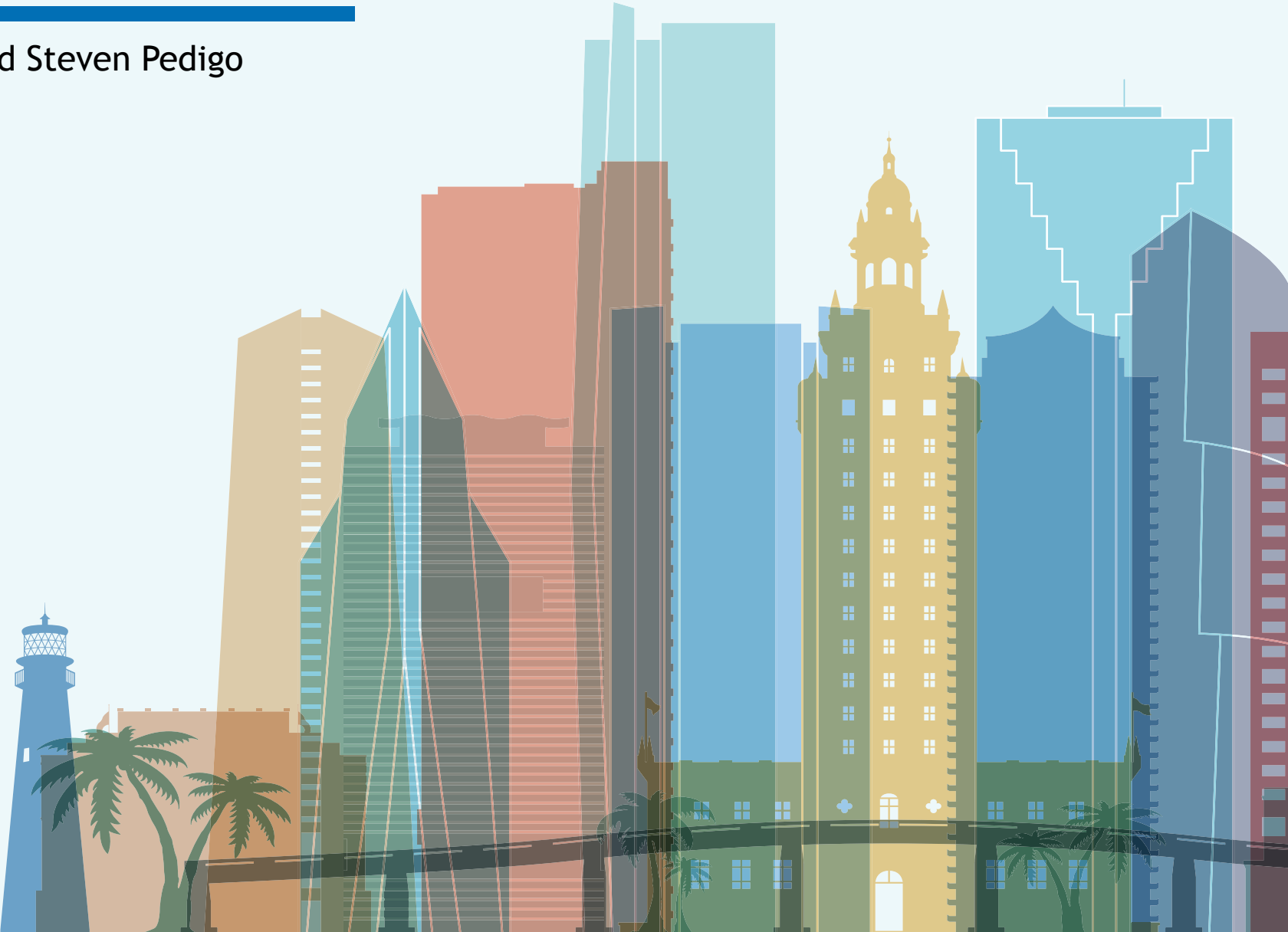


BUILDING MIAMI'S CREATIVE ECONOMY

Richard Florida and Steven Pedigo



FIU

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The Creative Class Group, founded by world renowned urbanist Richard Florida, is a global advisory firm composed of expert researchers, academics, and business strategists. Our proprietary data and research, gives companies and regions leading insights to achieve growth and prosperity.

