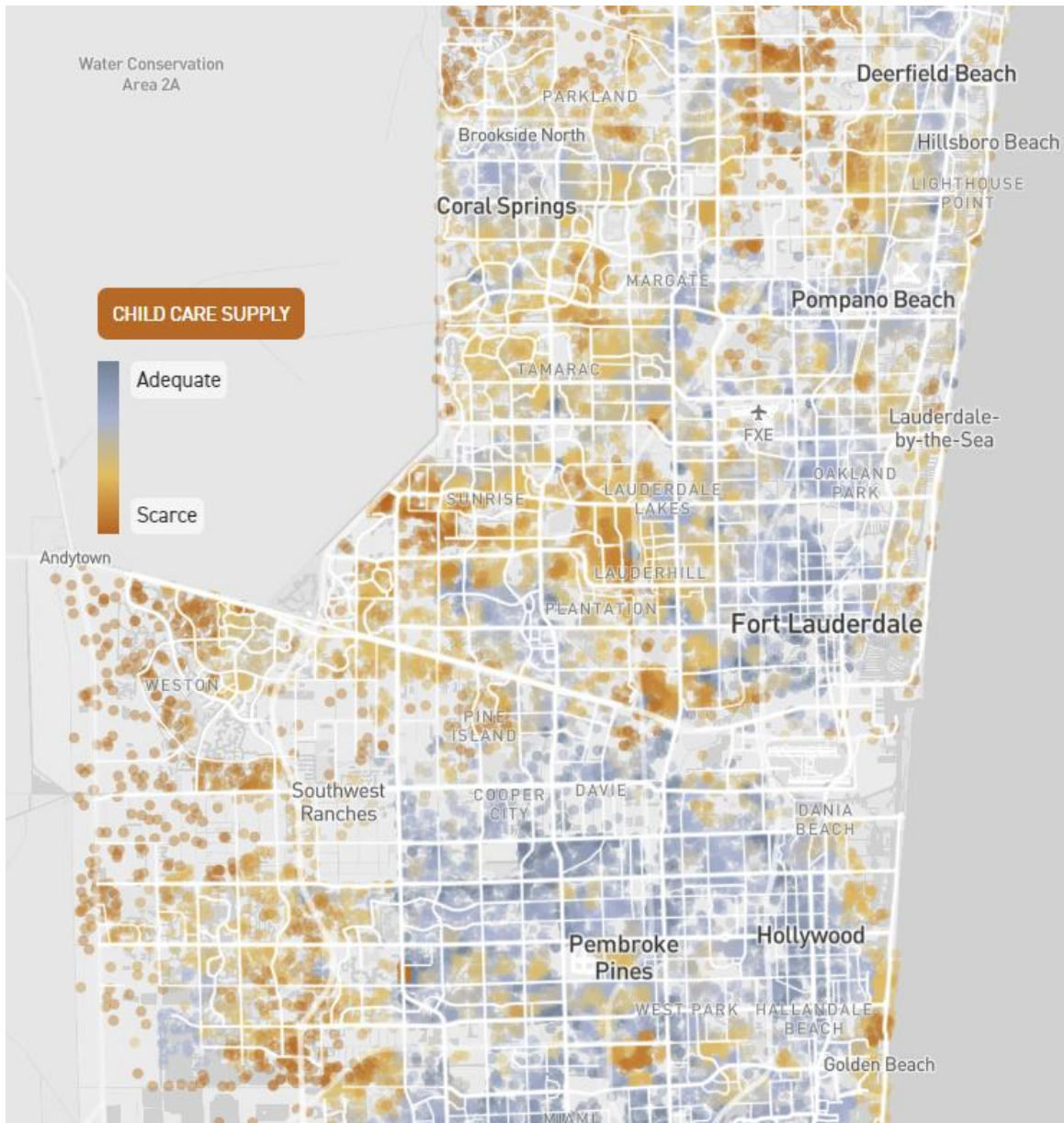
Source: *Economic Modeling Specialists Intl.*

Childcaredessert.org conducts a periodic assessment of childcare access across the nation. Their most recent analysis (presented in Figure 34 on the following page) provides a visual representation of childcare access throughout Broward County. As the can be seen in the figure, the blue areas represent adequate access while the orange represent more limited options. According to the analysis, adequate childcare access is concentrated the northern portions of Coral Springs, Pompano Beach, Fort Lauderdale, Pembroke Pines and Hollywood. The further away from these locations (to the west and along the barrier islands), the scarcer childcare services become.

