GREATER MIAMI'S TALENT SCORECARD

Despite the region's rapid growth and rising tech ecosystem, Greater Miami lags on educated, Creative Class talent.

Richard Florida and Steven Pedigo

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MIAMI URBAN FUTURE INITIATIVE

The Miami Urban Future Initiative is a joint effort between the Creative Class Group and Florida International University's College of Communication, Architecture + The Arts (CARTA) to develop new research and insights for building a stronger, more innovative, and more inclusive economy in Greater Miami. The initiative engages top thinkers and researchers from across the region and the world to combine their knowledge with that of the region's business leaders, economic development practitioners, and other key stakeholders. Its efforts are made possible thanks to generous funding from the John S. and James L. Knight Foundation.

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The FIU College of Communication, Architecture + The Arts (CARTA) provides students with the distinct experience of working closely with an award-winning faculty in nationally ranked accredited programs in the heart of Miami, Miami Beach, New York City, and Washington, DC—some of the country's most vibrant, diverse, and creative cities. Focused on its engaged mission of driving the information, innovation, and cultural economy of South Florida and beyond, CARTA is committed to a trans-disciplinary curriculum that prepares graduates for meaningful careers and leadership in their chosen professions.

CREATIVE CLASS GROUP

Founded by world-renowned urbanist Richard Florida, the Creative Class Group (CCG) is an advisory services firm composed of leading next-generation researchers, academics, and business strategists. Utilizing its unique approach and metrics, CCG works with companies and governments worldwide.

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He is author the award-winning book, *The Rise of the Creative Class* and most recently, *The New Urban Crisis*. He serves as senior editor for *The Atlantic*, where he founded *CityLab*, the leading news site on urban development

He is an entrepreneur, as founder of the Creative Class Group which works closely with leading companies and governments around the world.
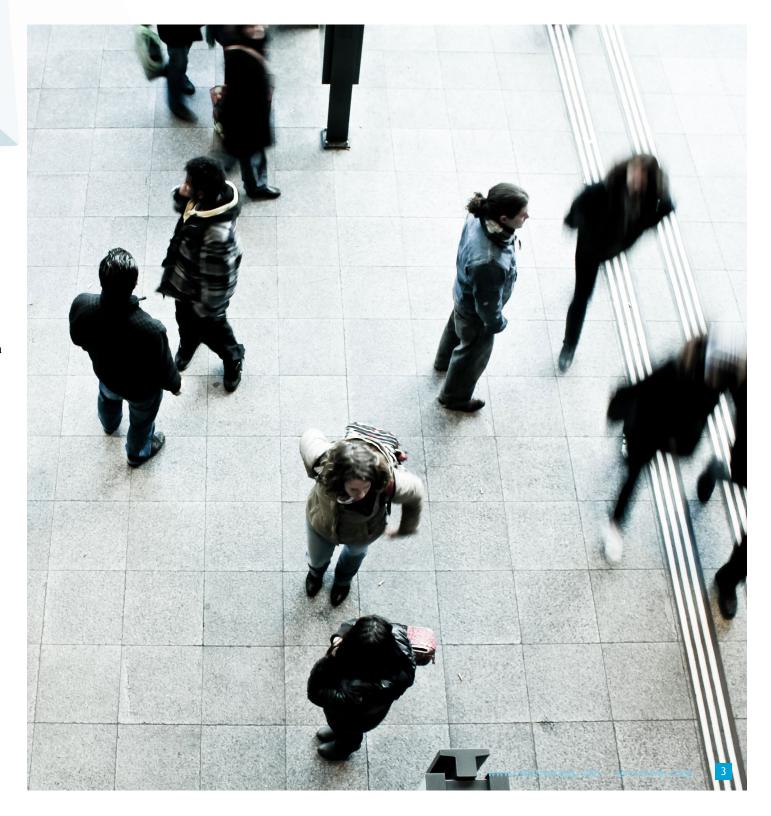