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Richard Florida is the world's leading urbanist. He is a researcher and professor, serving as the Director of the Martin Prosperity Institute at the University of Toronto's Rotman School of Management, Global Research Professor at New York University and a Visiting Fellow at Florida International University. He is a writer and journalist, having penned several global best sellers, including the award winning *The Rise of the Creative Class* and serving as senior editor for *The Atlantic*, where he co-founded and serves as Editor-at-Large for *CityLab*. And he is an entrepreneur, as founder of the Creative Class Group which works closely with governments and companies worldwide.

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INTRODUCTION

Miami has long been characterized by a robust arts, culture, design and creative scene, from the internationally renowned Art Basel fair to Design Miami, a global forum featuring the world's most influential collectors, designers, curators and critics. Over the past decade, the region has made substantial efforts to cultivate a unique creative fingerprint, distinguishing itself from places like Los Angeles and New York by bolstering its arts, culture and design industries. In particular, Miami has attracted significant projects from renowned architects such as Zaha Hadid, Frank Gehry, Norman Foster, Renzo Piano, Jeanne Gang, Bjarke Ingels, Herzog & de Meuron, and Rem Koolhaas, underpinning its status as a center for contemporary design.

But how does Miami's creative economy stack up against other regions? Who are the workers that make up Miami's Creative Class? Do their skills and talent compare to those in other metro areas?

In this latest release from the joint [FIU-Miami Creative City Initiative](#) of Florida International University and the Creative Class Group, we take a deep dive into the creative economy of the Miami metropolitan area or Greater Miami, which spans Miami-Dade, Broward and Palm Beach counties. Our research evaluates Miami's Creative Class in comparison to the 53 large metros with populations over one million, as well as all 382 metros in the U.S. We begin by analyzing nine key occupational groups that make up the Creative Class: science, computer and math, arts and media, architecture and engineering, business and finance, law, education, management and healthcare. We then identify where the majority of Miami's creative workers live, as well as the areas of strengths and weakness in Miami's creative economy. The conclusion outlines a series of strategic recommendations for improving Miami's creative economy and transforming the region into a more inclusive creative hub.¹



Photo: @Scott Webb

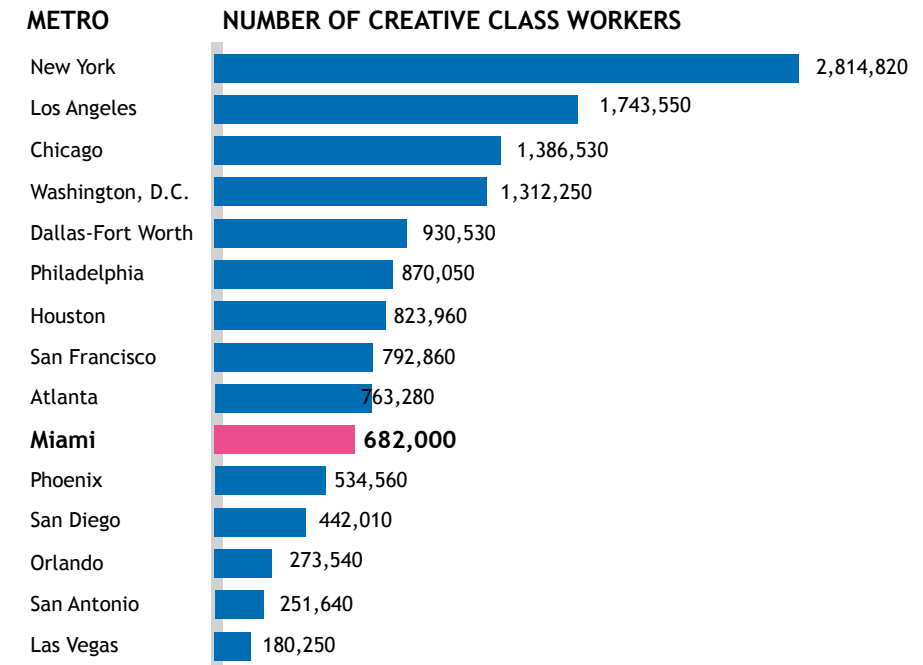


Photo: © Lance Kasper

HOW DOES GREATER MIAMI'S CREATIVE CLASS STACK UP?

