



Women in Miami-Dade County

Economic Participation, Opportunity and Equity

2018

The report titled *Women in Miami-Dade County: Economic Participation, Opportunity and Equity* is the second report that tracks the economic conditions of women in Miami-Dade County. The first report - *The Status of Women in Miami-Dade County: Economic Opportunity Analysis* was released in 2016. Both reports were prepared by the Florida International University Metropolitan Center, Florida's leading urban policy think tank and solutions center. Established in 1997, the Center provides economic development, strategic planning, community revitalization, and performance improvement services to public, private and non-profit organizations in South Florida.

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The legislative Prime Sponsor Commissioner **Daniella Levine Cava**, and her seven Co-Sponsors - Commissioners **Bruno A. Barreiro**, **Audrey M. Edmonson**, **Sally A. Heyman**, **Barbara J. Jordan**, **Dennis C. Moss**, **Rebecca Sosa**, and **Xavier L. Suarez** - sponsored Ordinance No. 15-87 authorizing the Office of the Commission Auditor to gather and provide Gender Equity Data to the Miami-Dade County Commission for Women regarding the status of women in Miami-Dade County in the areas of economic development, health and safety, and education.

The report is funded by and prepared for both:

The Office of the Commission Auditor, Policy and Legislation Division Miami-Dade Board of County Commissioners

The Commission Auditor reports to the Board of County Commissioners on the fiscal operations of County departments and advises as to whether the fiscal and legislative policy directions of the Commission are being efficiently and effectively implemented.

The Miami-Dade County Commission for Women

The Commission for Women is an advisory board to the Board of County Commissioners, the County Administration and the public at large about issues pertaining to the status of women. The Commission for Women also advocates for the women in the community and strives to improve their quality of life.

This study, prepared by the FIU Metropolitan Center as subject matter experts, was substantially less detailed in scope than an audit in accordance with generally accepted auditing standards; the objective of which is that the Commission Auditor will plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. Accordingly, the Commission Auditor does not express an opinion on the data gathered by the subject matter expert.

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Executive Summary

The 2016 *Report on the Status of Women in Miami-Dade County* was the first comprehensive report, which presented comparisons across economic indicators between men and women in the county. The report identified significant gaps in earnings across various occupations and industries. The 2018 update presents evidence that economic conditions for women improved modestly since the publication of the first report. However, women's earnings continue to lag behind men's earnings. The 2016 report, using the most current, 2014 data at the time, showed a 13% earnings gap between female and male full-time workers. The most current, 2016 data, shows a 15% gap. When adjusted for inflation, the median earnings of full time female workers increased by 0.4% from 2014 to 2016. The larger increase for men - 2.9% - has contributed to the increased gender gap.




The report does not attempt to explain the reasons for the observed earnings gaps or the broader consequences of such disparities. However, the data does show that when comparing men and women of similar educational attainment, degrees, work status, occupational and industry categories, the differences may not be due only to chance and choice. The following tables summarize some of the report findings, organizing the data in categories of indicators pertaining to opportunity, economic participation, and equity. The tables show the change from the findings of the previous report, as well as the size of the current gaps. The upward pointing arrows indicate a change in a positive direction for women, while the downward pointing arrow shows a decrease for that indicator. The left-right arrow shows the change is less than one percent.

Education is an objective indicator for future career and earning opportunities. Women have higher college graduation rates, which suggests they are catching up in terms of educational attainment. The percentage of women with a bachelor's degree is slightly higher. However, the degrees women obtain are mostly in disciplines which lead them on career paths with typically lower earnings.

Employment is another objective indicator of economic opportunity. Women have lower labor participation rates, and a lower percentage of them work full time. Both conditions affect overall earnings, but the report will also show that earnings for full-time female workers are lower than male full-time workers.

Category	Indicator	Female	Male	Change
 Education	College Graduation Rate	56%	49%	↑
	% bachelor's degree or higher	28.1%	27.6%	↑
	Degree in Science, Engineering and Related	37.5%	46.5%	↑
	Degree in Education	17.4%	5.6%	↓
	Degree in Business	24.5%	30.4%	↔
	Degree in Arts, Humanities and Other	20.6%	17.6%	↔
 Employment	Labor Force Participation	71.4	82.1%	↓
	Unemployment	6.3%	5.6%	↓
	Percent of Gender Working Full Time	68.3%	78.5%	↑
	Percent of Full Time Workforce	43.6%	56.4%	↔

The following indicators pertain to equity between women and men. The table shows income and earnings by gender overall, for specific industries and occupations, and the calculated gaps. In 2016, women made more than men in only one category of comparison shown in the table – Office and Administrative Support occupations (1.5%). One in five women were employed in such occupations. The earnings in these occupations are typically lower than the county median earnings.

Category	Indicator	Female	Male	Gap	Change
Income and Earnings 	Poverty rate	19.7%	16.7%		
	Median Earnings	\$24,353	\$30,843	Gap: 21%	↑
	Earnings increase, 2015-2016	3.3%	5.3%		
	Median Earnings for Full-Time Workers	\$31,671	\$37,323	Gap: 15%	↑
	Earnings increase, 2015-2016	-1.1%	2.3%		
	Median Earnings with Bachelor's Degree	\$36,881	\$47,056	Gap: 22%	↑
	Median Earnings with Graduate Degree	\$51,908	\$76,662	Gap: 32%	↑
Industry Employment and Earnings 	Percent of Gender in Educational Services, and Health and Social Assistance	31.8%	9.7%		
	Earnings in Educational Services, and Health and Social Assistance	\$36,473	\$46,300	Gap: 21%	↓
	Percent of Gender in Professional, Scientific and Management Services	12.3%	12.3%		
	Earnings in Professional, Scientific and Management	\$33,038	\$45,500	Gap: 27%	↑
	Percent of Gender in Retail Trade	10.8%	10.9%		
	Earnings in Retail Trade	\$26,027	\$30,564	Gap: 15%	↓
	Percent of Gender in Finance, Insurance, Real Estate	9.5%	7.7%		
	Earnings in Finance, Insurance, Real Estate	\$40,826	\$50,173	Gap: 19%	↓
	Percent of Gender in Accommodation and Food Services	8.5%	8.6%		
Earnings in Accommodation and Food Services	\$20,955	\$26,949	Gap: 22%	↑	
Occupations and Earnings 	Percent of Gender in Office and Admin. support occupations	20.4%	8.4%		
	Earnings in Office and Admin. support	\$31,082	\$30,629	Gap: (1.5%)	↔
	Percent of Gender in Management, business, and financial occupations	16.5%	16.2%		
	Earnings in Management, business, and financial occupations	\$50,810	\$68,039	Gap: 25%	↑
	Percent of Gender in Sales and related occupations	12.2%	11.6%		
	Earnings in Sales and related occupations	\$26,747	\$41,253	Gap: 35%	↑
	Percent of Gender in Education, legal, community service, arts, and media	11.2%	6.0%		
	Earnings in Education, legal, community service, arts, and media	\$42,678	\$56,414	Gap: 24%	↑
Percent of Gender in Healthcare practitioners and technical occupations	9.0%	3.0%			
Earnings in Healthcare practitioners and technical occupations	\$51,266	\$61,774	Gap: 17%	↔	

Introduction

In 2016, the FIU Metropolitan Center prepared *The Status of Women in Miami-Dade County: An Economic Development Analysis*. The 2016 report was developed on behalf of the Office of the Commission Auditor, Miami-Dade Board of County Commissioners, in response to the adoption of Commission Ordinance No. 15-87 authorizing the Office of the Commission Auditor to gather and provide gender equity data to the Miami-Dade County Commission for Women regarding the status of women in Miami-Dade County. The 2016 report presented an overview of changes that occurred since 2000 in a range of areas linked to economic opportunity, detailing the performance of women on the most important economic indicators over time, and in comparison to men. The latest data available at the time of report development was for year 2014.

The 2016 report had two overarching findings. First, the analysis showed the persistence of the gender gap across most measures of equality. Some of these measures include higher poverty rate of women and households with a female head of household, more women who only have part time jobs, and lower overall median income for female-headed households. In 2014, full time female workers made 87 cents for every dollar a man earned. The report noted that at the rate of earnings growth (16% for men and 21% for women every 10 years), it would take over three decades for women in Miami-Dade to earn the same as men. The only indicator in which women were on par or outperforming men was educational advancement. The percentage of residents with a Bachelor's degree or higher was the same across genders. However, women had much higher high school and college graduation rates. Yet, the report showed significant (47%) earnings disparity between men and women with a graduate or professional degree

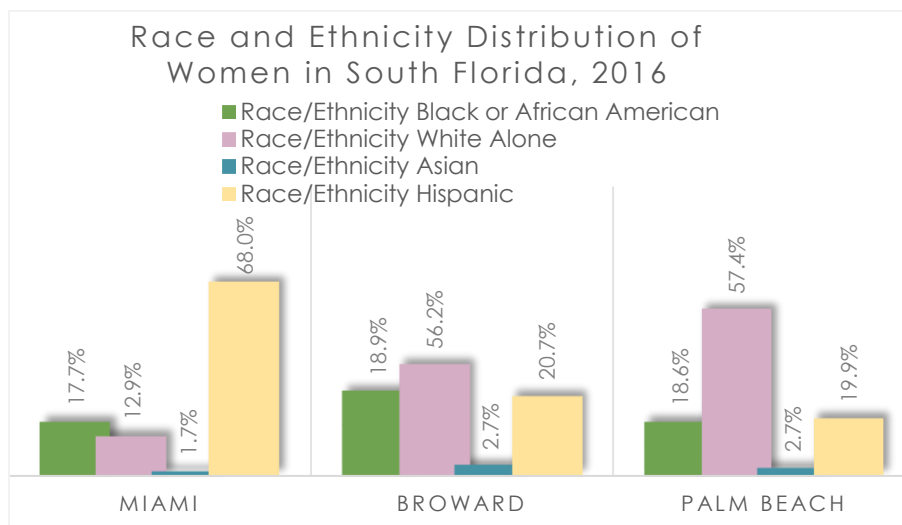
The second significant finding was the positive trend towards narrowing the gaps in most categories. The earnings of women with a graduate or professional degree increased by 8.7% since 2005. The wage gap for full-time male and female workers decreased from 18% in 2000, to 15% in 2010, and 13% in 2014. Between 2005 and 2014, the earnings gap between male and female private for-profit wage and salary workers decreased from 32% to 24%.

The 2018 report focused once again on indicators of economic participation and opportunity. While the 2016 report included comparisons over time and with national or state figure, the 2018 report also included comparisons within the South Florida area, as well as two other Florida counties. The comparisons between Miami-Dade, Broward and Palm Beach counties are predicated on the fact that these three counties are part of a larger economic region, and differences in economic outcomes for women shed light on the extent to which sources of major economic differences in income are local and idiosyncratic in nature. Additionally, two other Florida counties - Orange and Hillsborough - were selected for comparisons. A local economy oriented towards tourism has a business composition and wage structure that is significantly different from economies centered on other industries. For that reason, Orange County, FL (Orlando) and Hillsborough County (Tampa) provide meaningful comparisons from outside the region.

General Characteristics

In 2016, women were slightly over half (1,397,186 or 51.5%) of the population of Miami-Dade County and had a median age of 41.4 years, compared to men whose median age was 38.1 years. The proportion of women in the population in Miami-Dade was similar to Broward (980,255 or 51.3%) and Palm Beach (745,396 or 51.6%).

Most Miami-Dade women were of Latino or Hispanic descent (68.0%). Approximately 17.7% were of Black or African American descent, 12.9% were White, non-Hispanic, and 1.7% were of Asian descent. Miami-Dade had the largest number of female Hispanics - 950,594. In 2016, Broward's Hispanic female population was 281,881 (28.8%) and Palm Beach County had 154,634 (20.7% of women in the county). In comparison, 17.3% of women in the United States were of Latino or Hispanic descent.

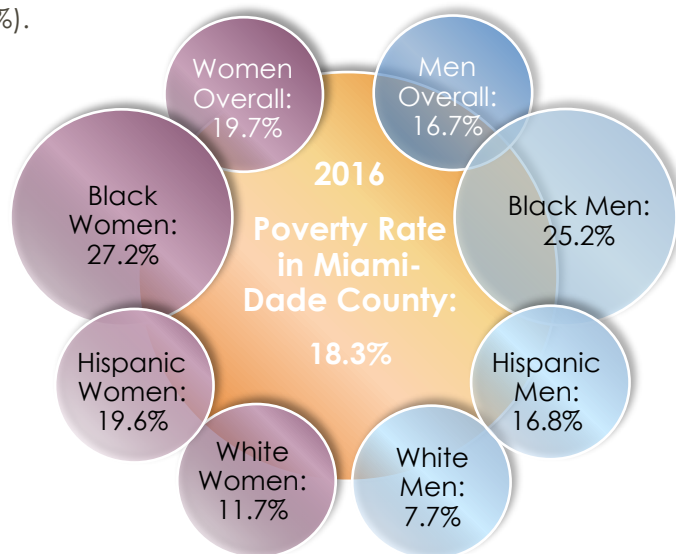


Palm Beach County had the highest percentage of White women in the region (56.2%), and the lowest representation of women of Hispanic descent (19.9%). In general, Miami's predominantly Hispanic population is also reflected in the larger proportion of Hispanic women. The other two comparison counties in the state, in which Tampa and Orlando are located, have similar demographics to Broward County. Orlando had a slightly greater percentage of women of Hispanic or Latino descent (30.5%) than Broward (28.8%) and Tampa (27.2%).