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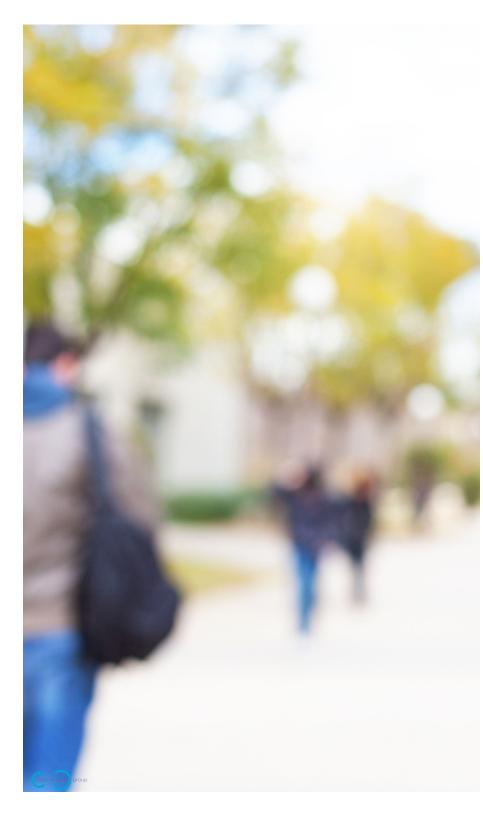
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INTRODUCTION

Talent is the key factor in the success of cities, regions, and nations in today's knowledge-driven economy. This study, a product of the Miami Urban Future Initiative, takes a deep dive into Miami's skill base these issues using data from the U.S. Census American Community Survey and other sources, comparing the situation in Greater Miami—the tri-county region consisting of Miami-Dade, Broward, and Palm Beach Counties—to the 53 largest metro areas in the country. We chart several measures of talent, based on college students, college graduates, brain drain, knowledge, professional and creative occupations, and talent flows to and from other metros. We use maps and tables to illustrate the state of the region's talent base and ecosystem and to inform a discussion at the conclusion of the paper as to how Greater Miami can increase its share of Creative Class workers to become a globally competitive knowledge hub.

KEY FINDINGS

■ **Greater Miami is one of the nation's largest college towns.** With more than 340,000 students at its colleges and universities, the region ranks as the nation's ninth-largest college town, with more college students than San Francisco and not far off from Boston and Philadelphia.

■ **"Brain drain"—highly educated residents leaving the region—is a factor, but not a major one.** More than two-thirds of Greater Miami's graduates of two- or four-year institutions of higher education remain in the region, the 16th-highest rate in the nation, better than Boston and similar to San Francisco.

■ **The problem is that Miami starts from a relatively low base of talent.** The region suffers from a relatively low share of college grads. Roughly a third of the population 25 or older has a bachelor's or graduate degree, which is the 15th-lowest rate among large metros and comparable to Providence and Detroit.

■ **The skilled Creative Class also makes up a small share of the region's workforce.** Just a third of the metro's workforce are members of the Creative Class of technologists, managers, professionals, and cultural creatives, the fifth-lowest share of the nation's large metros.

■ **Despite the region's growing startup scene, Greater Miami lags badly in some of the fastest-growing, high-tech Creative Class occupations.** Among large metros, the region has the fourth-smallest cluster of computer and math occupations and the smallest cluster of engineering and architecture occupations. This may be a constraint on the further development of the region's high-tech startup economy

■ **Part of the reason may be that Creative Class earnings are low.** The median Creative Class worker in the region earns $53,275, the second-lowest of all large metros.

■ **The region continues to be a talent magnet from the Northeast but is losing workers to other Sunbelt cities and major tech hubs.** Greater Miami receives significant talent inflows from New York and other major cities in the Northeast, from Florida's two major college towns—Gainesville and Tallahassee—and from Latin America. But it is losing talent to other Florida cities, like Tampa and Orlando, and fast-growing Sunbelt cities, like Atlanta and Denver.

COLLEGE GRADS AND BRAIN DRAIN

Greater Miami is one of the nation's leading college towns, home to 340,500 university students. That makes it the ninth-largest college town in the nation, similar to Dallas and San Diego and not far off from Boston and Philadelphia. And the region confers more than 90,300 degrees annually, the eighth-most in the nation.
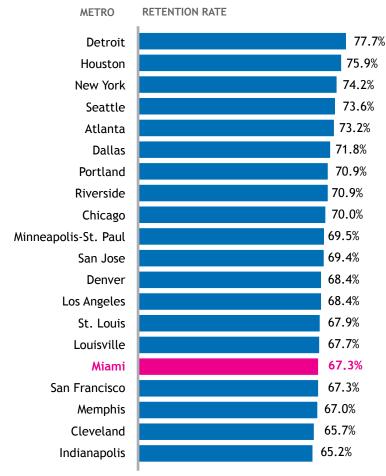
Metros with the Largest Student Enrollment

Rank	Metro	Student Enrollment
1	New York	1,115,368
2	Los Angeles	1,067,904
3	Chicago	582,577
4	Phoenix	502,265
5	Washington, D.C.	424,563
6	Philadelphia	388,904
7	Boston	377,756
8	Dallas-Fort Worth	370,214
9	Miami	340,561
10	San Diego	311,880
11	Houston	308,444
12	San Francisco	298,824
13	Minneapolis	275,072
14	Atlanta	213,032
15	Riverside	201,254

Source: IPEDS 2015-2016

Note: The U.S. student enrollment is comprised of 20.6 million students.