The Creative Class—people who make a living by using their minds, whether in science, technology, law and medical industries or academia, media, management and finance—is a key driver of economic growth throughout the U.S.² With 42 million workers nationwide, the Creative Class makes up nearly a third of the American workforce. Its economic clout is substantial, accounting for roughly half of all U.S. wages and salaries and roughly three-quarters of discretionary spending. For the most part, metros with significant shares of Creative Class workers enjoy higher rates of innovation and economic growth. For example, metros like Washington, D.C. and San Jose, in the heart of Silicon Valley, have some of the highest shares of Creative Class workers (around 45 percent). Metros such as Boston, San Francisco and Hartford are close behind with approximately 37 to 39 percent, followed by metros like Seattle, Baltimore and Denver with some 35 percent.

Figure 1: Large Metros with the Most Creative Class Workers



Source: U.S. Bureau of Labor Statistics 2015



HOW DOES GREATER MIAMI'S CREATIVE CLASS STACK UP? // CONTINUED

Greater Miami's Creative Class is large in absolute terms (see Figure 1). With 682,000 workers, Miami's Creative Class is the 10th largest in the nation. Greater Miami's Creative Class is also double the size of recognized Creative Class hubs like Austin, Portland and Nashville.

That said, the Creative Class makes up a relatively small share of Greater Miami's workforce (see Figure 2). With a Creative Class share of 25.7 percent, Miami ranks 47th out of 53 large metros and 138th out of all 382 metros in the U.S. This share is roughly 6 percent smaller than the national average and relatively the same as regions like Louisville and Orlando. By contrast, Miami's Creative Class share is around 20 percentage points smaller than that of Washington, D.C. or San Jose. Nevertheless, Greater Miami's Creative Class is expected to grow 12.5 percent by 2024.

Figure 2: Large Metros with the Largest and Smallest Creative Class Shares

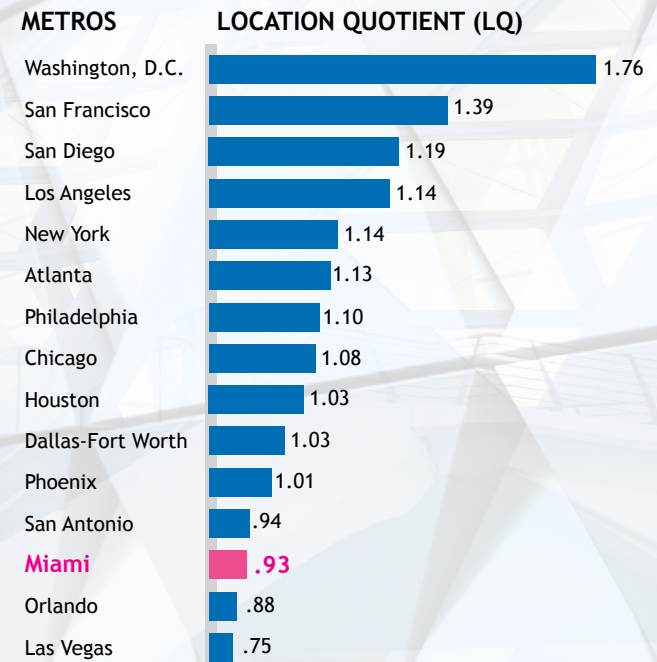
TOP 10	CREATIVE CLASS SHARE	BOTTOM 10	CREATIVE CLASS SHARE
San Jose	46.1%	Las Vegas	20.7%
Washington, D.C.	44.6%	Riverside	24.0%
Boston	38.8%	Memphis	25.2%
San Francisco	37.5%	Orlando	25.3%
Hartford	37.0%	Louisville	25.5%
Seattle	35.7%	Miami	25.7%
Baltimore	34.8%	Jacksonville	27.1%
Denver	34.3%	San Antonio	27.5%
Minneapolis-St. Paul	34.1%	New Orleans	27.7%
Austin	34.1%	Birmingham	28.0%