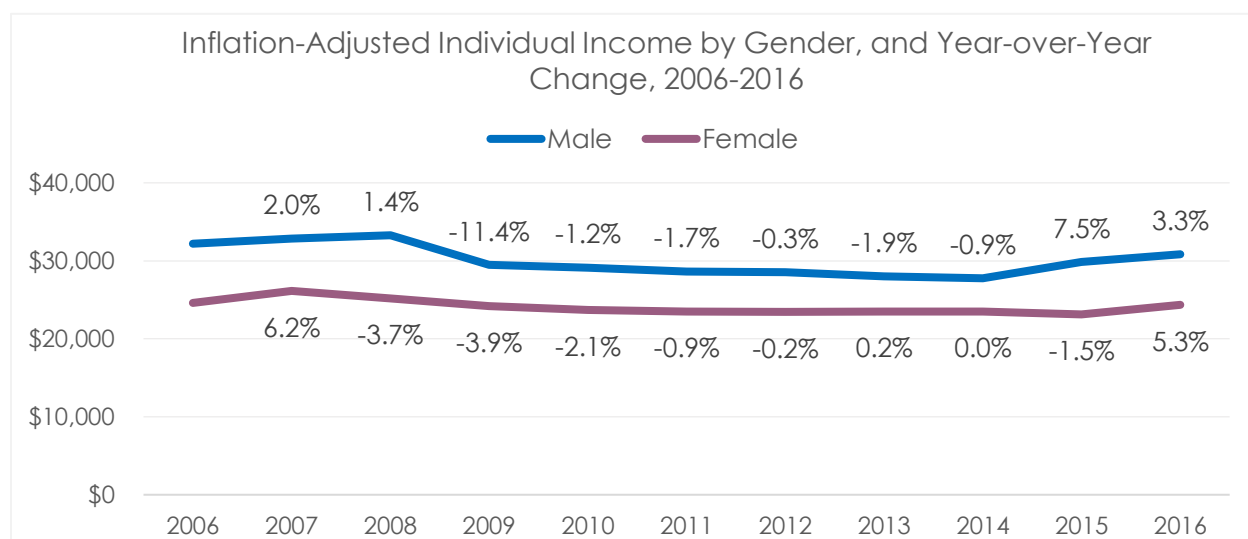
In 2016, approximately one in five women in Miami-Dade (19.7%) was living in poverty. Overall, 488,306 individuals (18.3%) were living on income below the poverty level, of whom 272,776 (55.9%) were women. A higher percentage of women live in poverty in Miami-Dade (19.7%) than any of the comparison counties. The largest percentage of women in poverty was in the Orlando area (18.5%), followed by Tampa (17.0%). The poverty rate for women in all these counties is above the Florida rate of 15.8% and the national rate of 15.9%. Broward had 15.5% of women in poverty, and Palm Beach had the lowest percentage (14.8%). In all counties, as well as the state and in the United States, there is a higher proportion of women in poverty than men.

While women had disproportionately higher poverty rates than men in all comparison counties, as well as nationally, the disparities were even more pronounced when race and ethnicity are considered. In 2016, approximately a quarter of Black men and women lived in poverty, significantly higher than the other racial and ethnic groups. The lowest poverty rate was for White, non-Hispanic men (7.7%) and women (11.7%).

The higher poverty rate and lower earnings for women conventionally are linked to multiple factors including their household status, educational level, occupation, type of employment, etc. The following sections present the gender comparisons across these categories. Before the ensuing analysis that presents a detailed breakdown of income by gender across industries, occupations, family types and other categories, it is useful to establish a timeline for the income growth for men and women.



The following figure shows inflation-adjusted trend data and year-over-year change of the individual income for men and women in Miami-Dade over the last decade. It is notable that the income growth for women from 2015 to 2016 outpaced inflation and the growth of men's income. The 5.3% growth was the second highest for women in the last decade. However, when adjusted for inflation, the \$24,050 median individual income for women in 2016 was still below the pre-Great Recession figure of \$25,817 in 2007. Similarly, the \$30,459 income of men was below the \$32,423 median income they received in 2007. The distance between the two lines in the figure reflects the persistence of the income gaps and their fluctuation. It should be noted that the figure below shows change in median income for all men and women, regardless of their work status, part time vs. full time.



Educational Attainment

There is a widely recognized relationship between education and economic opportunity. From a human capital perspective, higher education increases skill and knowledge, improves career prospects and results in higher income. Both the level of educational attainment, as well as the types of skills acquired and degrees achieved, are also important predictors of future earnings potential. The following section explores some of these important indicators as a precursor to the subsequent sections which delve into income and earnings.

In the 2015-2016 school year, Miami-Dade's graduation rate was 80.4% overall, a 2.3% increase from 2015-2014. For the 2016-2017 academic year, the graduation rate increased to 80.7%. The rate was higher than Florida's graduation rate by 4.3%.¹ Broward County had a graduation rate of 81.0% and Palm Beach County was the highest of the tri-county area with a graduation rate of 85.0%.² Both Tampa (82.9%) and Orlando (84.7%) also reported higher rates than Miami-Dade. The dropout rate for Miami-Dade for the 2016-2017 year was 2.8%.

The gender comparison shows the graduation rate for female high school students in Florida was 86.0%, and the total male graduation rate was 78.6%.³ Graduation rates for both female and male students in Miami-Dade is lower than the state figures. In the 2015-16 school year, 84.2% of female students graduated, compared to 76.7% of male students. In the latest academic year, 2016-17, the graduation rate for female students increased to 85.0% but decreased to 76.5% for male students.

Participation by gender in specialized programs offered by Miami-Dade Public Schools (M-DCPS) is also a good indicator of opportunities for students which may improve educational outcomes and career prospects. The International Baccalaureate (IB) program provides students with a broad general education, while offering specialization based on student's interests and plans. The IB program was offered at six senior high schools in Miami-Dade. According to M-DCPS, 65% percent of IB examinations were taken by female students and 35% were taken by male students in 2016-2017. Overall, 81% of female students passed the IB exams, compared to 78% of males. Female students at Coral Reef Senior High had the greatest passing rate of 88%; however, this was a decrease of seven percent from the academic school year of 2015-2016.⁴

Another advanced program offered by senior high schools in Miami-Dade is the Dual Enrollment (DE) acceleration program, in which students earn credit toward high school completion, and toward a career certificate or an associate or baccalaureate degree at the same time. DE courses are weighted toward grade point averages in the same way, as are Advanced Placement, International Baccalaureate, and Advanced International Certificate of Education courses. These courses were offered on site at the high schools (54%), at Miami Dade College (41%) or at Florida International University (5%).⁵ During the 2015-2016 school year, there were 20,361 students enrolled in DE courses. Female students comprised 62% of enrollment.

¹ Miami-Dade Public Schools: <http://news.dadeschools.net/cmnc/new/27379>

² Florida Department of Education; <http://www.fldoe.org/core/fileparse.php/7584/urlt/GradRates1617.pdf>

³ Florida Department of Education; <http://fldoe.org/core/fileparse.php/7584/urlt/GradRates1617.pdf>

⁴ MDCPS, Miami-Dade County Public Schools: 2016-2017 Student Performance in the International Baccalaureate Program. Research Brief, Vol. 1702, December 2017. <http://drs.dadeschools.net/ResearchBriefs/AMC-M360-ATTACHMENT-Research%20Brief-%20MDCPS%2016-17%20Student%20Perf%20in%20IB%20Program.pdf>

⁵ MDCPS, Dual Enrollment 2015-16 Participation Report. Vol. 1606, January 2017. <http://drs.dadeschools.net/ResearchBriefs/RB1606.pdf>

College graduation rates follow a similar pattern to high school graduation, with a significantly higher percentage of female students obtaining college diplomas within six years of enrollment. The six-year graduation rate for Florida International University for the 2010 cohort was 56%. Less than half of male students (49%) graduated within six years, compared to 62% of female students. Graduation rates were significantly lower overall in Miami Dade College, which offers mostly two-year degrees. The percentage of full-time students enrolling in 2010 and graduating within 150% of "normal time" (2 years for Associate's and 4 years for Bachelor's) was 30%, with a transfer-out rate of 3%. The college had a four percent graduation gap between male (28%) and female students (32%). At the University of Miami, the second largest university in the county, the graduation rates were 82% overall, 79% for males and 85% for females.⁶

The low graduation rates of the public college and university in Miami-Dade, which combined have over 120,000 students each school year, may account for the lower educational attainment of the population when compared to national statistics. The percentage of Miami-Dade population 25 years and over with a bachelor's degree or higher was 27.9%, compared to 31.3% nationally. Miami-Dade also had a higher percentage of residents who have a high school diploma or less (18.8%) when compared to the U.S. population (12.5%).

There are no significant differences in the educational attainment by gender. According to 2016 U.S. Census estimates, 27.6% of men and 28.1% of women in Miami-Dade had a bachelor's degree or higher. The differences are also small in the national and state figures for educational attainment. Miami-Dade had the highest percentage of female (19.0%) and male (18.6%) residents with less than a high school degree. For the South Florida region, Palm Beach had the highest percentage of women with advanced degrees - 21.3% with a bachelor's degree and 12.2% with a graduate or professional degree. The following table provides a comparison of the region of South Florida.

SEX BY EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER						
	Miami		Broward		Palm Beach	
	Male	Female	Male	Female	Male	Female
Less than high school graduate	18.6%	19.0%	12.7%	11.6%	13.7%	11.6%
High school graduate (incl. equivalency)	29.2%	27.3%	26.7%	26.8%	24.1%	25.1%
Some college or Associate degree	24.6%	25.6%	30.5%	30.1%	25.6%	29.8%
Bachelor's degree	17.0%	18.2%	18.8%	19.8%	22.4%	21.3%
Graduate or professional degree	10.6%	9.9%	11.3%	11.7%	14.2%	12.2%

Source: American Community Survey, 2016 1-Year Estimate.

Based on race and sex, Miami-Dade performed higher than the rest of the country. The Census reported that nationally 16.8% of female Hispanics had a bachelor's degree or higher, relatively lower in comparison to Miami-Dade (25.9%). On that indicator, Miami-Dade was also better than the state of Florida (24.5%) and Palm Beach County (23.6%). In Broward, 29.8% of females of Hispanic or Latino origin had a bachelor's degree or higher.

While education is a major predictor for future earnings, the comparison of earnings between men and women in various educational attainment categories shows the persistence of the gaps. In 2010, the median earnings gap for women with bachelor's degrees was 23.8%, and for those with graduate degrees it was 26.7%. In 2016, the gap for women with bachelor's degrees decreased to 21.6%. The gap between women and men with graduate degrees increased to 32.3%.

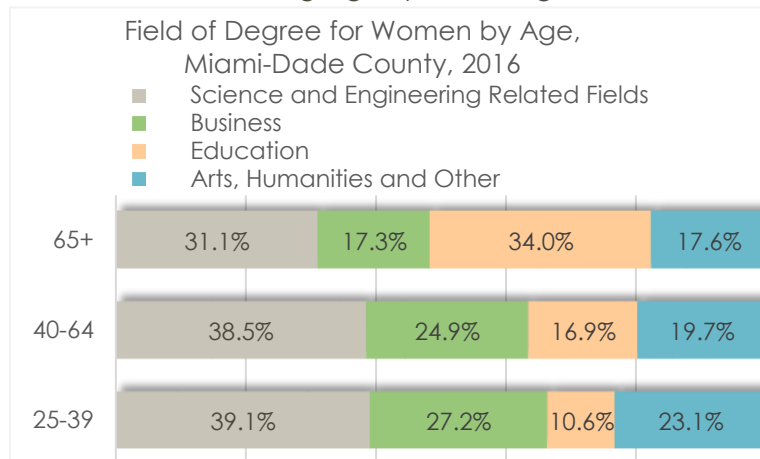
⁶ U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, College Navigator, 2016 data. <http://nces.ed.gov/collegenavigator/>

While there were no significant differences between men and women in terms of educational attainment, there were significant differences in the degrees men and women attained. Consistent with national figures, larger percentages of women across the South Florida area hold degrees in Education, Arts, and Humanities specialties. Conversely, larger percentages of men hold degrees in Science, Engineering and related fields. Interestingly, the percentage of women with Business degrees in the three South Florida counties was higher than the national figure of 17.3% and the state's (20.2%). It was also notable that the percentage of women with degrees in Science, Engineering and related fields increased to 37.5%, up from 35.7% in 2010. The percentage of men with degrees in Science, Engineering and related fields also increased slightly to 47.7%, up from 46.5% in 2010.

BACHELOR'S DEGREE FIELD FOR POPULATION 25+ YEARS						
	Miami-Dade		Broward		Palm Beach	
	Male	Female	Male	Female	Male	Female
Science and Engineering	39.5%	23.5%	39.9%	24.0%	40.5%	22.1%
Science and Engineering Related Fields	6.9%	14.0%	5.9%	14.2%	5.5%	9.6%
Business	30.4%	24.5%	29.3%	23.1%	29.9%	20.4%
Education	5.6%	17.4%	4.5%	16.4%	5.1%	23.5%
Arts, Humanities and Other	17.6%	20.6%	20.3%	22.3%	19.0%	24.5%

Source: American Community Survey, 2016 1-Year Estimate.

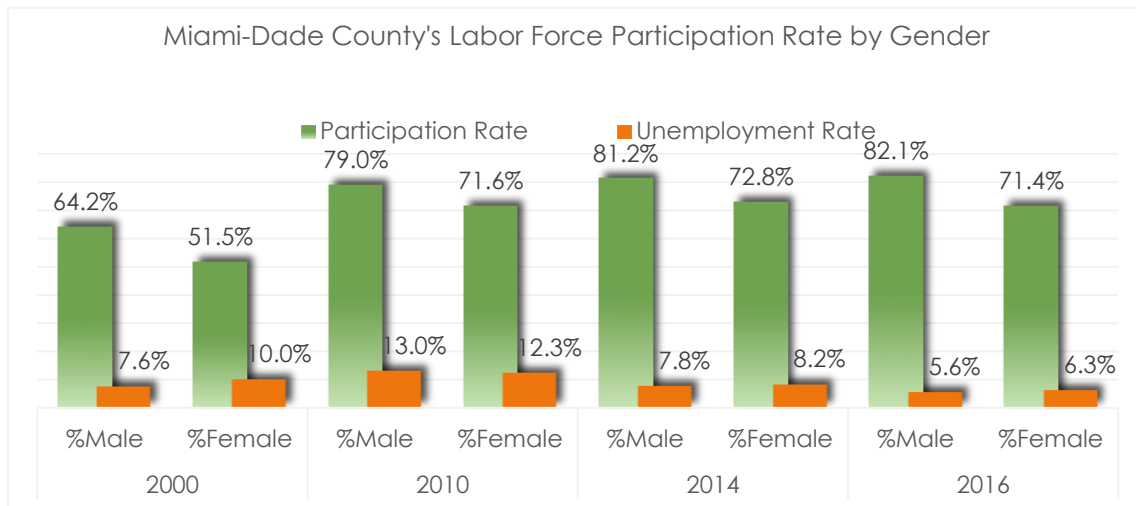
Another important trend is observed in the comparison of women across generations. There was a significantly higher percentage of women in the 25-39 age group with degrees in Science, Engineering and Business fields. Conversely, there was a higher percentage in the upper age groups with degrees in Education. Also of note is the fact that while the percentage of women in these fields grew across generations, it declined for men. While 50.3% of men over 65 had Engineering and Science degrees, only 44.3% of men between 25 and 39 attained degrees in these fields.