Greater Miami has the 13th-longest commute time among all large metros, at half an hour for a one-way commute. That's similar to Houston and San Jose and considerably higher than the national average.

College Graduate Retention of Two- and Four-Year Institutions for Large Metros

METRO	RETENTION RATE
Detroit	77.7%
Houston	75.9%
New York	74.2%
Seattle	73.6%
Atlanta	73.2%
Dallas	71.8%
Portland	70.9%
Riverside	70.9%
Chicago	70.0%
Minneapolis-St. Paul	69.5%
San Jose	69.4%
Denver	68.4%
Los Angeles	68.4%
St. Louis	67.9%
Louisville	67.7%
Miami	67.3%
San Francisco	67.3%
Memphis	67.0%
Cleveland	65.7%
Indianapolis	65.2%

Source: Jonathan Rothwell and Siddharth Kulkarni / Brookings Institution Metropolitan Policy Program

COLLEGE GRADS AND BRAIN DRAIN (CONTINUED)

Brain drain is a much-talked about issue in the region, as many Miamians believe the region is losing its young people and graduates to larger cities, like New York and Los Angeles, and leading tech hubs, like San Francisco and Boston. It is true that some of Miami's best and brightest leave home, but so do talented young people from New York, Boston, and San Francisco.
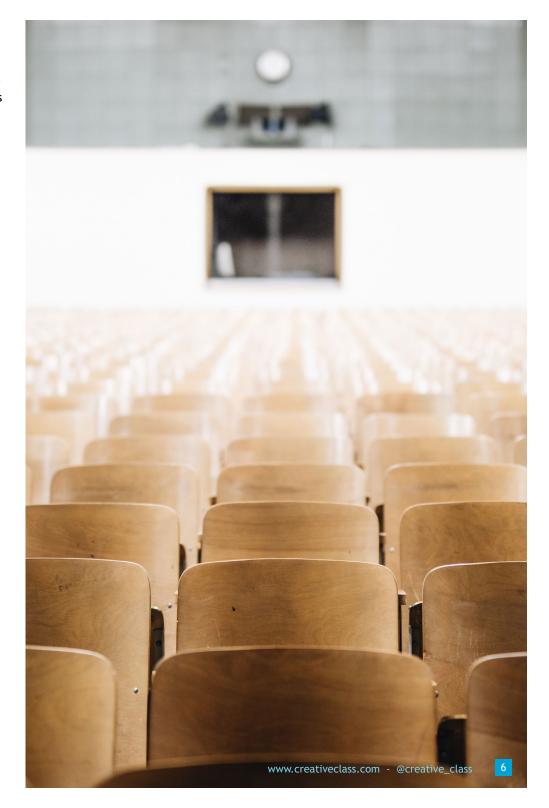
Greater Miami actually does reasonably well at keeping its educated talent at home. Miami ranks 16th among large U.S. metros for its share of college graduates from two- and four-year institutions that remain in the metro following graduation. With more than two-thirds (67.3 percent) of its college graduates choosing to stick around, Miami ranks ahead of San Francisco but slightly behind Los Angeles and San Jose. The region also ranks 16th among large U.S. metros for its share of graduates from four-year colleges that remain in the metro following graduation (59.6 percent). This is comparable to San Francisco and better than Boston.[1]

College Graduate Retention of Four-Year Institutions for Large Metros

Rank	Metro	Retention Rate
1	New York	71.1%
2	Riverside	70.6%
3	Detroit	70.2%
4	Houston	66.1%
5	San Jose	65.2%
6	Seattle	64.4%
7	Atlanta	64.2%
8	Dallas	63.7%
9	Louisville	63.0%
10	Los Angeles	62.9%
11	Chicago	62.2%
12	Portland	61.7%
13	Denver	61.7%
14	Minneapolis	61.7%
15	San Francisco	60.8%
16	Miami	59.6%
17	Indianapolis	57.0%
18	St. Louis	56.5%
19	Las Vegas	55.0%
20	Salt Lake City	55.0%

Source: Jonathan Rothwell and Siddharth Kulkarni / Brookings Institution Metropolitan Policy Program

COLLEGE GRADS AND BRAIN DRAIN (CONTINUED)

The bigger problem is that the metro is starting from a relatively low talent base. Its share of adults that are college graduates ranks near the bottom of large metros. The region's share of the adult population with a bachelor's degree or higher—which stands at roughly a third (32 percent)—places it in the bottom 15 of the nation's large metros, similar to Providence, Detroit, and Phoenix. In knowledge hubs like Washington, D.C. and San Jose, the share of adults with at least a bachelor's degree exceeds 50 percent.