Source: U.S. Bureau of Labor Statistics 2015

Another way to evaluate Miami's Creative Class is via a measure called a [location quotient](#) (LQ), which compares the metro's share of creative workers to the share for the entire nation. An LQ of 1 indicates that a metro is in line with the national average, while an LQ below one indicates that a metro is smaller than the national average³. An LQ of 1.25 is 25 percent higher than the national average, an LQ of 1.5 is 50 percent higher, and so on.

With an LQ of 0.93, Miami's share of creative workers is slightly below the national average (see Figure 3). The metro ranks 49th among large metros on this metric, with an LQ nearly identical to that of San Antonio. By comparison, the share of creative workers in Washington, D.C. (1.76) is around 75 percent larger than the national average, while San Francisco's Creative Class (1.39) is nearly 40 percent larger.

Figure 3: Creative Class LQs for Large Metros



Source: U.S. Bureau of Labor Statistics 2015

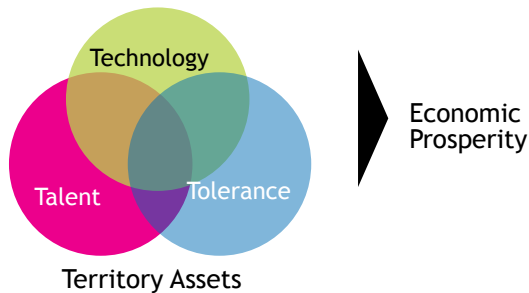
HOW DOES GREATER MIAMI'S CREATIVE CLASS STACK UP? // CONTINUED

Greater Miami's Creative Class averages \$74,500 in wages and salaries (see Figure 4). The metro ranks 11th among large metros, just behind Chicago (\$79,200) and just ahead of Las Vegas (\$74,000) but significantly behind San Francisco (\$101,000), Washington, D.C. (\$97,200) and New York (\$95,200).

Figure 4: Creative Class Salaries for Large Metros

METROS	AVERAGE ANNUAL SALARY
San Francisco	\$101,000
Washington, D.C.	\$97,200
New York	\$95,200
Los Angeles	\$88,500
Houston	\$86,400
San Diego	\$86,000
Philadelphia	\$82,400
Dallas-Fort Worth	\$79,400
Atlanta	\$79,400
Chicago	\$79,200
Miami	\$74,500
Las Vegas	\$74,000
Phoenix	\$73,500
San Antonio	\$70,500
Orlando	\$69,000

Source: U.S. Bureau of Labor Statistics 2015



Source: Richard Florida, *The Rise of the Creative Class Revisited*, New York: Basic Books, 2012

Greater Miami's Creative Class is, by far, its affluent and well-paid class. The average salary of its members is \$42,900 more than that of the Working Class (\$31,600) and \$42,200 more than that of Service Class (\$32,300).

We next examine how Greater Miami stacks up on the Creativity Index, a composite measure of economic potential based on the "3Ts" of economic development: Technology, Talent and Tolerance. Technology is measured by the concentration of high-technology industry and innovations (measured as patents), Talent is measured by the Creative Class and Tolerance is measured as the share of immigrants and gays and lesbians and as ethnic and racial diversity. Across metros, higher scores on the Creativity Index are associated with higher rates of innovation and economic growth.⁴

Greater Miami ranks 32nd among large metros and 63rd out of 382 U.S. metros on the Creativity Index (see Figure 5). This places the region just behind Orlando (31st) and well ahead of San Antonio (36th) and Las Vegas (44th) but significantly behind leading creative centers like San Francisco, San Diego and Washington, D.C.