For more detailed analysis, the reader is encouraged to visit childcaredessert.org to access the tool’s full capability. Of particular interest is the ability to overlay poverty concentrations (as well as other demographics) on childcare access. The analysis clearly shows that childcare access is adequate in lower income area while more affluent regions of the county have less options closer to their residence. This may be due to significant federal funding for childcare in lower income areas as well as more affluent communities’ decisions to live further away the urban core where high concentrations of jobs have historically been located.

² This analysis assumes children under the age of 5 to represents the childcare population.

Figure 37. Access to Childcare, Broward County



Source: childcaresdeserts.org

Conclusion

It is expected that the U.S. economy will likely experience a slowdown and potentially a recession in the next twelve months. With high inflation and rising interest rates to offset, it is likely that consumption and business investment will slow down.

- Prepare for employment growth to slow. Certain sectors will see some short-term employment declines such as construction and real estate (specifically sales/transactions).
- Employment trends right now include “great resignation” and career paths, unions, ESG (Environmental, Social, Governance). Currently, employees are in the best market to negotiate wages/benefits or seek alternatives.
- Average wages are growing at phenomenal rates. The growth of average wages is outpacing inflation over the last decade in Broward County. This will likely continue for the lower paying jobs over the next few years as minimum wage reaches \$15.00 an hour by 2026 for Florida. However, this will continue to put pressure on profit margins for small business and those in leisure and hospitality.
- Labor force remains an asset in Broward relative to the north and south counties. In addition, the trend to attract those to work in Broward County has been increasing over the last fifteen years.
- The leisure and hospitality industry is expected to remain strong with growth over the next decade. This includes the amusement, entertainment, and gambling industries. Occupations with lower starting wages, that do not generally require postsecondary education, are great opportunities to provide soft skills and management development opportunities.
- Housing, and specifically Affordable Housing is a big concern for Broward County and South Florida. If there is an economic slowdown, with rising mortgage rates, this could potentially be the silver lining with housing and rent prices stabilizing.
- There is a demographic shift continuing as the population is aging. In the next five years, the Hispanic population is expected to become the majority in Broward County.
- Broward County has significant childcare affordability issues. Reported to have the most expensive childcare in the state, Broward County may see some of these affordability issues improve over the next several years as the fastest growing age cohort in the county is 70 and up whereas the under 15 population (inclusive of the childcare population) is only projected to grow at 2% through 2026.

Resource Allocation Strategies

Given the economic and workforce analysis provided in this document, the following are suggested strategies for allocating limited resources, and potentially achieving the highest return in the region:

1. The industries identified in this research are consistent with CareerSource Broward's targeted industry list. The industry analysis highlighted aviation/aerospace, healthcare, hospitality/tourism, information technology, and retail. Marine, life sciences, and construction were not identified as "high growth". However, these industries expect to remain stable to low growth and remain a strong employer in the region. It is recommended that CSBD consider financial services or fintech as a potential targeted industry. In addition to data supporting this research, the Greater Ft. Lauderdale Alliance has listed financial services as a targeted industry. It is also important to note that both Palm Beach and Miami counties have made significant investments in recruiting and building a financial services presence.
2. There are quite a few examples where Broward's training institutions are training an ample pipeline of potential skills and talent to the region, meeting employer's demands. The following highlights some programs specific to the targeted industries and in-demand skills:
 - a. **Aviation/Aerospace** – with strong growth expected in this industry, there is no doubt that maintenance and repair will be needed. The current training providers are not necessarily aligned with the specific demands of employers. Many students are becoming trained in aviation operations and management. Although they obtain some skillsets needed for aircraft maintenance, the expected need of employers is to maintain and repair the airplane. It is suggested that CSBD collaborate with local training providers (specifically Broward College) and employers to determine whether training outcomes currently meet regional business needs, or if they could be adjusted for alignment. Initial conversations could be arranged through focus groups.
 - b. **Healthcare** – nursing is currently leading the job postings and is expected to remain strong into the future. The aging population of Broward County and South Florida support this. The South Florida region, Broward included, is doing well training a pipeline for this career path. The analysis from this report identifies a potential gap in the entry level nursing positions. It is suggested that CSBD continue to support career paths in nursing through certificate and training programs at the local technical and state colleges.
 - c. **Computer Support** – computer support is needed across all industries with occupations including web and application development, IT support, and networking. Broward County is training more individuals in this field for a certificate or associates than Miami-Dade and Palm Beach counties combined. It is recommended that CSBD works with the five local training institutions

supporting enrollments. In addition, CSBD can provide customers with information on career paths regarding demand and potential wages (Software developers, network architects, etc.). Given the variety of programs and offerings, it is important for CSBD and partners to understand the business needs and determine if further testing or certificates are worthwhile.

3. It is not surprising to residents that the quality of life in Broward County is restricted due to lack of affordable housing and for families, the burden of childcare expenses. Although the market might stabilize, these costs will likely remain a high portion of household budget due to population density and shortage of daycare employees. Given the resources and partnerships, it is suggested that CSBD consider addressing this topic with their customers. Job searchers, employees, and youth could be made aware of this through financial literacy workshops. The importance of managing the household budget, maintaining responsible limits on debt, and spend on these two items appropriately. It may also be meaningful for CSBD to work with community partners and employers on this issue and make sure the business community is aware.
4. From a long-term planning perspective, it is important to recognize the occupations and skill sets that are likely to see a decline in total jobs (**Figure 30**) over the next decade. Although these skills might be in demand now, it is important to have a strategy for the employee in terms of career path. This might include CSBD adjusting business partners and target occupation/industry lists as artificial intelligence and automation disrupt the current environment.
5. Throughout the research of this report, it was apparent that useful regional economic and workforce data is sparse for business. Executives would like to gain information from a local perspective about the regional economy, and not just the U.S., Florida, or even South Florida data. It is suggested that CSBD work with partners (Greater Florida Alliance, Chamber, etc.) to consider a regional data dashboard or identify informative metrics. As an example, if surveys are collected and database maintained a Broward County Consumer Confidence or Business Confidence index could be created.

Appendix A. Education and Training Institutions: *Postsecondary Certificate (Program)*

Institution Name	Agricultural/Animal Science	Natural Resource and Conservation	Communication/Journalism	Communications Technologies	Computer and Information Sciences	Culinary, Entertainment, Personal Education	Engineering	Family and Consumer Sciences	Legal Professions and Studies	Science Technologies	Homeland Security/Fire/Protective Social Sciences	Construction Trades	Mechanic/Repair Technologies	Precision Production	Transportation and Materials Moving	Visual and Performing Arts	Health Professions	Business, Management, & Marketing
ASM Beauty World Academy					X													
Atlantic Technical College					X	X	X		X			X	X	X		X	X	X
Aveda Institute-South Florida					X												X	
Boca Beauty Academy-Parkland					X												X	
Broward College	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X
Concorde Career Institute-Miramar																	X	
Cortiva Institute-Pompano					X												X	
Empire Beauty School-Lauderhill					X													
Florida Academy of Health & Beauty					X													
Florida Barber Academy					X													
Florida Career College-Lauderdale Lakes					X		X						X				X	X
Florida Career College-Margate							X						X				X	X
Florida Career College-Pembroke Pines							X						X				X	X
Hollywood Institute					X												X	
Hollywood Institute of Beauty Careers					X												X	
Hope College of Arts and Sciences																	X	
Jose Maria Vargas University								X									X	
Kaizen Beauty Academy					X													
McDougle Technical Institute					X												X	
Merryfield School of Pet Grooming	X																	
Nova Southeastern University						X											X	
Paul Mitchell the School-Fort Lauderdale					X													
Pets Playground Grooming School	X																	
Sheridan Technical College					X	X		X	X			X	X		X		X	X
William T McFatter Technical College			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Associate Degree