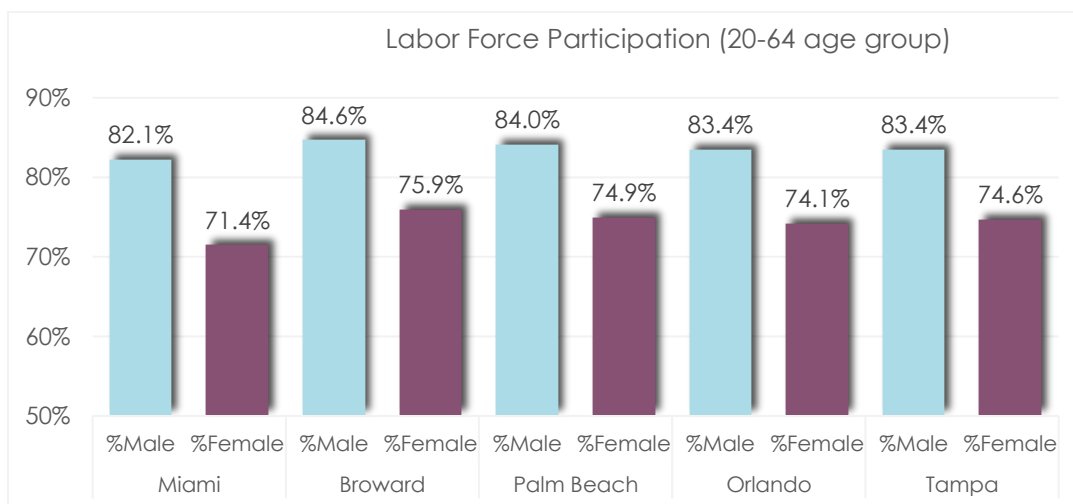
In comparison to Broward, Miami-Dade ranked lower in the percentage of young professional women with degrees in Science and Engineering. In Broward County, 47.3% of women in the 25-39 age group have degrees in these fields. Palm Beach had the lowest percentage at 36.7%. However, Miami-Dade led South Florida in Business degrees for young women with 27.2%, compared to 22.0% in Broward and 24.0% in Palm Beach. The Tampa area (Hillsborough County) had the largest percentage of women in the 25-39 age group who held degrees in Science and Engineering – 46.7%. That figure was above the national figure of 43.7% and for the state of Florida – 42.3%.

Labor Force and Earnings

Employment earnings are a crucial component of income for individuals and families, and thus linked to economic success. While many factors may impact the opportunities residents have to earn income, the first factor is their participation in the labor force. From 2010 to 2016, the labor force participation rate for men increased by 3.1% but decreased by 0.2% for women. Approximately 82.1% of men in the 20 to 64 age group were in the labor force, compared to only 71.4% of women in the county. Since 2000, women in the labor force increased by almost 20%, while men's participation rate increased by 18%. The increase is in line with national figures in which labor force participation is trending up.



In comparison to the rest of South Florida, Broward had a labor force participation rate of 84.6% for men and 75.9% for women, both higher than Miami-Dade and Palm Beach. Palm Beach County had a higher labor force rate for both men (84.0%) and women (74.9%). In comparison to other parts of the state, the labor force participation rate for both men and women in Tampa and Orlando was also greater than Miami-Dade. Orange County had a labor force rate of 83.4% for men and 74.1% for women. Hillsborough County (Tampa) had a rate of 83.4% for men and 74.6% for women.

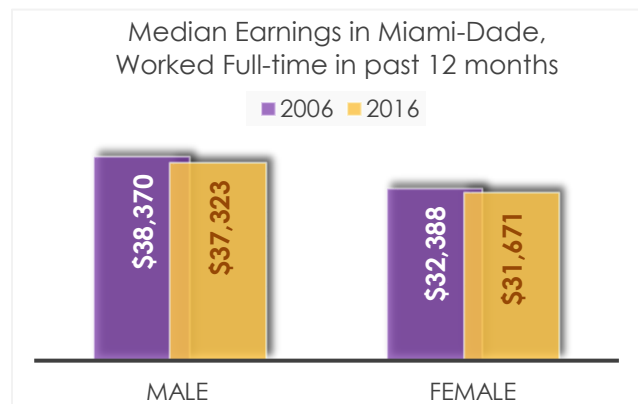


The unemployment rate for both men and women decreased since 2014. The unemployment rate represented the number of unemployed people as a percentage of the civilian labor force. Given the increase of the population in the working age group, and the stable labor force participation rate, the decrease signifies a robust job market which absorbs new workers. From 2014 to 2016, the unemployment rate decreased from 8.2% to 6.3% for women and from 7.8% to 5.6% for men.

While the unemployment rates for men and women were not significantly different, it should be noted that women are more likely than men to have part-time jobs. Of the 686,186 employed male residents in the 16 to 64 age group, 75.1% usually worked full-time, compared to 66.2% of female residents. The percentage of full-time workers declined slightly since 2014 when it was 74.4% for males and 65.7% for females.

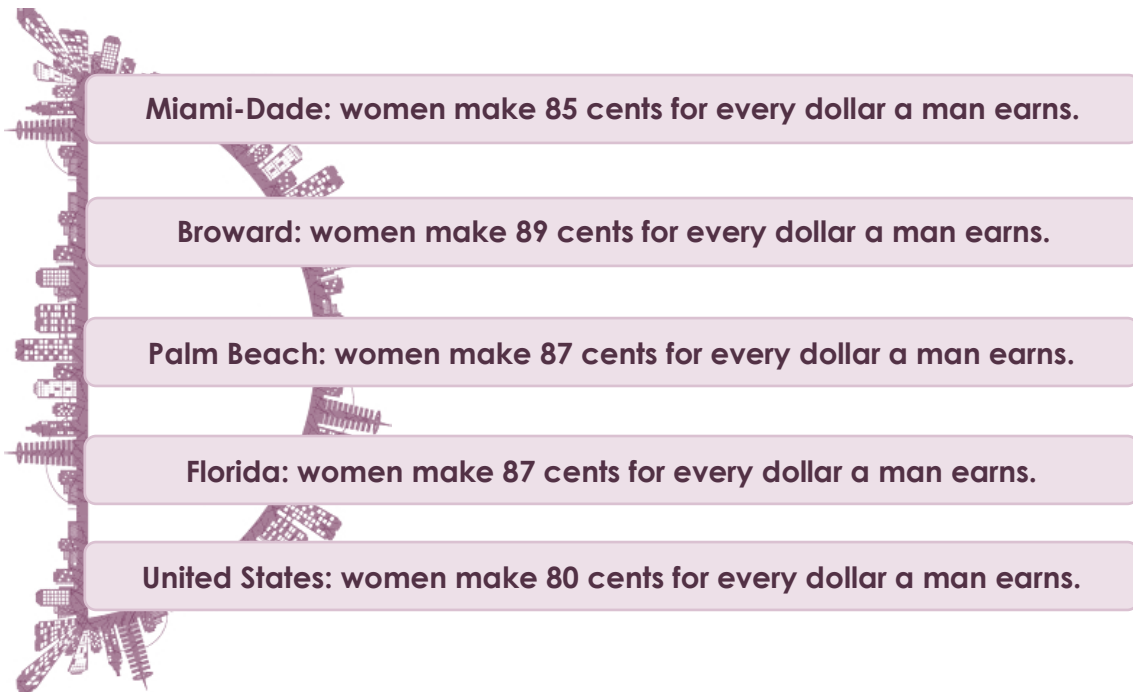
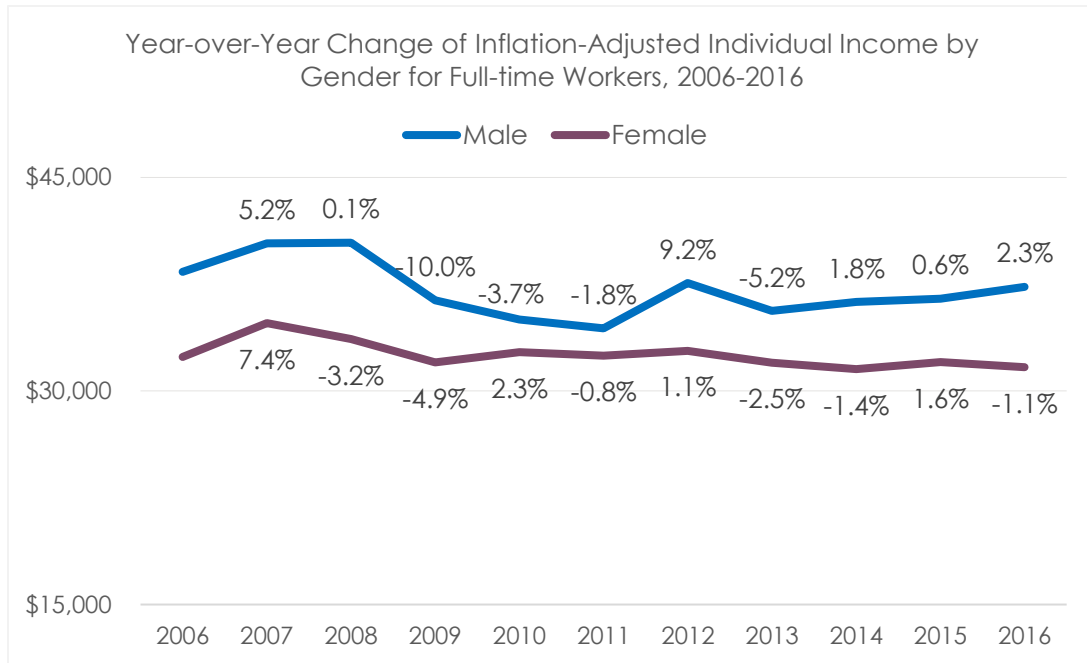
The differences of work status, full time versus part time, is one of the factors that may create income disparity between men and women. However, the Census data shows that even when distinguishing between part-time and full-time workers, the income gap is still present. The 2016 median earnings for full-time female workers in the County were \$31,671, compared to \$37,323 for male workers, a 15.1% difference. The disparity between male and female workers in Miami-Dade was smaller than the national figure of 19.8%. In comparison to other areas in South Florida, in Broward County, female workers earned \$37,939, compared to \$42,345 for male workers (11.0% gap). In Palm Beach County, female workers earned the highest median earning amount of \$39,149 in the tri-county area but still had a 13.2% gap with male workers in Palm Beach.

The following figure shows that, when adjusted for inflation, earnings for both genders decreased from 2006 to 2016 – 2.7% for men and 2.2% for women. Women's median earnings continue to be lower, and the wage gap decreased from 15.6% in 2006, to 15.1% in 2016. In 2016, the wage gap for the United States was 19.8%.



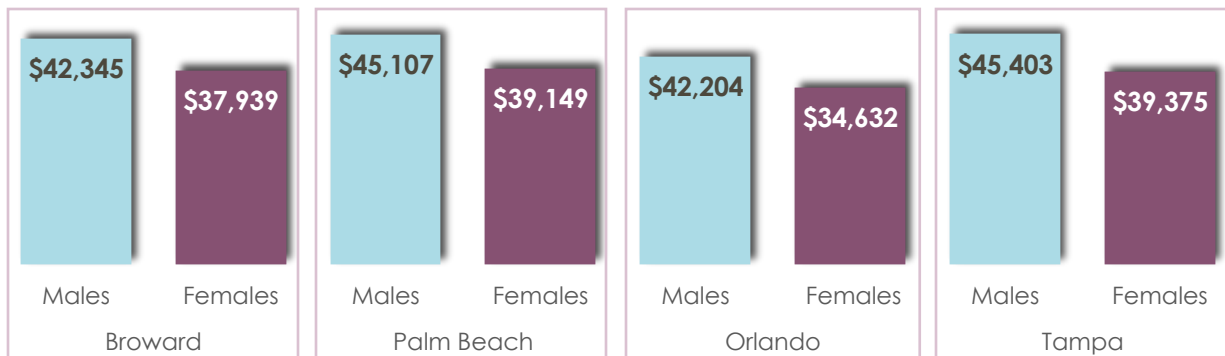
The following figure showed that the wage gap increased in 2012. The earnings gap in 2012 was 12.6%. It dipped to 10.2% in 2013, but then climbed to 13.0% in 2014 and 12.2% in 2015. It reached 15.1% in 2016.

The earnings gap between men and women was the smallest in the post-recession years. In 2010 the gap was 6.5%, while in 2011 it was 5.6%. These were the years in which male earnings dipped year-over-year. In 2010, when male earnings increased significantly, the gap widened again.



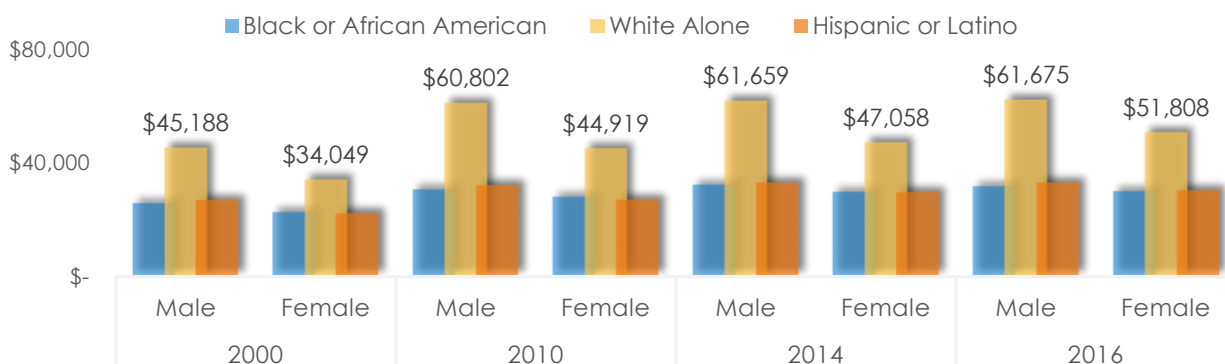
In comparison to other counties in Florida, Miami-Dade had the lowest overall median earnings for both genders. In Broward County, women earned 16.5% above Miami-Dade's median. Tampa had a significant earnings gap of 13.3% or \$6,028. In South Florida, Palm Beach County had the greatest earning gap with a difference of \$5,958. Similar to Miami-Dade, earnings for both genders increased over the last 16 years, but at a faster pace for women than men in Palm Beach and Broward counties. A comparison of 2010 to 2016 median earnings indicate that the largest increases occurred for women in Broward County (4.4%).

Median Earnings, worked full-time in past 12 months (2016)



The earnings disparity is more pronounced when race and ethnicity are taken into consideration. Differences in earnings between women and men were most evident for Black/African American and White workers. The 2016 Census data shows White men and women earned more than their Black and Hispanic counterparts. Hispanic and Black women earned 49 cents to the dollar of White women. When compared within each group, the gender gap was most significant for White workers, with White and Hispanic women earning 84 cents and 91 cents to the dollar of White and Hispanic men, respectively. Black female workers earned only 5% less than Black male workers.