Figure 5: Creativity Index for Large Metros

METRO	CREATIVITY INDEX SCORE	CREATIVITY INDEX RANK
San Francisco	0.970	2
San Diego	0.961	4
Washington, D.C.	0.947	5
Atlanta	0.912	11
Los Angeles	0.901	13
New York	0.871	18
Phoenix	0.869	19
Dallas-Fort Worth	0.865	20
Chicago	0.829	24
Philadelphia	0.806	27
Houston	0.794	29
Orlando	0.784	31
Miami	0.772	32
San Antonio	0.663	36
Las Vegas	0.580	44

Source: Richard Florida, *"The Rise of the Creative Class Revisited,"* New York, Basic Books, 2012



GREATER MIAMI'S LEADING CREATIVE CLASS CLUSTERS

We now take a look inside Greater Miami's Creative Class. The Creative Class can be further divided into nine occupational clusters spanning arts and media, science and tech, architecture and engineering, business and finance, healthcare, law, management, and education. Each of these nine clusters represents a set of occupations rather than a specific industry. Research identifies three of these in particular—Science and Technology, Business and Finance and Arts, Culture, Design and Media—as key drivers of innovation and economic growth. Conversely, large occupational clusters like Education and Medicine, while important sources of regional employment, are less important drivers of economic growth. The following Figures provide details on the total employment, share of employment, wages and salaries, LQs and projected growth for these nine Creative Class clusters.⁵