Institution Name	Agricultural/Animal Science	Natural Resource and Conservation	Communication/Journalism	Communications Technologies	Computer and Information Sciences	Culinary, Entertainment, Personal	Education	Engineering	Legal Professions and Studies	Liberal Arts and Sciences	Parks, Recreation, Leisure, Fitness	Theology & Religious Vocations	Science Technologies	Psychology	Homeland Security/Fire/Protective	Mechanic/Repair Technologies	Transportation and Materials Moving	Visual and Performing Arts	Health Professions	Business, Management, & Marketing
Broward College	X	X		X	X	X	X	X	X	X				X	X	X	X	X	X	X
City College-Fort Lauderdale			X					X						X				X	X	
City College-Hollywood	X																	X	X	
Concorde Career Institute-Miramar																			X	
DeVry University-Florida				X			X													X
Florida Career College-Lauderdale Lakes				X														X		
Florida Career College-Margate				X														X		
Florida Career College-Pembroke Pines				X														X		
Hope College of Arts and Sciences																		X		
Jose Maria Vargas University						X												X	X	
Keiser University-Ft Lauderdale				X	X		X	X	X	X		X		X			X	X	X	
Key College								X												
Nova Southeastern University						X														
South Florida Bible College & Seminary									X		X		X							X
United International College		X																		X
University of Fort Lauderdale											X									X

Bachelors and Graduate Degree Offerings

Institution Name	Natural Resource and Conservation	Communication/Journalism	Computer and Information Sciences	Education	Engineering	Family and Consumer Sciences	Legal Professions and Studies	English Language/Literature	Liberal Arts and Sciences	Biological/Biomedical Sciences	Mathematics & Statistics	Interdisciplinary Studies	Parks, Recreation, Leisure, Fitness	Philosophy, Theology & Religion	Physical Sciences	Psychology	Homeland Security/Fire/Protective	Public Admin	Social Sciences	Transportation and Materials Moving	Visual and Performing Arts	Health Professions	Business, Management, & Marketing	History
Arizona College of Nursing-Fort Lauderdale																						X		
Atlantic Institute of Oriental Medicine																						X		
Broward College	X	X	X																X		X	X		
City College-Fort Lauderdale																						X	X	
DeVry University-Florida		X	X	X	X												X					X	X	
Jose Maria Vargas University				X																	X	X	X	
Keiser University-Ft Lauderdale		X	X	X	X		X			X		X	X			X	X		X		X	X	X	
Key College																							X	
Nova Southeastern University	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X
South Florida Bible College & Seminary														X	X							X	X	
United International College		X																					X	
University of Fort Lauderdale													X										X	

Appendix B. Top 20 Regional Occupations

Palm Beach County:

Occupations	Avg. Annual Openings	Avg. Hourly Earnings
Fast Food and Counter Workers	3,314	\$10.46
Waiters and Waitresses	3,161	\$12.31
Home Health and Personal Care Aides	2,778	\$13.62
Retail Salespersons	2,777	\$14.64
Cashiers	2,622	\$11.87
Customer Service Representatives	2,030	\$18.48
Maids and Housekeeping Cleaners	1,964	\$14.20
Cooks, Restaurant	1,899	\$14.61
Office Clerks, General	1,721	\$18.45
Childcare Workers	1,717	\$14.19
Stockers and Order Fillers	1,674	\$14.11
Landscaping and Groundskeeping	1,524	\$15.42
Laborers, Freight, Stock, and Movers	1,481	\$17.18
Janitors and Cleaners	1,464	\$14.02
Security Guards	1,420	\$15.95
Amusement and Recreation Attendants	1,145	\$12.06
General and Operations Managers	1,074	\$57.45
Food Preparation Workers	971	\$12.94
Secretaries and Admin Assistants	953	\$19.02
Receptionists and Information Clerks	939	\$15.50