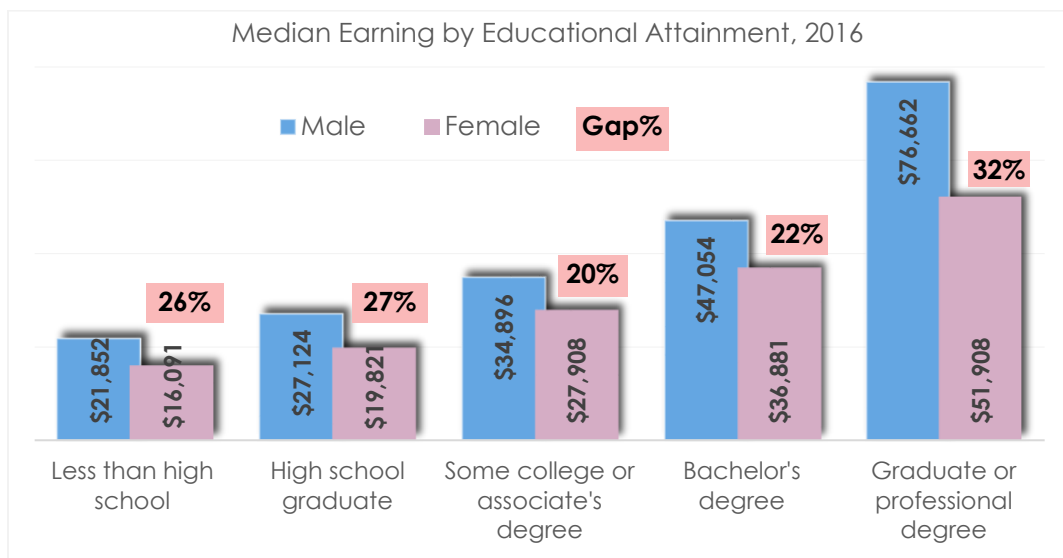
Median Earnings for Full-Time Workers



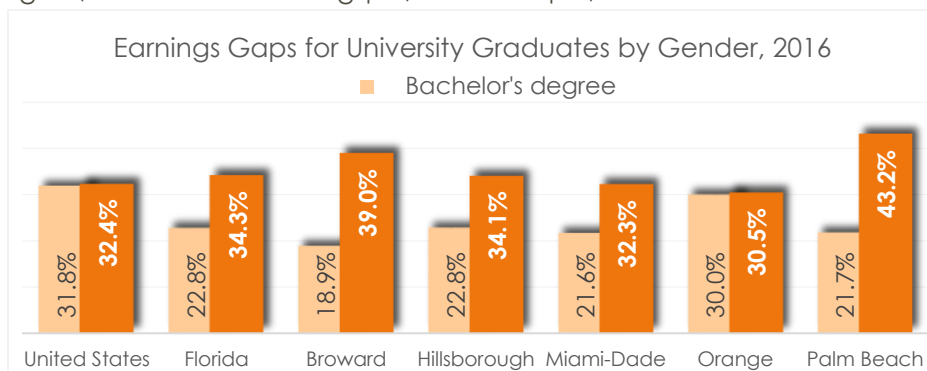
Educational attainment is a major predictor of earnings and equality. The earnings of those with a college degree or more have risen steadily, while the wages of those with lower levels of education have stagnated or fallen. Furthermore, lifetime earnings of workers with a college degree were nearly twice as high as those without a degree.

Median earnings for the population 25 and over vary significantly by educational attainment and gender. The median earnings of the population 25 years and over with earnings in 2016 was \$30,508. Those with a bachelor's degree earned 35% more than the median, while those with graduate degrees earned more than double the median figure.

Regardless of educational attainment, men earned considerably more than women in Miami-Dade County. In 2016, men with less than a high school diploma made \$21,852, while women with the same educational level earned 26.4% or \$5,761 less. The smallest gaps between men and women were for those with some college or Associate's degree (20.0%). The largest earnings disparity between men and women was for workers with a graduate or professional degree, with women earning \$51,908 versus men's median earning of \$76,662, a 32% gap.



Of the comparison counties, Orange County (Orlando) had a larger disparity between men and women with a Bachelor's degree, with women earning \$38,377 to the \$54,821 of men. Palm Beach had the largest gap for men and women with Graduate or professional degrees, with women earning \$50,258, 43% less than men. Miami-Dade had a smaller gap in earnings for men and women with graduate degrees (32.3%).



Despite the significant and persistent gaps in median earnings between women and men, from 2010 to 2016, women's earnings increased. Overall, their earnings increased by 19.2%, compared to only a 3.9% increase for males. The greatest percentage change was for women who have less than a high school degree, earning 24.0% more than in 2005. Men with only a high school degree experienced an increase of 0.9% in median earnings, while women saw a 9.6% increase. Earnings for women with a Bachelor's degree rose by 16.1%, whereas earnings for men rose by 9.6%. Men with a graduate or professional degree saw an 8.9% increase in earnings, compared to 10.5% for women. The faster pace of increase in earnings for women over time is a positive trend which can potentially lead to the decrease of the earnings gap.

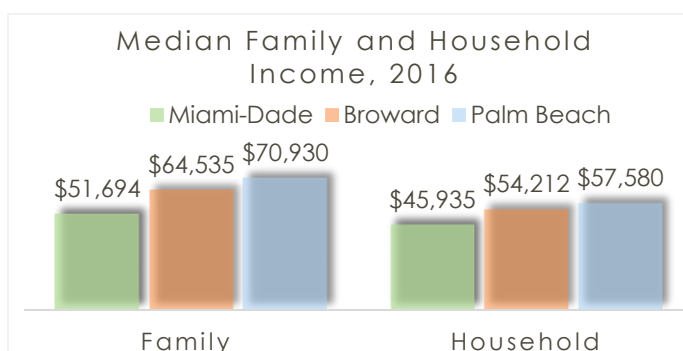
Median Household and Family Income

Household and family income are other measures that allow for comparisons across household types. While earnings include wages and salary from a job, including self-employment, household income represents the combined incomes of all people sharing a household or place of residence including every form of income - earnings (wages, salaries, and self-employment income), social security, unemployment compensation, retirement, alimony etc.⁷

While household and family are often used interchangeably, the Census Bureau draws a careful distinction. A household consists of one or more persons living in the same house, condominium or apartment. They may or may not be related. A family has two or more members who live in the same home and *are related* by birth, marriage or adoption.⁸ Approximately two-thirds of America's households are also classified as families.

In 2016, the Miami-Dade median household income was estimated at \$45,935 and was 20% lower than the national figure. In fact, household income was lower in all comparison counties in comparison to the national income of \$57,617. Broward County had a median household income of \$54,212 and Palm Beach County had a median household income of \$57,580, making Miami-Dade the lowest. Miami-Dade's median household income was also lower than the Orlando area (Orange County) with a median household income of \$51,335, and the Tampa area (\$54,588).

The median *family* income for Miami-Dade in 2016 was \$51,694, 27.3% lower than the national statistic (\$71,062). Broward had a median family income of \$64,535 and Palm Beach was \$70,930, both higher than Miami-Dade's. Both Orange County (\$60,150) and Hillsborough County (\$65,430) had higher median family income than Miami-Dade.



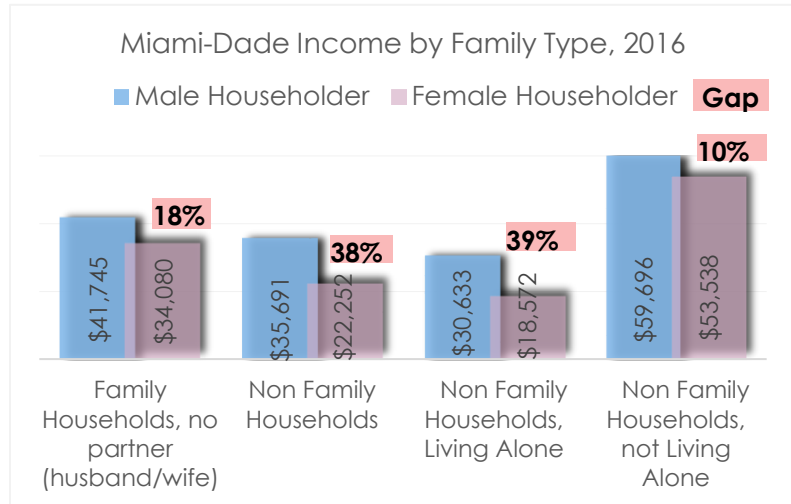
Married-couple families typically have the highest income level among all family types. In 2016, male-headed families and female-headed families with no spouse present had median incomes of \$41,745 and \$34,080, respectively, an 18.4% gap. This figure was significantly lower than the gap for these families in the U.S. (28.7%). The income disparity between male and female-headed households is also important because there were 27.3% families headed by a female, compared to 7.1% headed by a male householder, no wife present.

The following figure shows the presence of disparities in median household income between female and male householders across family and nonfamily households. A female-headed household with no partner had a median household income of \$34,080, a 13% increase from 2010, while a male headed household earned \$7,665 more (\$41,745), for a 14% increase since 2010. Non-family households include a householder living alone or with nonrelatives, with a nonrelative defined as a household member not related to the householder by birth, marriage, or adoption, and including foster children. A female-headed householder living alone with no relatives had a low median household income of \$18,572 in 2016, however a female headed household living with nonrelatives had a high median household income of \$53,538.

⁷ For a full list of all sources of income, refer to the U.S. Census definition: https://www.census.gov/glossary/#term_Income

⁸ For a distinction between family and household, access the Census definitions: <https://www.census.gov/hhes/families/about/>

The most significant gaps were for non-family households, with a female householder living alone. However, the gaps decreased over time, as a result of significant increases in income across all household types. The most significant income increase for woman-headed households were for non-family households, with women not living alone (43.7%). This figure likely reflects the increase of households with partners who are not married.



MIAMI-DADE, MEDIAN HOUSEHOLD INCOME BY HOUSEHOLD TYPE						
	2010			2016		
	Male Householder	Gap	Female Householder	Male Householder	Gap	Female Householder
Family Households with no partner	\$36,506	17.3%	\$30,199	\$41,745	18.4%	\$34,080
Non-Family Households	\$30,664	42.6%	\$17,586	\$35,691	37.7%	\$22,252
Living Alone	\$25,746	42.2%	\$14,872	\$30,633	39.4%	\$18,572
Not Living Alone	\$51,879	28.2%	\$37,252	\$59,696	10.3%	\$53,538

Source: U.S. Census, American Community Survey, 2010-2016 1-Year Estimate.

The gaps for women-led households in Miami were larger than the other South Florida counties. The following table shows the gaps between a female-headed household and a male-headed household in Broward and Palm Beach. The gaps in Palm Beach were larger than Broward, but for most categories of households they were smaller than Miami's. Female-headed households in both Broward and Palm Beach had a higher median household income than Miami-Dade.

South Florida, Median Household Income by Household Type (2016)						
	Broward			Palm Beach		
	Male Householder	Gap	Female Householder	Male Householder	Gap	Female Householder
Family Households with no partner	\$50,815	23%	\$38,910	\$49,388	24%	\$37,691
Non-Family Households	\$42,516	24%	\$32,154	\$46,430	32%	\$31,441
Living Alone	\$36,408	24%	\$27,513	\$40,574	30%	\$28,584
Not Living Alone	\$66,038	-8%	\$71,367	\$72,204	10%	\$64,977

Source: U.S. Census 2000 and 2010, American Community Survey, 2016 1-Year Estimate.

A comparison with household incomes of Central Florida shows female-headed family households in Orlando (\$32,915) had a lower median household income compared to households in South Florida. The income for such households in Tampa was larger than Miami's (\$36,239). However, in 2016, the gap between female and male-headed family households in Tampa was greater than any county in South Florida (29.2%). The national gap for woman-headed family households was 28.7% in the U.S. and 24.2% in Florida.

Occupation, Industry, and Class of Worker

The types of occupations and industries of employment for women affect their earnings and family income. The Census Bureau collects information and data on occupation, industry, and class of worker for American workers. Occupational data refers to the type of work the person does on the job, whereas industry data pertains to the kind of business that is conducted by a person's employing organization. The *Class of Worker* category organizes people according to the type of ownership of the employing organization and identifies whether the individuals is salaried or self-employed, as well as whether they work in the private sector or in government. The following section analyzes Miami-Dade County employment and median earnings by gender across occupations and industries, and in comparison with other counties in Florida.

Occupations in Florida

Over the past 17 years, the distribution of full-time employees over the age of 16 by gender remained steady in Miami-Dade. Although women were a higher proportion of the population in 2016, they were only 43.6% of the full-time workforce. Women were the majority of employees in Sales and Office (55.9%), and Service occupations (51.7%). Women continue to increase in occupations related to management, business, science, and arts. Jobs in this broad occupational category were split evenly between men and women.

EMPLOYMENT BY OCCUPATION AND GENDER FOR POPULATION 16 YEARS AND OVER, 2016										
Occupation	Miami		Broward		Palm Beach		Tampa		Orlando	
	% Male	% Female	% Male	% Female	% Male	% Female	% Male	% Female	% Male	% Female
Full-time civilian employed population	56.4%	43.6%	55.7%	44.3%	56.6%	43.4%	54.6%	45.4%	56.7%	43.3%
Management, business, science, and arts	50.0%	50.0%	48.2%	51.8%	49.0%	51.0%	50.1%	49.9%	51.5%	48.5%
Service	48.3%	51.7%	54.2%	45.8%	52.9%	47.1%	54.5%	45.5%	52.3%	47.7%
Sales and office	44.1%	55.9%	45.3%	54.7%	48.2%	51.8%	38.9%	61.1%	45.9%	54.1%
Natural Resources, construction, maintenance	96.3%	3.7%	98.2%	1.8%	95.7%	4.3%	95.3%	4.7%	95.1%	4.9%
Production, transportation, and material moving	81.9%	18.1%	79.8%	20.2%	80.1%	19.9%	80.0%	20.0%	79.6%	20.4%

Source: U.S. Census, American Community Survey, 1-Year Estimate.

Women were the largest percentage of the workforce in *Sales and Office* occupations, as well as service occupations. These occupations typically have lower wages. The occupations with higher wages are concentrated in the *Management, Business, Science and Arts* occupations category which has four subcategories of occupations. Women were the majority of the workforce in *Education, legal, community service, arts, and media* occupations (59.1%), and *Healthcare practitioner and technical* occupations (69.7%). The table below shows a similar concentration in these occupational categories for Broward and Palm Beach counties.

However, women's employment in the high-wage, high-skill occupations pertaining to management and finance, as well as engineering and science, was significantly lower than male employment in these occupations. Across the South Florida region, women were approximately

44% of the workforce in *Management, Business, and Financial* occupations in 2016. In Miami-Dade, women had the lowest representation in *Computer, engineering and science* occupations – 21.1%. Palm Beach County had the highest percentage of women (24.4%) in these occupations in the region. From among the comparison counties, Hillsborough County (Tampa) had the highest proportion of women in engineering and science occupations – 26.6%.