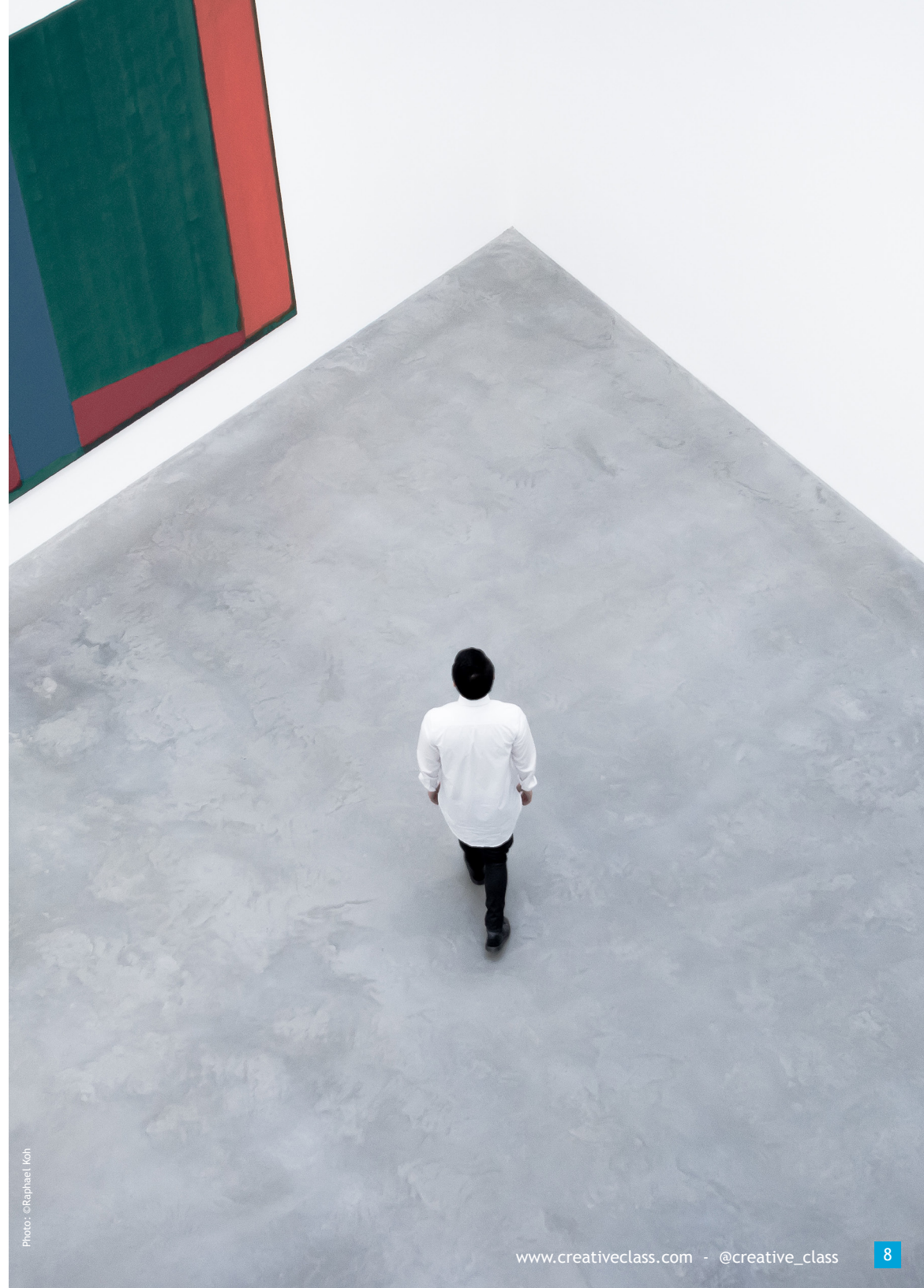


Photo: @Raphael Koch

BROADEN AND DEEPEN THE REGION'S GROWING STARTUP ECOSYSTEM // CONTINUED

HEALTHCARE

With 154,000 workers, healthcare is by far Greater Miami's largest creative cluster. By 2024, this cluster is expected to grow by 11 percent. With a location quotient of 1.08, Miami's Healthcare cluster is 8 percent larger than the national average. Within the Healthcare cluster, the leading occupations (as measured by their LQ) include general practitioners (1.78), podiatrists (1.93), respiratory therapists (1.37) and nurses (1.17).



As a global center for Latin and South America, Greater Miami has a long history of providing healthcare to international patients. Every year, thousands of patients travel from around the world to the University of Miami Health System to receive care.⁶ With this level of global outreach, Healthcare is clearly an area that the region can build upon in the future.

Figure 6: Miami's Nine Creative Class Clusters

CREATIVE CLASS CLUSTER	EMPLOYMENT	SHARE OF CREATIVE CLASS
Life, Physical and Social Sciences	10,671	1.60%
Architecture and Engineering	25,305	3.70%
Legal	38,685	5.70%
Arts, Design, Entertainment, Sports and Media	46,059	6.80%
Computer and Mathematical	48,832	7.20%
Management	104,015	15.30%
Education	117,691	17.30%
Business and Finance	136,890	20.10%
Healthcare	153,730	22.50%

Source: EMSI 2011-2015

BUSINESS AND FINANCE

With around 136,000 creative workers, Business and Finance is the region's second-largest creative cluster. By 2024, this cluster is expected to grow by 11 percent. With an LQ of 1.06, Business and Finance exceeds the national average by 6 percent. Within this cluster, the leading occupations include financial advisors (1.34), real estate appraisers (1.42), credit counselors (2.67), auditors and accountants (1.23) and agents for performers and athletes (1.33).



Greater Miami has considerable strength in the areas of wealth management and real estate. Once more, its status as a global city and economic hub for Latin America presents an opportunity to build on these assets in the future.

Figure 7: Salaries for Greater Miami's Creative Class Clusters

CREATIVE CLASS CLUSTER	ANNUAL SALARY
Management	\$101,084
Legal	\$91,625
Healthcare	\$73,646
Computer and Mathematical	\$69,799
Architecture and Engineering	\$69,457
Life, Physical and Social Sciences	\$67,102
Business and Finance	\$65,748
Education	\$47,409
Arts, Design, Entertainment, Sports and Media	\$45,691
Creative Class Overall	\$70,316

Source: EMSI 2011-2015



EDUCATION

Education is Greater Miami's third-largest creative cluster, with roughly 118,000 workers. Although Education is projected to increase by 13 percent over the next seven years, the cluster's current share of employees lags behind the national average by 13 percent, with an LQ of 0.87. This is likely a result of the age structure of Miami's population, which is 3.4 years older, on average, than the rest of the nation.



Miami's Education cluster also contains three times as many special education teachers as the national average (3.01), although the region still suffers from an overall teaching shortage. Miami's share of secondary teachers is 30 percent smaller than the national average, while its share of elementary teachers is 24 percent smaller. Greater Miami also has a below average share of post-secondary or college- and university-level educators. With an LQ of 0.66, the region's share of college and university educators is a substantial 34 percent less than the national average. The region must address these gaps as it seeks to build its knowledge and creative economy by attracting and retaining talent.