Occupations	Total Jobs Gained	Avg. Hourly Earnings
Cooks, Restaurant	4,078	\$14.61
Waiters and Waitresses	4,029	\$12.31
Home Health and Personal Care Aides	4,016	\$13.62
Fast Food and Counter Workers	2,242	\$10.46
Security Guards	1,891	\$15.95
Amusement and Recreation Attendants	1,431	\$12.06
Childcare Workers	1,319	\$14.19
Supervisors of Food Preparation	1,132	\$18.04
General and Operations Managers	1,102	\$57.45
Hairdressers, Hairstylists, & Cosmetologists	1,039	\$15.39
Laborers, Freight, Stock, and Movers	1,027	\$17.18
Landscaping and Groundskeeping Workers	994	\$15.42
Software Developers, Analysts, & Testers	976	\$48.97

Janitors and Cleaners	789	\$14.02
Exercise Trainers and Fitness Instructors	773	\$20.59
Bartenders	770	\$11.44
Medical Assistants	768	\$17.95
Hosts and Hostesses	763	\$11.60
Animal Caretakers	757	\$15.85
Accountants and Auditors	747	\$42.24

Miami-Dade County:

Occupations	Avg. Annual Openings	Avg. Hourly Earnings
Retail Salespersons	5,214	\$15.08
Fast Food and Counter Workers	4,478	\$11.68
Cashiers	4,243	\$12.02
Waiters and Waitresses	3,986	\$13.27
Customer Service Representatives	3,696	\$17.19
Laborers, Freight, Stock, and Movers	3,589	\$15.95
Home Health and Personal Care Aides	3,279	\$12.37
Stockers and Order Fillers	3,222	\$13.46
Office Clerks, General	3,036	\$17.38
Janitors and Cleaners	2,963	\$13.89
Security Guards	2,590	\$14.11
Maids and Housekeeping Cleaners	2,551	\$13.18
Cooks, Restaurant	2,455	\$15.77
Heavy and Tractor-Trailer Truck Drivers	2,020	\$20.79
Childcare Workers	1,949	\$12.19
Secretaries and Admin Assistants	1,801	\$18.01
General and Operations Managers	1,798	\$53.95
Postsecondary Teachers	1,781	\$45.93
Registered Nurses	1,685	\$36.16
Construction Laborers	1,543	\$16.61

Occupations	Total Jobs Gained	Avg. Hourly Earnings
Cooks, Restaurant	4,306	\$15.77
Home Health and Personal Care Aides	4,074	\$12.37
Waiters and Waitresses	3,554	\$13.27
Postsecondary Teachers	2,442	\$45.93
Registered Nurses	1,994	\$36.16
Personal Service Managers	1,962	\$37.45
Farmworkers, Crop, and Nursery Laborers	1,822	\$12.24
Passenger Vehicle Drivers	1,819	\$15.28
Security Guards	1,802	\$14.11
Lawyers	1,786	\$81.23
Software Developers, Analysts and Testers	1,748	\$46.68
Heavy and Tractor-Trailer Truck Drivers	1,663	\$20.79
Real Estate Sales Agents	1,480	\$33.17
Medical Assistants	1,469	\$17.09
Construction Laborers	1,430	\$16.61
Construction Managers	1,424	\$39.33
Flight Attendants	1,415	\$28.08
Management Analysts	1,364	\$48.27
Janitors and Cleaners	1,251	\$13.89
Laborers, Freight, Stock, and Movers	1,167	\$15.95