EMPLOYMENT IN MANAGEMENT, BUSINESS, SCIENCE, AND ARTS OCCUPATIONS FOR THE POPULATION 16 YEARS AND OVER BY GENDER, 2016									
	Miami-Dade			Broward			Palm Beach		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Management, business, science, and arts occupations	318,616	50.0%	50.0%	270,567	48.2%	51.8%	181,956	49.0%	51.0%
Management, business, and financial occ.	156,124	55.9%	44.1%	135,829	56.3%	43.7%	85,410	55.9%	44.1%
Computer, engineering, and science occ.	29,370	78.9%	21.1%	30,180	77.6%	22.4%	22,423	75.6%	24.4%
Education, legal, community service, arts, and media occ.	79,353	40.9%	59.1%	60,014	32.9%	67.1%	48,168	32.3%	67.7%
Healthcare practitioner and technical occ.	53,769	30.3%	69.7%	44,544	24.2%	75.8%	25,955	34.3%	65.7%

Source: U.S. Census, American Community Survey, 2016 1-Year Estimate.

Median earnings across occupation and gender vary greatly. Overall, median earnings for men were generally higher than women's median earnings regardless of occupation. In 2016, median earnings for women in the United States was \$40,675 compared with \$50,741 for men. According to the U.S. Census, while the female-to-male earnings ratio narrowed over the last 50 years, women continued to earn less than men in nearly all occupations. The earnings disparity between men and women was present in occupations that predominately employ men, and in occupations with a similar mix of men and women. Women were also more likely to be employed in lower-paying occupations.

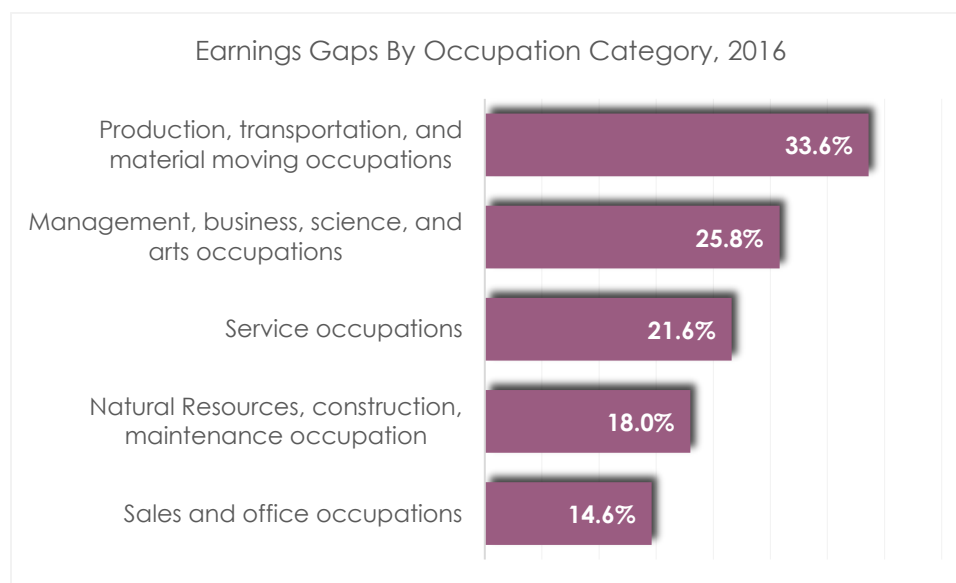
In 2016, the largest gap in Miami-Dade was in both *Management, business, science, and arts occupations* (25.8%) and the *Production, transportation, and material moving occupations* (33.6%). The gap is smallest in *Sales and office occupations* (14.6%). In 2016, women in both Palm Beach and Broward County had higher median earnings in all categories. In the highest earning occupational category of *Management, Business, Science and Arts*, Miami-Dade women had median earnings of \$48,476, compared to \$50,788 in Broward and \$50,342 in Palm Beach.

According to 2016 Census figures females in Central Florida had higher median earnings in some sectors compared to South Florida. Both Tampa and Orlando had greater earnings for women working in the *Production, transportation, and material moving occupations, Management, business, science, and arts occupations, Service occupation, Sales and office occupations and Natural Resources, construction, maintenance occupation.*

From 2010 to 2016, the earnings for women in Miami-Dade generally increased in all occupations. Nonetheless, the gender gap within occupations persists. Since 2010, the largest earnings increases for women were in *Natural Resources, construction, maintenance* occupations (40.1%) and *Service* occupations (14.4%). The largest increases for men since 2010 were in *Service* (21.0%) and *Management, business, science, and arts* occupations (11.8%). In 2016, there were double-digit gaps between male and female earnings across all occupational categories, as shown in the table below.

EARNING BY OCCUPATION AND GENDER, 2010-2016					
Miami-Dade, Occupation	2010		2016		
	Males	Females	Males	Females	Gap
Full-time, year-round civilian employed population 16 years and over	\$35,540	\$29,740	\$37,323	\$31,671	15.1%
Management, business, science, and arts occupations	\$58,406	\$43,465	\$65,323	\$48,476	25.8%
Service occupations	\$22,413	\$18,606	\$27,126	\$21,279	21.6%
Sales and office occupations	\$34,489	\$27,382	\$35,434	\$30,262	14.6%
Natural Resources, construction, maintenance occupation	\$30,466	\$18,247	\$31,173	\$25,571	18.0%
Production, transportation, and material moving occupations	\$27,086	\$19,786	\$30,239	\$20,068	33.6%

Source: U.S. Census, American Community Survey, 2016 1-Year Estimate.



A more detailed analysis of specific occupations reveals significant differences across all occupations in which a high number of women were employed. The following table shows the top ten highest earning occupations for women and the significant gaps that exist across most of these occupations. The largest gaps were in *Legal and Law enforcement* occupations. Interestingly, women earned 4.2% more than men in *Computer and mathematical* occupations.

For almost all occupations, the earnings gap was smaller in Miami-Dade than the national figures, with a few exceptions. The gap for *Architecture and Engineering* occupations was 18.9% in Miami-Dade, compared to 13.5% nationally. The gap was also larger in Miami-Dade for *Business and financial operations* (32.5%) compared to 23.1% nationally. Also, the gap for female law enforcement workers in Miami was 33.5% compared to 19.5% in the United States.

There are other occupations in which the gap between men and women was smaller than the national figures. Female health diagnosing and treating practitioners in Miami earned 14.6% less than men in such occupations, but the gap for the country was 35.5%. Women in Computer and mathematical occupations in Miami-Dade earned 4.2% more than men, while nationally there was a 15.2% earnings gap.

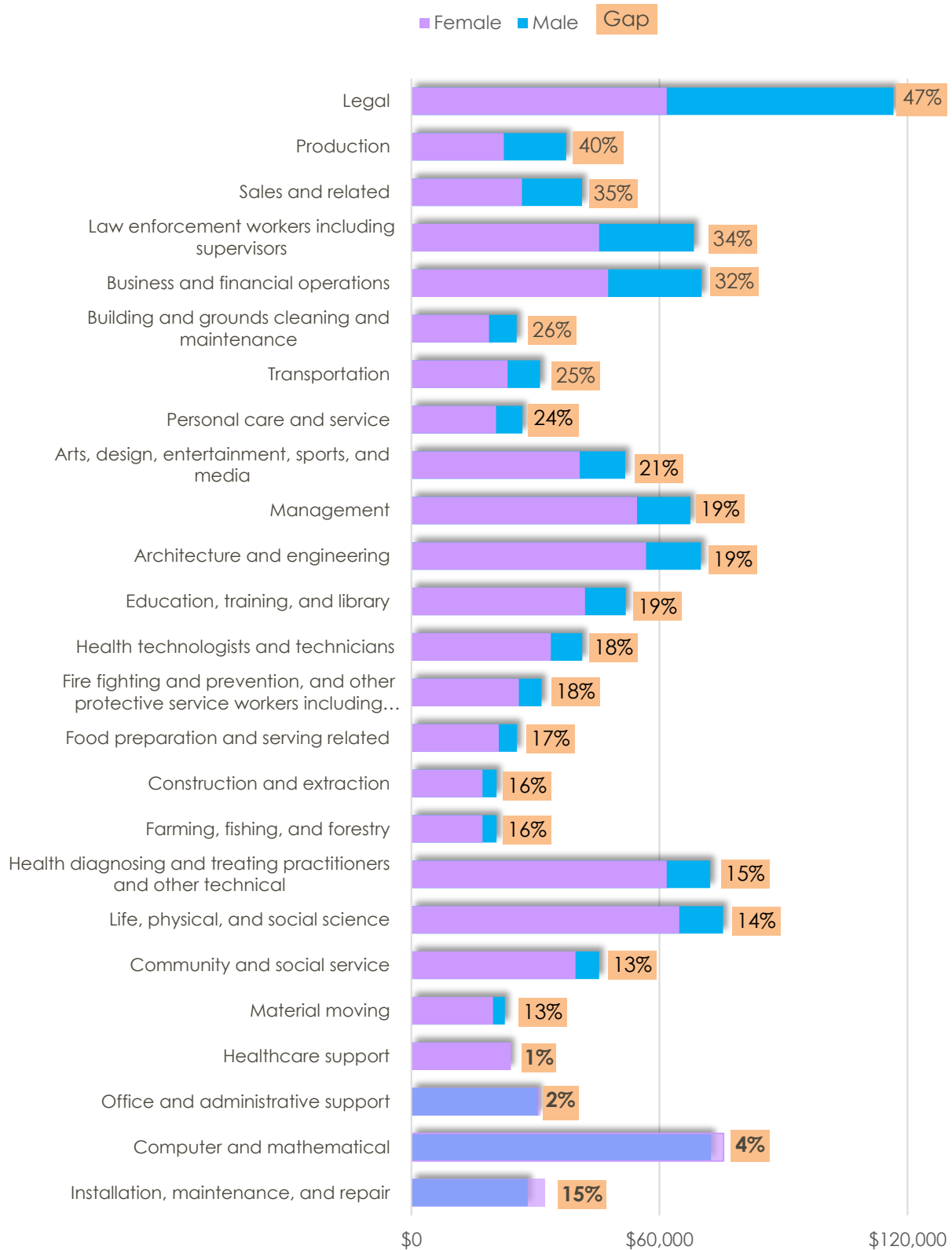
The comparison between Miami-Dade and the other South Florida counties shows some differences. In Broward, three occupational categories showed larger earnings for women than men - Life, physical, and social science occupations; Community and social service occupations; and Arts, design, entertainment, sports, and media occupations. The only occupation category in which women earned more than men in Palm Beach in 2016 was Office and administrative support.

MIAMI-DADE, EARNINGS GAP FOR TOP 10 HIGHEST EARNING OCCUPATIONS FOR WOMEN, 2016		
Full-time, Occupation	Earnings	Gap
Computer and mathematical occupations	\$75,498	4.2%
Life, physical, and social science occupations	\$64,784	-14.0%
Legal occupations	\$61,782	-47.0%
Health diagnosing and treating practitioners and other technical occupations	\$61,758	-14.6%
Architecture and engineering occupations	\$56,768	-18.9%
Management occupations	\$54,600	-19.1%
Business and financial operations occupations	\$47,600	-32.2%
Law enforcement workers including supervisors	\$45,382	-33.5%
Education, training, and library occupations	\$42,021	-18.9%
Arts, design, entertainment, sports, and media occupations	\$40,745	-21.2%

Source: U.S. Census American Community Survey, 2016 1-Year Estimate.

The following figure presents the earnings gaps across all occupational categories. As noted previously, the largest disparities were in *Legal, Production, and Sales and related* occupations. In four occupational categories shown at the bottom of the figure, women make more than men: *Installation, maintenance, and repair; Computer and mathematical occupations; Office and administrative support; and Healthcare support*.

Earning for Full-time Workers by Gender and Occupations, Miami-Dade (2016)



Gender Comparisons by Industry

The following section presents comparisons across genders for the full-time, year-round civilian employed population 16 years and over. As already mentioned, women are more likely to have part-time jobs. In 2016, 84.9% of men in the labor force usually worked 35 or more hours per week, compared to 75.3% of women. Since such differences in work status can also affect overall income levels and contribute to the earnings gaps, the following section focuses only on full time workers.

Women in Miami-Dade County continued to be the majority of employees in the *Educational Services, Health Care and Social Assistance* industry sector. This was the only sector in which women were the majority of full-time employees. Other industries in which women make up close to 50% of employees include *Other services, except public administration*⁹ (48.7%); and *Finance, Insurance and Real Estate* (49.1%). In terms of the size of the female workforce within sectors, there are significant numbers of women employed in *Educational services, and health care and social assistance* (132,736); *Professional, Scientific, and Management services* (51,386); and *Retail Trade* (45,141). These three sectors account for 55% of women who are employed full time.

Broward and Palm Beach had a similar industry concentration of women, with the *Educational Services, Health Care and Social Assistance* industry sector leading in employment for women. Miami had the largest percentage of women in the *Information, Agriculture, Professional Services, and Other* sectors. Broward County had the largest percentage of women in South Florida employed in *Construction* (11.4%), *Manufacturing* (36.5%), and *Educational services, health care and social assistance* (74.3%). Palm Beach had higher percentages of women in *Transportation and warehousing and utilities* (25.3%); *Retail Trade* (43.6%); *Educational services, and health care and social assistance* (75.2%); and *Arts, entertainment, and recreation, and accommodation and food services* (42.2%).

The representation of women in Miami-Dade County's industry sectors was similar to the national figures. The most significant difference was in the *Agricultural* sector. In the United States, women comprised only 15.9% of the workforce in that sector. In comparison, women comprise 35.1% of the workforce in that sector. *Manufacturing* is another sector in which women were a larger percentage. Nationally, only 27.5% of the full-time workforce in that sector were women, compared to 34.5% in Miami. The third sector with significant difference was *Professional, scientific, and management, and administrative and waste management services*. In the United States, only 38.8% of the sector's workforce were women, compared to 43.6% in Miami.