Metros with the Lowest Share of College Grads

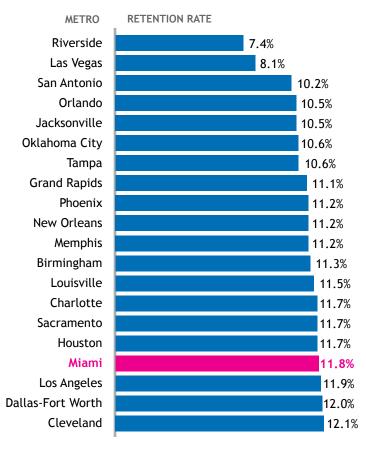| Rank	Metro	Share
1	Riverside	21.4%
2	Las Vegas	24.4%
3	Memphis	27.9%
4	San Antonio	28.1%
5	Louisville	28.7%
6	New Orleans	29.5%
7	Tampa	30.0%
8	Birmingham	30.5%
9	Jacksonville	30.7%
10	Cleveland	30.8%
11	Oklahoma City	31.0%
12	Phoenix	31.1%
13	Detroit	31.1%
14	Providence	31.9%
15	Miami	32.0%

Based on the share of adults ages 25 and older with a bachelor's degree or higher

Source: U.S. Census American Community Survey 2017

Note: The U.S. average is 32.0%. The three highest large metros are Washington, D.C. (50.8%), San Jose (50.8%), and San Francisco (49.3%). Miami has 1.3 million residents with a bachelor's degree or higher.

Greater Miami also does poorly in terms of its share of adults with advanced graduate and professional degrees. About 12 percent (11.8 percent) of residents 25 or older have a graduate or professional degree, the 17th-lowest rate among the nation's large metros.

Metros with the Lowest Share of Residents with a Graduate Degree

METRO	RETENTION RATE
Riverside	7.4%
Las Vegas	8.1%
San Antonio	10.2%
Orlando	10.5%
Jacksonville	10.5%
Oklahoma City	10.6%
Tampa	10.6%
Grand Rapids	11.1%
Phoenix	11.2%
New Orleans	11.2%
Memphis	11.2%
Birmingham	11.3%
Louisville	11.5%
Charlotte	11.7%
Sacramento	11.7%
Houston	11.7%
Miami	11.8%
Los Angeles	11.9%
Dallas-Fort Worth	12.0%
Cleveland	12.1%

Based on the share of adults 25 years of age and older

Source: U.S. Census American Community Survey 2017

Note: The U.S. average is 12.3%. The three highest large metros are Washington, D.C. (25.0%), San Jose (24.2%), and Boston (21.9%). Miami has 477,222 residents with a graduate degree.

THE CREATIVE CLASS

The good news is that the region has a large Creative Class made up of highly paid, highly skilled workers in science and technology, knowledge-based management and professional work, and arts, design, media, and cultural occupations. Greater Miami's Creative Class clocks in at just under one million, the 11th-largest Creative Class in the nation. This is bigger than Seattle and not too far off from San Francisco or Boston.

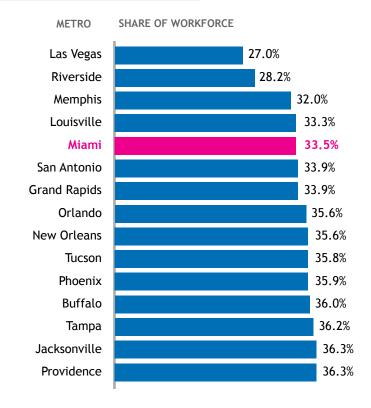But Greater Miami's Creative Class share of the workforce is quite small, comprising roughly a third of its workforce. This is far behind leading metros like Washington, D.C. and San Jose, where the Creative Class makes up more than half of the workforce.