⁹ The Other Services (except Public Administration) sector comprises establishments engaged in activities such as equipment and machinery repairing, promoting or administering religious activities, grant making, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

SOUTH FLORIDA EMPLOYMENT BY INDUSTRY SECTOR AND GENDER, 2016						
Industry	Miami		Broward		Palm Beach	
	Male	Female	Male	Female	Male	Female
Agriculture, forestry, fishing and hunting, and mining	64.9%	35.1%	73.2%	26.8%	73.9%	26.1%
Construction	91.1%	8.9%	88.6%	11.4%	91.2%	8.8%
Manufacturing	65.5%	34.5%	63.5%	36.5%	66.4%	33.6%
Wholesale trade	69.2%	30.8%	67.5%	32.5%	73.2%	26.8%
Retail trade	56.5%	43.5%	62.4%	37.6%	56.4%	43.6%
Transportation and warehousing, and utilities	76.7%	23.3%	75.4%	24.6%	74.7%	25.3%
Information	59.6%	40.4%	64.3%	35.7%	63.8%	36.2%
Finance and insurance, and real estate and rental and leasing	50.9%	49.1%	47.6%	52.4%	54.2%	45.8%
Professional, scientific, and management, and administrative and waste management services	56.4%	43.6%	60.8%	39.2%	61.3%	38.7%
Educational services, and health care and social assistance	28.3%	71.7%	25.7%	74.3%	28.0%	72.0%
Arts, entertainment, and recreation, and accommodation and food services	59.0%	41.0%	62.9%	37.1%	57.8%	42.2%
Other services, except public administration	51.3%	48.7%	58.6%	41.4%	54.2%	45.8%
Public administration	58.1%	41.9%	56.4%	43.6%	60.7%	39.3%

Source: U.S. Census, American Community Survey, 2016 1-Year Estimate.

The industry sectors in which women are employed may influence the overall earnings gap. While median earnings vary depending on industry sector, for each industry there were consistent disparities in earnings between men and women, except for *Construction*. Although women only make up 8.9% of the workforce in the construction industry, their median earnings were higher, earning \$32,327 compared to \$31,330 for men, or 3% more. The only other sector in which women seem to have a small earnings advantage was *Transportation and warehousing, and utilities*, where women earn 0.1% more. However, there were significant gaps in the three sectors with the highest concentration of women. In the *Educational services, and health care and social assistance* sector which employed 184,249 women in 2016, women earned \$36,473 or 21.2% less than men. In the *Professional, scientific, and management, and Administrative and waste management services* sector, employing over 75,000 women, the earnings gap was 27.4%. The gap in *Retail trade* was 14.8%. The largest median earning gap was evident in *Manufacturing* (38.4%), followed by the *Other Services* sector, in which men earned 28.3% more.

The gender comparisons in the United States showed consistent high gaps across most sectors. The largest gap was in the *Arts, entertainment, and recreation, and Accommodation and food services* sector where men earn 28.5% more than women. The smallest gap was in *Manufacturing* where women earn only 2.3% less than men. In *Information*, which was the sector with the highest earnings for women in Miami-Dade (\$45,856), women's earnings were 10% lower than men's, compared to a 17% gap in the United States.

The 2010-2016 comparison of earnings and gender gaps showed that while gaps in some sectors decreased, they increased in others. On the positive side, the gaps in the *Construction* and *Transportation* sectors were reversed in favor of women. The gaps also decreased in five additional sectors: *Agriculture; Wholesale Trade; Retail Trade; Finance and insurance, and real estate and rental and leasing; and Public Administration*. However, the most notable difference

was the significant gap that emerged in manufacturing. Women's earnings in that sector declined by almost 30% from 2010, while men's earning increased, producing a 38.4% gap in 2016. The *Information* sector, in which women earned more than men in 2010, converted to a 10% gap in favor of men in 2016. In comparison to 2010, the gaps also increased in four other sectors: *Professional, scientific, management, and Administrative and waste management services; Educational services, and health care and social assistance; Arts, entertainment, and recreation, Accommodation and food services; and Other services, except public administration.*

MIAMI-DADE, MEDIAN EARNINGS BY INDUSTRY AND GENDER, 2010-2016						
Industry	2010			2016		
	Males	Females	Gap	Males	Females	Gap
Agriculture, forestry, fishing and hunting, and mining	\$35,540	\$29,740	16.3%	\$30,738	\$26,059	15.2%
Construction	\$19,600	\$15,253	22.2%	\$31,330	\$32,327	-3.2%
Manufacturing	\$30,318	\$33,967	-12.0%	\$39,060	\$24,052	38.4%
Wholesale trade	\$35,527	\$20,803	41.4%	\$45,253	\$41,446	8.4%
Retail trade	\$37,382	\$28,578	23.6%	\$30,564	\$26,027	14.8%
Transportation and warehousing, and utilities	\$29,018	\$22,201	23.5%	\$40,409	\$40,457	-0.1%
Information	\$37,062	\$39,087	-5.5%	\$50,953	\$45,856	10.0%
Finance and insurance, and real estate and rental and leasing	\$50,182	\$39,932	20.4%	\$50,173	\$40,826	18.6%
Professional, scientific, management and Admin. and waste mgmt. services	\$48,470	\$38,215	21.2%	\$45,500	\$33,038	27.4%
Educational services, and health care and social assistance	\$40,933	\$35,370	13.6%	\$46,300	\$36,473	21.2%
Arts, entertainment, and recreation, Accommodation and food services	\$42,242	\$31,928	24.4%	\$29,277	\$21,804	25.5%
Other services, except public administration	\$23,988	\$17,442	27.3%	\$27,403	\$19,649	28.3%
Public administration	\$25,872	\$18,473	28.6%	\$60,724	\$45,229	25.5%

Source: U.S. Census, American Community Survey, 2010 and 2016 1-Year Estimates.

In Miami-Dade, the top three employment industries for women were *Education Services, and Health Care and Social Assistance; Professional, scientific, and management, and administrative and waste management services; and Retail Trade*. These three sectors account for 55% of women workers. Women earned significantly less in each of them – 21.2% less in *Education Services, Health Care and Social Assistance; 27.4%* in *Professional, Scientific and management and administrative and waste management services; and 14.8%* less in *Retail Trade*.

In 2016, women employed in *Education Services, and Health Care and Social Assistance* in Miami-Dade earned 10% less than Broward women in that sector and 9% less than Palm Beach. The only sector in which Miami-Dade women earned slightly more than Broward was *Information*, in which female workers' earnings in Miami-Dade were 1.8% higher.

Class of Worker

The U.S. Census classifies all people over the age of 15 who have been employed at any time according to the type of work they normally do or the work performed most regularly. Occupations and types of work are then broken down into six classes: Private for-profit wage and salary workers; Private not-for-profit wage and salary workers; Local government workers; State government workers; Federal government workers; and Self-employed in own not incorporated business workers and unpaid family workers. The majority of Miami-Dade's full-time workers were private for-profit wage and salary workers (78.4%). That figure was above the 72.9% of workers in this class for the United States and the 76.2% for Florida.

In 2016, women were the majority of the full-time workforce in private not-for-profit wage and salary jobs (66.2%), as well as state government jobs (59.9%). These proportions were similar to national figures of women representation in these worker classes. Private not-for-profit wage and salary workers include people who worked for wages, salary, commission, tips, pay-in-kind, or piece rates for a private-for-profit employer or a private-not-for-profit, tax-exempt, or charitable organization.

In 2010, women were also the majority in local government jobs (51.6%), but their representation declined to 47.2% in 2016. The proportion of women in private for-profit wage and salary jobs also declined. While in 2010 women were 45.8% of workers in this class, their representation decreased to 42.6% in 2016.

MIAMI-DADE CLASS OF WORKER BY GENDER						
Class of Worker	2010		2016		2016 Employment	
	% Male	% Female	% Male	% Female	Male	Female
Full-time, year-round civilian employed population 16 years and over	53.4%	46.6%	56.4%	43.6%	538,538	416,943
Private for-profit wage and salary workers:	54.2%	45.8%	57.4%	42.6%	429,822	318,903
• Employee of private company workers	52.5%	47.5%	55.8%	44.2%	383,952	304,294
• Self-employed in own incorporated business workers	73.2%	26.8%	75.8%	24.2%	45,870	14,609
Private not-for-profit wage and salary workers	38.6%	61.4%	33.8%	66.2%	15,153	29,660
Local government workers	48.4%	51.6%	52.8%	47.2%	33,870	30,263
State government workers	41.6%	58.4%	40.1%	59.9%	6,757	10,091
Federal government workers	59.9%	40.1%	67.1%	32.9%	10,990	5,397
Self-employed in own not incorporated business workers and unpaid family workers	64.4%	35.6%	65.0%	35.0%	41,946	22,629

Source: U.S. Census, American Community Survey, 2010 and 2016 1-Year Estimate.

Similar to Miami-Dade, women were the majority of employees in Private not-for-profit wage and salary workers in Broward, Palm Beach and Orange counties. However, women comprised a larger percentage of local government workers in Broward, Palm Beach and Orange counties. Women were also the majority of workers in these classes of workers. Orlando had the highest proportion of women working at the state level.

FLORIDA-CLASS OF WORKER BY GENDER						
Class of Worker	Broward		Palm Beach		Orlando	
	% Male	% Female	% Male	% Female	%Male	%Female
Full-time, year-round civilian employed population 16 years and over	55.7%	44.3%	56.6%	43.4%	56.7%	43.3%
Private for-profit wage and salary workers:	57.7%	42.3%	58.9%	41.1%	59.9%	40.1%
• Employee of private company workers	55.9%	44.1%	57.1%	42.9%	58.7%	41.3%
• Self-employed in own incorporated business workers	75.6%	24.4%	75.4%	24.6%	76.0%	24.0%
Private not-for-profit wage and salary workers	34.5%	65.5%	40.5%	59.5%	35.6%	64.4%
Local government workers	45.3%	54.7%	44.5%	55.5%	37.4%	62.6%
State government workers	36.0%	64.0%	51.2%	48.8%	29.5%	70.5%
Federal government workers	63.1%	36.9%	58.5%	41.5%	58.4%	41.6%
Self-employed in own not incorporated business and unpaid family workers	64.9%	35.1%	58.0%	42.0%	64.2%	35.8%

Source: U.S. Census, American Community Survey 2016 1-Year Estimate.

Disparities in median earnings based on gender and class of workers were persistent and consistent with the findings in previous sections. Women's earnings increased across all worker classes. The most significant earnings increase for women compared to 2010 were in the federal government sector (28.7% increase), the Private not-for-profit wage and salary class (17.0%), and employee of private company (13.4%). Male earnings also increased in almost all classes, except for the Private not-for-profit wage and salary class, where male earnings were 4.0% lower than 2010. The growth in men's earnings outpaced women in two classes. Earnings for men with state government jobs increased by 23.1% compared to 2010, in comparison to only 3.0% increase for women. Median earnings for men who were self-employed in own incorporated business increased by 7.6%, compared to 6.7% for women.

In 2016, the gender gaps persisted across all classes of workers, but generally decreased compared to 2010. The only class in which the gap increased significantly was state government. The gap in women's earnings increased to 17.3% in 2016, up from only 1.2% in 2010. The gap for women who were self-employed in own incorporated business remained almost unchanged (26.6%) compared to 2010 (26.0%).

MIAMI-DADE, EARNINGS BY CLASS OF WORKER AND GENDER, 16 YEARS AND OVER						
Class of Worker	2010		Gap	2016		Gap
	Males	Females		Males	Females	
Full-time, year-round civilian employed population	\$35,540	\$29,740	-16.3%	\$37,323	\$31,671	-15.1%
Private for-profit wage and salary workers:	\$32,883	\$27,174	-17.4%	\$36,278	\$30,688	-15.4%
• Employee of private company	\$31,917	\$26,961	-15.5%	\$35,423	\$30,576	-13.7%
• Self-employed in own incorporated business	\$46,065	\$34,083	-26.0%	\$49,567	\$36,369	-26.6%
Private not-for-profit wage and salary	\$47,643	\$34,644	-27.3%	\$45,744	\$40,542	-11.4%
Local government	\$50,153	\$41,496	-17.3%	\$52,400	\$43,864	-16.3%
State government	\$40,539	\$40,063	-1.2%	\$49,900	\$41,283	-17.3%
Federal government	\$60,042	\$46,567	-22.4%	\$63,207	\$59,934	-5.2%
Self-employed in own not incorporated business and unpaid family workers	\$25,433	\$15,284	-39.9%	\$26,922	\$16,945	-37.1%

Source: U.S. Census, American Community Survey, 2010 and 2016 1-Year Estimate.

Disparities in median earnings based on gender and class of worker were consistent with the findings in previous sections. The highest gender gap of the South Florida region by class of worker was in Palm Beach County for women in local government. Their earnings were 37.1% lower than men's earnings for local government jobs. The largest gap by class of worker in Broward County was in federal government jobs, where male earnings were 22.4% higher.

SOUTH FLORIDA-EARNINGS BY CLASS OF WORKER AND GENDER, 16 YEARS AND OVER (2016)						
Class of Worker	Broward		Gap	Palm Beach		Gap
	Males	Females		Males	Females	
Full-time, year-round civilian employed population 16 years and over with earnings	\$42,345	\$37,939	-10.4%	\$45,107	\$39,149	-13.2%
Private for-profit wage and salary workers:	\$41,585	\$36,313	-12.7%	\$42,228	\$37,114	-12.1%
• Employee of private company	\$40,706	\$36,112	-11.3%	\$41,452	\$36,430	-12.1%
• Self-employed in own incorporated business	\$52,180	\$48,386	-7.3%	\$52,330	\$51,773	-1.1%
Private not-for-profit wage and salary	\$51,650	\$45,092	-12.7%	\$51,395	\$42,091	-18.1%
Local government	\$60,091	\$48,604	-19.1%	\$67,605	\$42,499	-37.1%
State government	\$49,130	\$45,650	-7.1%	\$52,015	\$44,450	-14.5%
Federal government	\$77,265	\$59,981	-22.4%	\$58,396	\$47,280	-19.0%
Self-employed in own not incorporated business workers and unpaid family workers	\$27,139	\$21,531	-20.7%	\$30,562	\$28,214	-7.7%

Source: U.S. Census, American Community Survey, 2005 and 2012-2016 5-Year Estimate.

Women Entrepreneurship

The Survey of Business Owners (SBO) provides the only comprehensive, regularly collected source of information on selected economic and demographic characteristics for businesses and business owners by gender. The U.S. Census conducts the survey every five years with most current data available from the year 2012. The 2017 data has not been released by the Census. The 2012 data was analyzed comprehensively in the 2016 Status of Women report. Some of the findings include:

- From 2007 to 2012, women-owned firms in Miami-Dade County increased by 60.7%, compared to a 39% increase in Florida and 26.8% in the United States.
- Women-owned firms are 46.4% of all firms in the county and represented 21% of employer firms, while men-owned firms comprised over half of all firms (51%) and 58% of firms with paid employees.
- Miami-Dade had a larger percentage of women-owned firms (46.4%) than United States (36.5%).
- Women-owned firms in Miami-Dade generated \$15.9 billion in receipts, up from \$11.7 billion in 2007, a 35% increase. From 2007 to 2012, male-owned firms in the county increased only by 10.9%, with a revenue increase of 7%.
- Women-owned firms were distributed across all industry sectors but the sector with the largest percentage of such firms was *Health Care and Social Assistance*, both in 2007 and 2012. That sector also accounted for 22.3% of total women-owned firms. The *Professional, Scientific, and Technical Services* sector, accounting for 16.1% of women-owned firms in 2012, dropped to second largest, down from 21.8% of total women-owned firms in 2007. Third was the Retail Trade sector in which 11.3% of total women businesses operated.

While more recent official representative U.S. Census data on entrepreneurship is not available, other organizations are tracking the state of women-owned businesses. The most notable among such sources is the *State of Women-Owned Businesses* report commissioned by American Express. In 2017, American Express released the seventh annual report. While the research presented in the report focused on national figures and trends, it also looked at some of the major metropolitan areas in the country, including Miami. The Miami metropolitan area also includes Broward and Palm Beach counties. The projections in the report used the most recent (2012) Survey of Business Owners data from the U.S. Census Bureau, and adjusted the numbers each year by the annual gross domestic product estimates at the national, state, and metropolitan levels, as well as by industry. Some of the findings for 2016 include:

- Miami ranked third by the number of women-owned firms, with approximately 453,000 businesses, behind New York and Los Angeles.
- Miami ranked among the bottom five areas with lowest employment vitality, which is a measure of the employment growth rate of women-owned businesses and the average number of employees per women-owned business. The other areas were Nashville, TN; Chicago, IL; Memphis, TN and San Jose, CA.
- The number of firms in the Miami area increased by 27.4% since 2012.
- Employment in women-owned firms increased by 6.3%.
- Sales for women-owned firms increased by 20.6%.
- Miami was ranked seventh out of 50 metropolitan areas in the economic clout of women-owned firms. The areas that outranked Miami were Charlotte, NC; San Antonio, TX; Memphis, TN; Dallas, TX; Austin, TX and Indianapolis, IN.
- There were on average 67 new women-owned firms created per day in the Miami area in the 2012-2016 period.

Contracts to Women-Owned Businesses

Miami-Dade County's three Small Business Enterprise programs for contracts that provide Goods and Services, Architectural & Engineering, or Construction projects are gender and race neutral. The Small Business Development (SBD) Division of the Internal Services Department collects demographic data from firms that submit applications for Small Business Enterprise certification. SBD does not collect demographic (race and gender) data for firms that are not certified as a small business. The following section presents analysis of the data provided by Small Business Development (SBD) Division of the Internal Services Department. The data covers the five-year period from 2013 through 2017. (See Appendix A: Miami-Dade County Contracts/Subcontracts to Women-Owned Businesses (2013-2017))

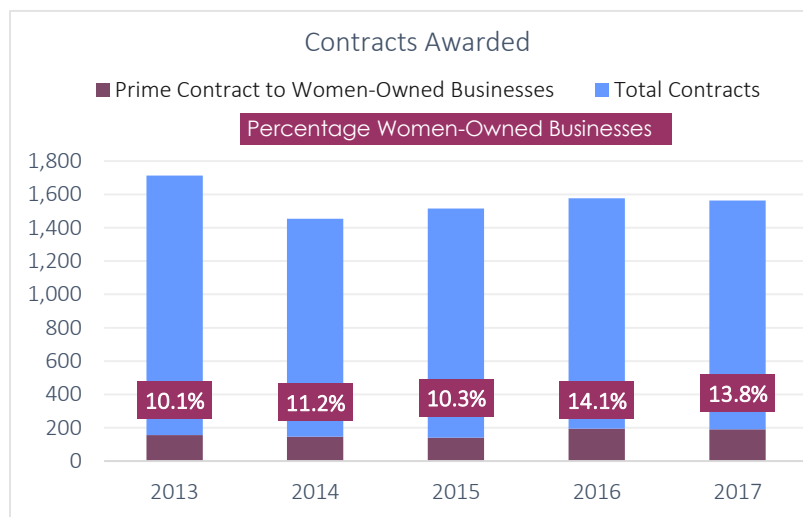


The data shows a significant increase in the number of businesses with certification as 100% women-owned or with women as majority owners in 2016 and 2017, in comparison to 2015. The table below shows the breakdown by prime contracts and subcontracts awarded to these two categories of women-owned businesses.

BUSINESSES CERTIFIED AS WOMEN-OWNED					
	2013	2014	2015	2016	2017
Number of businesses which are 100% women-owned	77 – Prime	68 – Prime	60 – Prime	84 – Prime	94 – Prime
	123 - Subs	102 – Subs	96 - Subs	141 - Subs	113 - Subs
Number of businesses with women as majority owners	80 – Prime	79 – Prime	81 – Prime	111 – Prime	96 – Prime
	146 - Subs	124 – Subs	117 - Subs	170 - Subs	124 - Subs

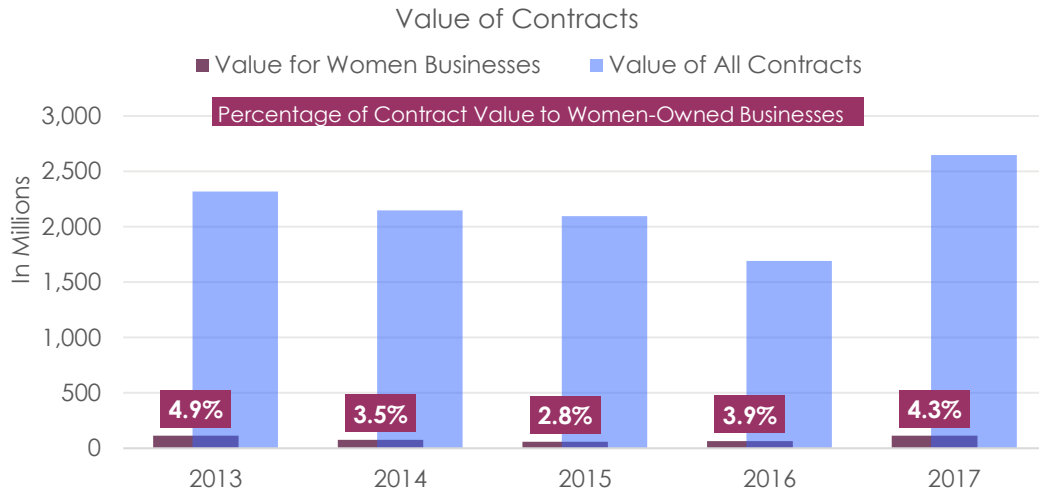
Source: Small Business Development (SBD) Division of the Internal Services Department, Miami-Dade County 2018.

In the 2013-2017 period, only 11.9% of total contracts were awarded to women-owned businesses. The value of contracts to women owned businesses including prime and subcontracts was only 3.9% of total value.¹⁰ The highest number of contracts awarded to women-owned businesses – 195 was in 2016, while the lowest was in 2014 – 147 contracts. In addition to prime contracts, in which the women-owned businesses were the main contractor, women-owned businesses also participate as subcontractors on some projects. The largest number of subcontracts to women-owned businesses was in 2016 – 311, while the lowest was in 2015 – 213. In 2017, there were 237 subcontracts to women-owned businesses.



¹⁰ SBD data only includes women-owned businesses which obtained SBD certification. The data also do not include small purchase orders procured at the department level.

More significant than the number of contracts is the value of contracts. Over the 2013-2017 period, the value of all contracts was approximately \$10.9 billion. Overall, only \$427 million or 3.9% of contract value was to women-owned businesses, including prime contracts and subcontracts. The value of contracts to women-owned businesses increased significantly from 2016 to 2017, by approximately 74%. However, these contracts' value still represents a very small proportion of total value because the value of all contracts increased substantially, from almost \$1.69 billion to \$2.65 billion. Also of note is the fact that the value of contracts to women-owned businesses in 2017 was still slightly below the \$113.7 million awarded to women-owned businesses in 2013.



Analysis of Miami-Dade County Employees

The Miami-Dade County Human Resources Department provided the full database of county employees as of May 2018. The Metropolitan Center research team conducted detailed statistical analysis to examine if there is wage disparity between male and female county employees. The database contained 28,633 employees. The analysis focused on the 25,620 full time employees and excluded 2,514 part-time workers, 25 temporary/seasonal workers, 462 non-county employees, and the 13 county commissioners who receive a nominal salary of \$6,000.

Summary of Findings

The majority of county employees are men (approximately 60%), similar to 2016 (59%). The average salary of full time MDC employees is approximately \$69,000. The comparison with 2016 data shows a significant decrease of the salary gap between women and men. The average salary of female employees in 2018 is 11.3% lower in comparison to male employees. In 2016, the gap was 14%.

The gap decrease was even more significant when median salaries are compared. The median value separates the data in two equal halves. In other words, half of the county employees earn more than \$63,284 and half earn less. The 2018 gap in median salaries was 16.2%. In 2016, the gap was 25%. The analysis shows the salary gaps are significantly smaller for employees hired within the last 10 years.

ADJUSTED ANNUAL RATE				
	Overall	Women	Men	Gap
Mean	\$68,993	\$64,043	\$72,217	11.3%
Median	\$63,284	\$57,071	\$68,082	16.2%
Count	25,620	10,105	15,515	-

An independent-samples t-test shows the difference in mean salaries between men and women is statistically significant. However, factors which may affect the difference in salaries are tenure, education, job category (professionals, clerical, technical etc.), and level of responsibility (supervisory vs. non-supervisory). The following analysis shows how male and female employees differ on these factors.

- 32.0% of female employees have Bachelor's degrees or higher, compared to 22.4% of male employees.
 - There are significant salary gaps between men and women across all educational levels. The smallest gap was for women with Bachelor's degrees whose average salary is 13% lower than men with the same educational level.
 - The gap between women and men with graduate or professional degrees was almost 17%.
- The average length of tenure for women was similar to men - 13.37 years, compared to 13.75 for men.
 - The salary gaps were present across all tenure groups, with the smallest gaps observed among employees who have been hired within the last five years (7% gap).

- The highest gap was for employees who have been with the county between 11 and 15 years (14.5%).
- The majority of women were in office/clerical positions (32.7%) and professional positions (28.7%).
 - The salary gap was the largest for employees classified in the professional job category (including attorneys, planners, analysts, accountants, architects) – 14.4%.
 - The average salary was 2.8% higher for women than men in office/clerical positions. However, the average salary for women in these positions is \$47,795, significantly lower than the overall average salary for women (\$64,043).
- There was a slightly higher proportion of women (25.3%) than men (23.3%) in supervisory positions.
 - However, women in such position make on average 11.3% less than men.
 - The largest salary gap by job role is for women in non-supervisory professional roles (18.7%).

The analysis cannot determine conclusively that the observed salary differences between female and male county employees were due to unequal treatment. The main impediment to such a determination is the lack of information on the field of degree for employees. While the county database contains information on the level of education (high school, Bachelor's, graduate etc.), it does not discern between a graduate degree in engineering, for example, and a graduate degree in social work.

For the detailed statistical analysis, see [Appendix B](#).

Towards Closing the Gender Gap

The second report on the status of women in Miami-Dade County presented in the preceding pages details the progress women have made in closing the earnings gap and the challenges that remain before achieving parity of income. The preponderance of evidence points to the persistence of the gaps in earnings overall, as well as by educational attainment, occupations and industries.

Many differences that contributed to the pay gap have diminished or disappeared since the 1980s. One of the most important differences that has been erased gradually is the similar educational attainment of men and women. In fact, a slightly higher percentage of women (28.1%) than men (27.6%) in Miami-Dade County had a Bachelor's degree or higher in 2016. Within each gender group, men and women with college degrees earned significantly more than those without college education. However, significant earnings gaps exist between men and women in various educational attainment categories. In 2016, women with Bachelor's degrees made only 82 cents for every dollar earned by men with college degrees. The median earnings of women with graduate degrees were \$51,908, compared to \$76,662 for men, a 32% gap, up from 27% in 2010. The field of degree is one of the factors that affects earning potential. A larger percentage of college-educated women (38.0%) than men (23.2%) have degrees in typically lower paying fields such as Education, Arts and Humanities. Conversely, 46% of male and only 38% of female university graduates have bachelor's degrees in Science, Engineering and related fields.

The trends in fields of degree obtained by women suggest that women have the potential to narrow the gap. The report shows that a larger percentage of women obtained degrees in Science, Engineering and Business fields. In 2016, 66.4% of women in the 25-39 age group with Bachelor's degrees had degrees in Science, Engineering and related subjects, or in Business fields. The percentage of women with degrees in high-paying fields was still lower than for men in this age group (76.6%). However, it increased modestly since 2010 when 65.7% of women in the 25 to 39 age group held such degrees.

The field of study women choose is a major predictor of earnings as it affects the occupations and industries that women enter. Many of the jobs women take typically have lower career earning potential. While over the last couple of decades, more women moved from clerical to managerial jobs, women continue to be the majority in office and administrative support occupations (65.3% of workforce). Women also dominate the healthcare support (86.2%), and personal care and service occupations (67.8%). The median earnings in these occupational categories are lower than the overall county median earnings.

Women sometimes voluntarily choose lower-paying occupations because they are drawn to work that happens to pay less, like caregiving or nonprofit jobs, or because they want less demanding jobs in order to dedicate time to family responsibilities outside of work. However, the earnings gap cannot be dismissed with trivial observations that women outnumber men in lower-paying jobs. The gaps are present in high-paying occupational categories as well. In 2016, women in legal occupations earned 47% less than men. The earnings gap was 32% in the Business and Financial operations and 34% in the Law Enforcement occupations. These occupations pay more than the median earnings in the county.

The gaps also cannot be attributed simply to the industry sectors with high concentrations of women or fields like teaching and social work. Even within these industry sectors, the earnings gaps were significant. In 2016, Miami-Dade women employed in the educational services, and health care and social assistance sector earned only 79 cents to every dollar a man earned. The earnings gaps were even more significant in sectors with a very high degree of specialization and higher wages. For example, women in the finance and insurance sector earned 38% less than men. The gap in the Professional, scientific, and technical services sector was even larger – 45%. In comparison, the gap in this sector in the United States was 25%.

While factors such as employment status, labor force participation, field of study, occupation and industry sector choices, and career paths make a difference in earning potential, there are other factors that are often hard to quantify, like gender bias and social pressure, that depresses wages for women's work. The report shows that even within occupations and industry sectors, women generally receive less for their work. Moreover, the gaps are larger in the higher paying industry sectors and occupational categories.

Despite the continuing significant gaps, there are also some encouraging trends that hold the promise of women's earnings catching up. The most significant positive trends were the higher graduation rates of women and their gradual shift towards degrees that typically have higher earning potential. However, while education improves earnings, the report shows that education alone will likely not eliminate the gender pay gap. More needs to be done to ensure that educational parity carries over into the professional world, and to reduce the negative effect of gender bias and social pressure. Closing the gender wage gap does not need to be a zero-sum game. For the divide between men and women to close, women's real wages just need to rise faster than men's. If the earnings for full-time female workers begin to increase by 2% annually, while men's earnings increase by 1%, the gap will be closed by the year 2033. A community without income gaps will reflect a society that values women's and men's contributions equally.