Metros with the Largest Creative Class Workforce

Rank	Metro	Creative Class
1	New York	4,067,995
2	Los Angeles	2,400,039
3	Chicago	1,781,478
4	Washington, D.C.	1,695,729
5	Dallas-Fort Worth	1,412,516
6	Philadelphia	1,255,145
7	Boston	1,230,882
8	San Francisco	1,207,322
9	Houston	1,203,124
10	Atlanta	1,165,859
11	Miami	992,267
12	Seattle	895,332
13	Minneapolis	827,531
14	Phoenix	795,130
15	Detroit	764,668

Source: U.S. Census American Community Survey 2017

Note: The U.S. Creative Class is comprised of 56.5 million workers.

Metros with the Smallest Creative Class

METRO	SHARE OF WORKFORCE
Las Vegas	27.0%
Riverside	28.2%
Memphis	32.0%
Louisville	33.3%
Miami	33.5%
San Antonio	33.9%
Grand Rapids	33.9%
Orlando	35.6%
New Orleans	35.6%
Tucson	35.8%
Phoenix	35.9%
Buffalo	36.0%
Tampa	36.2%
Jacksonville	36.3%
Providence	36.3%

Source: U.S. Census American Community Survey 2017

Note: The U.S. average is 36.4%. The three highest large metros are San Jose (51.3%), Washington, D.C. (50.7%), and San Francisco (48.1%).

Part of the problem may be that the region's Creative Class is poorly paid. Members of Greater Miami's Creative Class take home a median income of just $53,275, the second-lowest in the nation. By comparison, the Creative Class in Silicon Valley (San Jose) has median earnings of nearly $100,000, while in nearby San Francisco, median Creative Class earnings are approaching $90,000.

Metros with the Lowest Median Earnings: Creative Class

Rank	Metro	Median Earnings
1	Tucson	$52,227
2	Miami	$53,275
3	Oklahoma City	$53,983
4	Grand Rapids	$54,253
5	Buffalo	$54,662
6	San Antonio	$55,593
7	Louisville	$55,859
8	Orlando	$55,992
9	Rochester	$56,004
10	Tampa	$56,120
11	Jacksonville	$56,171
12	Nashville	$56,262
13	Riverside	$56,819
14	Salt Lake City	$56,951
15	New Orleans	$57,450

Source: U.S. Census American Community Survey 2017

Note: The U.S. average is $61,177. The three highest large metros are San Jose ($98,093), San Francisco ($89,342), and Washington, D.C. ($84,646).

The region also lags on a number of key Creative Class occupations that are important to high-tech industry. The table below shows the number, share, and location quotient for nine key Creative Class occupations. A location quotient indicates how a given region's concentration of these occupations compares to the national average.[2] A ratio of 1 or greater means the region is doing better than the national average; a ratio of less than 1 means that it is doing worse.

Miami's Creative Class Occupations

Occupations	Employment	Share	Location Quotient
Life, Physical, and Social Sciences	13,574	0.5%	0.53
Architecture and Engineering	29,884	1.0%	0.55
Computer and Mathematical	59,220	2.0%	0.66
Education and Training	144,964	4.9%	0.82
Arts, Design, Entertainment, Sports, and Media	56,261	1.9%	0.93
Healthcare	174,165	5.9%	0.97
Management	314,448	10.6%	1.01
Business and Financial Operations	149,992	5.1%	1.02
Legal	49,619	1.7%	1.52

Source: U.S. Census American Community Survey 2017

Note: The U.S. LQ (location quotient) average is 1.0.

Miami's highest location quotients—meaning its greatest competitive advantages—are in law and legal occupations. Its LQ of approximately 1.5 means that it has 50 percent more legal workers than the national average. The region basically matches the national average in occupations like management, healthcare, and business and finance. But it trails badly in key high-tech occupations like computer and math, architecture and engineering, and life, physical, and social sciences.