Appendix A: Miami-Dade County Contracts/Subcontracts to Women-Owned Businesses (2013-2017)

Data Category	2013	2014	2015	2016	2017
1. Number of contracts and subcontracts awarded to women-owned businesses	Prime – 157 Sub – 269	Prime – 147 Sub – 226	Prime – 141 Sub – 213	Prime – 195 Sub – 311	Prime – 190 Sub – 237
2. Total number of contracts awarded	1557	1307	1374	1382	1374
3. Value of contracts and subcontracts to women-owned businesses	Prime - \$98,520,184.96 Sub - \$15,190,189.26	Prime - \$28,926,794.03 Sub - \$46,846,867.92	Prime - \$49,556,988.39 Sub - \$9,141,793.22	Prime - \$33,218,265.58 Sub - \$32,102,653.35	Prime - \$63,479,328.32 Sub - \$49,941,626.31
4. Total value of all contracts	\$2,319,010,525.08	\$2,149,025,755.07	\$2,095,354,478.56	\$1,690,650,671.44	\$2,648,114,117.88
5. Number of businesses which are 100% women-owned	77 – Prime 123 - Subs	68 – Prime 102 – Subs	60 – Prime 96 - Subs	84 – Prime 141 - Subs	94 – Prime 113 - Subs
6. Number of businesses with women as majority owners	80 – Prime 146 - Subs	79 – Prime 124 – Subs	81 – Prime 117 - Subs	111 – Prime 170 - Subs	96 – Prime 124 - Subs

Notes:

- The demographic data is what has been reported to the Miami-Dade County Small Business Development Division on a required or voluntary basis, for certified and non-certified firms, respectively, as of June 2018.
- Due to reporting limitations of the contracts database, there may be additional businesses where women are minority owners or on contracts awarded to multiple firms, but they were not able to be identified by the publishing deadline.
- The total number of contracts corresponds to the total number of women-owned businesses that were awarded or subcontracted with, even if the same women-owned business was awarded multiple contracts or was a subcontractor/subconsultant on more than one contract.

Appendix B: Miami-Dade County Employee Analysis (statistical results)

The statistical analysis included basic crosstabulation comparisons, as well as review of correlations and multiple regression analysis.

Education

- 32.0% of female employees have Bachelor's degrees or higher, compared to 22.4% of male employees.

EDUCATION				
	Women		Men	
	Count	Percent	Count	Percent
Grade School	21	0.2%	120	0.8%
High School	5,346	52.9%	9,629	62.1%
Associate's degree	1,013	10.0%	1,637	10.6%
Bachelor's degree	2,313	22.9%	2,716	17.5%
Master's degree	852	8.4%	701	4.5%
Doctorate or professional degree	71	0.7%	54	0.3%
Total	9,616	95.2%	14,857	95.8%
Missing	489	4.8%	658	4.2%
	10,105		15,515	

- Education and salary are positively correlated. The higher the educational attainment, the higher the salary. However, the gender comparison reveals that there are significant salary gaps across all educational levels.

ADJUSTED ANNUAL RATE by EDUCATIONAL LEVEL			
	Women	Men	Gap
Grade School	\$34,601	\$41,574	16.8%
High School	\$50,617	\$63,284	20.0%
Associate's degree	\$57,956	\$77,838	25.5%
Bachelor's degree	\$74,273	\$85,350	13.0%
Master's degree	\$80,018	\$95,952	16.6%
Doctorate or professional degree	\$97,603	\$117,131	16.7%

Tenure

- 61.0% of female employees have worked at the county for over 10 years, compared to 63.9% of men.
 - The average length of tenure for women is similar to men - 13.37 years, compared to 13.75 for men.

TENURE				
	Women		Men	
	Count	Percent	Count	Percent
< 5	2,933	29.0%	4,056	26.1%
6-10	1,013	10.0%	1,539	9.9%
11-15	2,033	20.1%	3,736	24.1%
16-20	1,660	16.4%	2,187	14.1%
21-25	1,196	11.8%	2,055	13.2%
Over 25	1,270	12.6%	1,942	12.5%
Total	10,105		15,515	

- The salary gap is the smallest for employees who have been hired within the last five years.

ADJUSTED ANNUAL RATE by TENURE			
	Women	Men	Gap
< 5	\$48,357	\$51,983	7.0%
6-10	\$63,697	\$68,695	7.3%
11-15	\$64,848	\$75,888	14.5%
16-20	\$69,489	\$78,720	11.7%
21-25	\$76,581	\$86,471	11.4%
Over 25	\$80,326	\$87,796	8.5%

Job Category

- Women are more likely to hold office and clerical positions, with one in three female employees holding a position in that category. Conversely, only 8.1% of men have office or clerical jobs.
- A larger percentage of women are employed in professional job categories (28.7%), than men (23.2%).
- The majority of men are in protective service, service and skilled craft occupations.

JOB CATEGORY				
	Women		Men	
	Count	Percent	Count	Percent
Office/Clerical	3,304	32.7%	1,249	8.1%
Officials and Administrators	173	1.7%	249	1.6%
Para-Professional	409	4.0%	152	1.0%
Professionals	2,903	28.7%	3,594	23.2%
Protective Service	1,789	17.7%	4,001	25.8%
Service/Maintenance	1,034	10.2%	2,333	15.0%
Skilled Craft	45	0.4%	2,608	16.8%
Technicians	448	4.4%	1,329	8.6%
Total	10,105		15,515	

- There are three job categories in which the salary gap favors women – office/clerical positions, skilled craft and technicians.
- The most significant gap between women and men is in professional jobs. After the “Officials and Administrators” category, the ‘Professionals’ category has the highest salaries. The gap between women and men is 14.4%.

ADJUSTED ANNUAL RATE by JOB CATEGORY			
	Female	Male	Gap
Office/Clerical	\$47,795	\$46,485	-2.8%
Officials and Administrators	\$136,649	\$145,922	6.4%
Para-Professional	\$40,818	\$44,999	9.3%
Professionals	\$82,000	\$95,768	14.4%
Protective Service	\$71,570	\$76,749	6.7%
Service/Maintenance	\$43,441	\$44,221	1.8%
Skilled Craft	\$64,902	\$63,246	-2.6%
Technicians	\$78,079	\$75,117	-3.9%

Position Role

- The most significant differences in terms of roles, is in the protective services category in which 22.1% of men are employed, compared to 14.9% of women.
- A slightly larger percentage of women are in both supervisory roles (25.3%) and in non-supervisory roles (49.1%).
- There is a 9.4% gap in salaries between women and men in the job category in which the highest percentage of both women and men are employed – non-supervisory positions.
- The gap in the second category with high percentages of workers – supervisors – is 11.3%.
- The largest gap is for professionals in non-supervisory positions – 18.7%. This category includes various occupations such as librarians, counselors, social workers, attorneys, analysts and others.

	ROLE			
	Women		Men	
	Count	Percent	Count	Percent
Deputy Mayor/Special Advisors	1	0.0%	3	0.0%
Assistant to the Deputy Mayor	3	0.0%	4	0.0%
Department Directors	17	0.2%	21	0.1%
Deputy/Assistant/Assoc. Directors	31	0.3%	57	0.4%
Division Directors	122	1.2%	156	1.0%
Assistant to Directors	12	0.1%	3	0.0%
Assistant Division Directors	16	0.2%	8	0.1%
Senior Bureau Commanders/ Section Heads	289	2.9%	608	3.9%
Supervisors	2,556	25.3%	3,620	23.3%
Non-Supervisory	4,959	49.1%	7,161	46.2%
Non-Supervisory Professionals	594	5.9%	433	2.8%
Protective Services	1,505	14.9%	3,435	22.1%

ADJUSTED ANNUAL RATE by JOB ROLE			
	Female	Male	Gap
Deputy Mayor/Special Advisors	\$269,326	\$255,893	-5.2%
Assistant to the Deputy Mayor	\$78,785	\$83,765	5.9%
Department Directors	\$201,702	\$197,497	-2.1%
Deputy Directors	\$184,524	\$187,811	1.7%
Assistant Directors	\$146,089	\$159,347	8.3%
Division Directors	\$124,141	\$131,866	5.9%
Assistant to Directors	\$100,423	\$114,549	12.3%
Assistant Division Directors	\$113,279	\$111,308	-1.8%
Senior Bureau Commanders/ Bureau Commanders/Section Heads	\$107,156	\$121,861	12.1%
Supervisors	\$78,377	\$88,409	11.3%
Non-Supervisory	\$47,729	\$52,693	9.4%
Non-Supervisory Professionals	\$73,782	\$90,702	18.7%
Protective Services	\$72,078	\$79,299	9.1%

Correlations

The correlation analysis shows the relationship between gender, adjusted annual rate, tenure and education, supervisory role and job category. The correlations are statistically significant at $\alpha=0.05$. The strongest correlation ($r=0.381$) is between gender and job category, which is a statistical representation of the finding mentioned above that women are more likely to have office/clerical jobs than men. This is a medium effect size according to Cohen's criteria.¹¹ The correlation coefficient of 0.140 between gender and adjusted annual rate represents a small but statistically significant effect of gender. The positive correlation means the average pay of men is higher than women's. The negative correlation between gender and education means women are more likely than men to have advanced degrees (also shown in the education analysis above).

		Gender	EDUCATION	TENURE	ADJUSTED ANNUAL RATE	JOB CATEGORY	SUPERVISORY ROLE
Gender	Pearson Correlation	1	-.121**	.018**	.140**	.381**	.040**
	Sig. (2-tailed)		.000	.005	.000	.000	.000
	N	25620	24473	25620	25620	25616	25616

Partial Correlations

The partial correlation analysis shows that when controlling for gender, education and the adjusted annual rate are positively correlated (0.397). The strongest relationship is between salary and tenure (0.408).

Control Variables		EDUCATION	TENURE	ADJUSTED ANNUAL RATE	JOB CATEGORY	SUPERVISORY ROLE	
Gender	EDUCATION	Correlation	1.000	.002	.397	-.112	-.265
		Sig. (2-tailed)	.	.766	.000	.000	.000
		df	0	24466	24466	24466	24466
TENURE		Correlation	.002	1.000	.408	-.018	-.195
		Sig. (2-tailed)	.766	.	.000	.005	.000
		df	24466	0	24466	24466	24466
ADJUSTED ANNUAL RATE		Correlation	.397	.408	1.000	.021	-.342
		Sig. (2-tailed)	.000	.000	.	.001	.000
		df	24466	24466	0	24466	24466
JOB CATEGORY		Correlation	-.112	-.018	.021	1.000	.136
		Sig. (2-tailed)	.000	.005	.001	.	.000
		df	24466	24466	24466	0	24466
SUPERVISORY ROLE		Correlation	-.265	-.195	-.342	.136	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		df	24466	24466	24466	24466	0

¹¹ Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159. doi:10.1037/0033-2909.112.1.155

Regression Analysis

Regression analysis was performed in two models. The multiple linear regression models presented below estimate whether one continuous (or criterion variable) can be predicted from a set of independent (or predictor) variables.

Model 1

The first model assessed the relationship between four predictor variables (gender, education, tenure, job category) on the criterion variable (adjusted annual rate). The model presents $R^2=0.343$, which according to Cohen's criteria represents a medium to large effect size.¹² Approximately 34% of the variation in salaries can be attributed to the four predictor variables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.586 ^a	.343	.343	22868.95518

a. Predictors: (Constant), Gender, TENURE, EDUCATION, JOBCAT

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6682942653000.0	4	1670735663000.000	3194.590	.000 ^b
	Residual	12796497570000.0	24468	522989111.100		
	Total	19479440220000.0	24472			

a. Dependent Variable: ADJUSTED ANNUAL RATE

b. Predictors: (Constant), Gender, TENURE, EDUCATION, JOBCAT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7737.786	637.823		12.132	.000
	EDUCATION	11019.138	143.661	.403	76.703	.000
	TENURE	6732.399	86.221	.405	78.083	.000
	JOBCAT	1083.682	77.894	.078	13.912	.000
	Gender	9148.250	324.089	.158	28.228	.000

a. Dependent Variable: ADJUSTED ANNUAL RATE

¹² Effect size is a statistical concept that measures the strength of the relationship between variables on a numeric scale.

Model 2

The second model excludes gender from the list of predictor variables and assessed the relationship between three predictor variables (education, tenure, job category) on the criterion variable (adjusted annual rate). The model results is an $R^2=0.322$, which according to Cohen's criteria represents a medium to large effect size.¹³ Approximately 32% of the variation in salaries can be attributed to the three predictor variables.

The decrease in the R value of the model means that gender does contribute to the explanation of salary variation.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.567 ^a	.322	.322	23237.85811

a. Predictors: (Constant), JOBCAT, TENURE, EDUCATION

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6266227949000.0	3	2088742650000.000	3868.056	.000 ^b
	Residual	13213212270000.0	24469	539998049.500		
	Total	19479440220000.0	24472			

a. Dependent Variable: ADJUSTED ANNUAL RATE

b. Predictors: (Constant), JOBCAT, TENURE, EDUCATION

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10283.019	641.603		16.027	.000
	EDUCATION	10731.533	145.610	.392	73.700	.000
	TENURE	6781.867	87.594	.408	77.424	.000
	JOBCAT	1889.057	73.649	.137	25.649	.000

a. Dependent Variable: ADJUSTED ANNUAL RATE

¹³ Effect size is a statistical concept that measures the strength of the relationship between variables on a numeric scale.

Analysis Limitations

The database of full time employees contains 1,147 employees without an education record and many of them with high range salaries, including directors and supervisors. The lack of education record includes employees who were hired within the last 3-5 years. Approximately 4.8% of female employees and 4.2% of male employees did not have an educational level in the database.

The county employee database does not contain information on the type of degree attained. The type of degree affects career paths and occupations, and may result in different salary prospects.

While the employee database contains information on supervisory status, that category does not simply classify employees in supervisory or non-supervisory positions, but also includes various other positions as separate from those two general categories. For that reason, the effect of supervisory status on salaries cannot be analyzed. Below are the categories in that field, as provided by the Miami-Dade County Human Resources Department.

SUPERVISOR STATUS/ REPORTING CODES

01	Mayor/ Commissioners
02	Deputy Mayors/Special Advisors
03	Assistant to Deputy Mayor
04	Department Directors
05	Deputy Directors
06	Assistant Directors
07	Division Directors
08	Assistant to Directors
09	Assistant Division Directors
10	Sr. Bureau Commanders/Section Head
11	Associate Directors
12	Supervisor Classes
13	Non-Supervisory
14	Non-Supervisory Professionals
15	Protective Services

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