In computer and math fields, greater Miami has the fourth-lowest location quotient in the country. Its LQ of 0.66 means that it has 44 percent fewer jobs in this field than the national average. By contrast, Raleigh's location quotient for this field is 2.3, and San Jose's is a whopping 3.7.
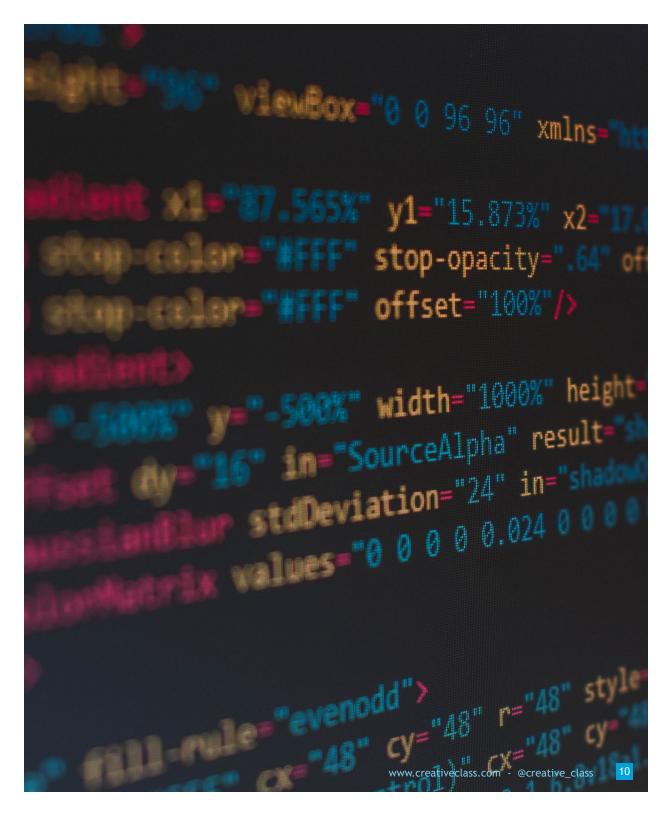
Metros with the Lowest Location Quotients for Computer and Math Occupations

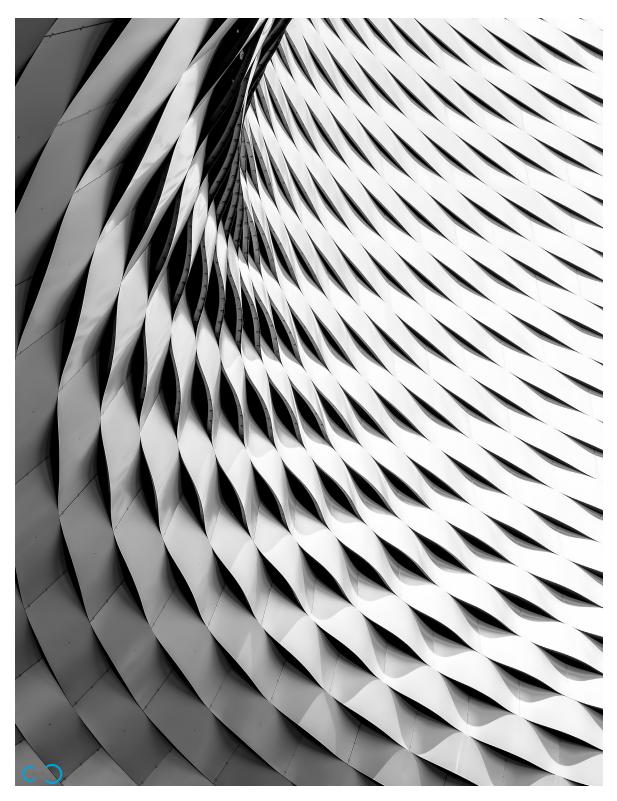| Rank	Metro	Location Quotient
1	Riverside	0.46
2	New Orleans	0.48
3	Las Vegas	0.56
4	Miami	0.66
5	Buffalo	0.69
6	Memphis	0.69
7	Birmingham	0.76
8	Oklahoma City	0.86
9	Tucson	0.86
10	Los Angeles	0.87

Source: U.S. Census American Community Survey 2017

Note: The U.S. LQ (location quotient) average is 1.0. The three highest large metros are San Jose (3.71), Washington, D.C. (2.59), and Raleigh (2.30).

Miami's computer and mathematical workforce is 59,220 workers (2% total employment).

THE CREATIVE CLASS (CONTINUED)

Greater Miami fares even worse for architecture and engineering occupations. With a location quotient of 0.55, the region ranks last among large U.S. metros.

Metros with the Lowest Location Quotients for Architecture and Engineering Occupations

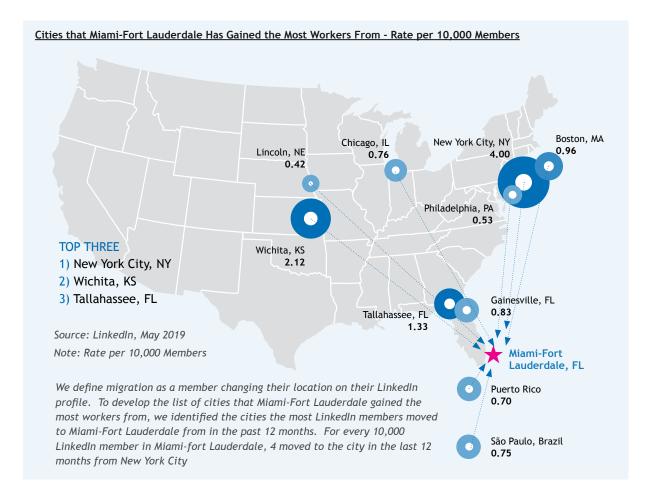| Rank	Metro	LQ
1	Miami	0.55
2	Riverside	0.60
3	Las Vegas	0.61
4	Memphis	0.62
5	Jacksonville	0.69
6	New York	0.70
7	Tampa	0.71
8	Louisville	0.82
9	San Antonio	0.83
10	Salt Lake City	0.84

Source: U.S. Census American Community Survey 2017

Note: The U.S. LQ (location quotient) average is 1.0. The three highest large metros are San Jose (3.16), Detroit (2.18), and Austin (1.70).
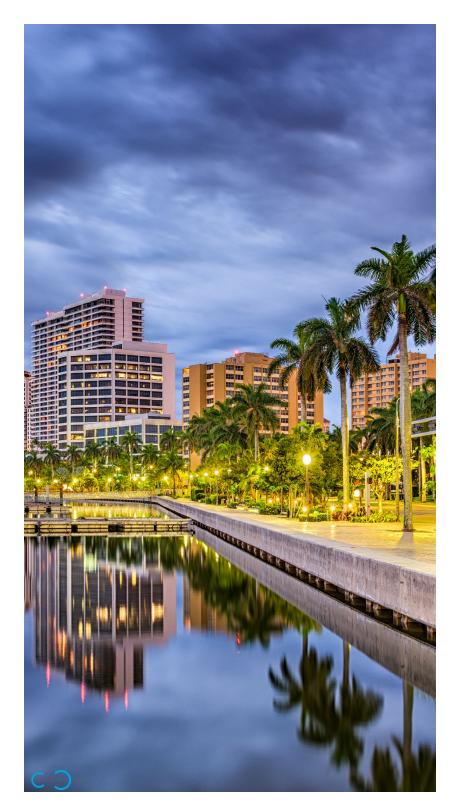
TALENT FLOWS INTO AND OUT OF GREATER MIAMI

Understanding the migration patterns of workers is a key piece of the talent puzzle. To get at this, we use data from LinkedIn, which tracks flows of skilled talent across major U.S. regions, including the Miami-Ft. Lauderdale area (different from the broader metro because it does not include West Palm Beach).[3]

The map below shows the flow of skilled talent into the Miami region: the places Miami is gaining talent from. The biggest talent flow is from New York City. The region also sees major inflows from Boston, Chicago, and Philadelphia, as well as Gainesville and Tallahassee—home of the University of Florida and Florida State University, respectively—and, surprisingly, Wichita, Kansas. As the economic center for Latin America, Miami is also a major magnet for talent from Sao Paolo and Puerto Rico.

Cities that Miami-Fort Lauderdale Has Gained the Most Workers From - Rate per 10,000 Members

Lincoln, NE
0.42

Chicago, IL
0.76

New York City, NY
4.00

Boston, MA
0.96

Philadelphia, PA
0.53

Wichita, KS
2.12

TOP THREE
1) New York City, NY
2) Wichita, KS
3) Tallahassee, FL

Tallahassee, FL
1.33

Gainesville, FL
0.83

Miami-Fort Lauderdale, FL

Puerto Rico
0.70

São Paulo, Brazil
0.75

Source: LinkedIn, May 2019
Note: Rate per 10,000 Members

We define migration as a member changing their location on their LinkedIn profile. To develop the list of cities that Miami-Fort Lauderdale gained the most workers from, we identified the cities the most LinkedIn members moved to Miami-Fort Lauderdale from in the past 12 months. For every 10,000 LinkedIn member in Miami-fort Lauderdale, 4 moved to the city in the last 12 months from New York City
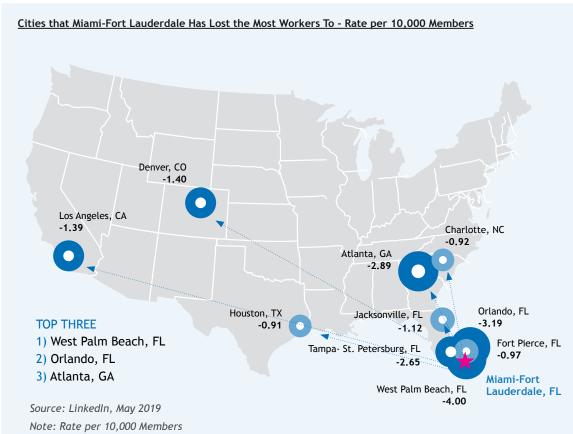
TALENT FLOWS INTO AND OUT OF GREATER MIAMI (CONTINUED)

The next map shows the major sources of talent outflow from Miami: the places Miami is losing talent to. Topping this list are nearby West Palm Beach and Orlando, as well Tampa-St. Petersburg. Other places drawing Miami's talent include Atlanta, Los Angeles, Denver, and Charlotte.

Cities that Miami-Fort Lauderdale Has Lost the Most Workers To - Rate per 10,000 Members

Denver, CO
-1.40

Los Angeles, CA
-1.39

Charlotte, NC
-0.92

Atlanta, GA
-2.89

Houston, TX
-0.91

Jacksonville, FL
-1.12

Orlando, FL
-3.19

Fort Pierce, FL
-0.97

Tampa- St. Petersburg, FL
-2.65

Miami-Fort Lauderdale, FL

West Palm Beach, FL
-4.00

TOP THREE
1) West Palm Beach, FL
2) Orlando, FL
3) Atlanta, GA

Source: LinkedIn, May 2019

Note: Rate per 10,000 Members

We define migration as a member changing their location on their LinkedIn profile. To develop the list of cities that Miami-Fort Lauderdale lost the most workers to, we identified the cities the most LinkedIn members moved from Miami-Fort Lauderdale to in the past 12 months. For every 10,000 LinkedIn member in Miami-fort Lauderdale, 4 moved to West Palm Beach in the past 12 months.

DISCUSSION

Miami's talent scorecard is a combination of good and bad news. On the positive side of the ledger, the region has a large pool of college grads and a large pool of educated Creative Class workers. On the negative side, it has a low share of highly educated talent and a low share of Creative Class talent, particularly in fields that are critical to high-tech industry. While the numbers are not yet alarming, college graduates are leaving the metro, and many appear to be heading to regional destinations elsewhere in Florida and the South. Meanwhile, Greater Miami continues to be a magnet for migrants from the Northeast, Florida's major college towns, and Latin America. And there is increasing evidence that Miami is attracting both financial and tech talent from tech hubs, New York, and other superstar cities, where housing prices and taxes are higher.

It is time for the region to reconsider its longstanding fixation on brain drain. Instead, the focus should be on its more enviable position as a global hub of brain circulation and the high-tech industries that draw talent from around the world—a phenomenon that propelled Silicon Valley's evolution as an international center for innovation.

Still, more work remains to be done. The region needs to ensure that, going forward, talent retention and attraction remains a key element of its economic development efforts.

BRIGHT SPOTS: TALENT ATTRACTION INITIATIVES

Beacon Council's One Community One Goal, one of the region's premier economic development organizations, has created a number of initiatives related to talent attraction and retention. Since its founding in 2011, One Community One Goal has brought together a broad spectrum of organizations from the public, private, and not-for-profit sectors—including the presidents of the county's colleges and universities—with a goal of promoting inclusive economic growth. In 2012, the organization established the Academic Leaders Council to create an educational ecosystem that aligns with the business community, ensures skilled worker availability for the future, and helps skillsets keep pace with business needs. The council meets quarterly to discuss strategies for preparing students to enter the workforce with the skills needed for high-paying jobs. Notable programs include technical training for young adults, new college and university degree programs, the Career Connections Initiative, the Talent Development Network, the Global Aviation Conference, Community Access Breakfasts, and the Urban Initiatives Task Force.

Brian Schriner,
Dean, FIU College of Communication, Architecture + The Arts

REFERENCES

1. Jonathan Rothwell and Siddharth Kulkarni, "Beyond College Rankings: A Value-Added Approach to Assessing Two- and Four-Year Schools," Brookings Institution, April 2015.

2. Rob Sentz, "Understanding Location Quotient," Esmi, October 14, 2011.

3. LinkedIn, "Workforce Report: Miami-Ft. Lauderdale," May 2019.

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