Figure 9: Location Quotients for Greater Miami's Creative Class Clusters

CREATIVE CLASS CLUSTER	LQ
Legal	1.75
Healthcare	1.08
Business and Finance	1.06
Arts, Design, Entertainment, Sports and Media	0.92
Education	0.78
Management	0.72
Computer and Mathematical	0.70
Architecture and Engineering	0.59
Life, Physical and Social Sciences	0.50
Creative Class Overall	0.94

Source: EMSI 2011-2015

MANAGEMENT

Management, with 104,000 employees, is Greater Miami's fourth-largest creative cluster. With an LQ of 0.72, this cluster lags the national average by 28 percent. Even so, Greater Miami's share of CEOs is slightly larger than the national average (1.13)—yet another symbol of the region's status as a global city and economic hub for Latin America. Miami's Management cluster also contains a greater number of construction managers (1.36) and lodging managers (1.43) than the national average, along with more than double the national share of real estate managers (2.43), reflecting the region's strong hospitality, tourism and real estate economy.



Figure 8: Job Growth for Greater Miami's Creative Class Clusters

CREATIVE CLASS CLUSTER	JOB GROWTH, 2011-2015	PROJECTED GROWTH,
Business and Finance	10.7%	10.8%
Healthcare	10.1%	11.1%
Legal	9.9%	18.6%
Computer and Mathematical	9.2%	15.5%
Management	7.4%	9.9%
Arts, Design, Entertainment, Sports and Media	7.1%	8.0%
Education	5.4%	13.2%
Architecture and Engineering	5.0%	5.0%
Life, Physical and Social Sciences	4.6%	14.4%
Creative Class Overall	8.4%	11.7%

Source: EMSI 2011-2015

COMPUTER AND MATHEMATICAL OCCUPATIONS

With 49,000 workers, the Computer and Mathematical cluster is the region's fifth-largest. With an LQ of 0.70, the cluster is 30 percent smaller than the national average. By 2024, Computer and Mathematical is expected to grow by 15 percent—the second-largest projected growth among the nine creative clusters. The leading occupations within this cluster include web developers (1.29) and computer network analysts (1.52). By contrast, Greater Miami is considerably lacking in software developers (0.59), where it lags the national average by 41 percent—far behind leading hubs like the Bay Area, Boston or New York. Miami's path to technology is better served by embedding tech skills like these into its leading clusters and industries as opposed to developing cutting-edge software or computing capabilities.



COMPUTER & MATHEMATICAL OCCUPATIONS



BROADEN AND DEEPEN THE REGION'S GROWING STARTUP ECOSYSTEM // CONTINUED

ARTS, DESIGN, ENTERTAINMENT, SPORTS AND MEDIA

Arts, Design, Entertainment, Sports and Media is the metro's sixth-largest creative cluster, with 46,000 workers. With an LQ of 0.92, the cluster lags the national average by 8 percent. This cluster is central to Miami's broad creative economy and is expected to grow by 8 percent in the next seven years. Media is not only a key anchor of this cluster but of Miami's entire creative economy as well. Most of the leading occupations within this cluster—including broadcast news analysts (1.54), producers and directors (1.18), radio and television announcers (1.27), camera operators (1.74) and photographers (1.35)—are directly related to media, with the exception of athletes and sports competitors (5.48) and interior designs (1.66).



ARTS, DESIGN,
ENTERTAINMENT,
SPORTS AND
MEDIA

LEGAL

With 38,000 workers, Legal is Greater Miami's seventh-largest creative cluster. With an LQ of 1.75, the region's Legal cluster is 75 percent larger than the national average. In the next seven years, this cluster is projected to increase by almost 20 percent. Leading occupations in this include lawyers (1.73) and mediators (2.09).



LEGAL

ARCHITECTURE AND ENGINEERING

Miami's Architecture and Engineering cluster, with 25,000 employees, is its eighth-largest creative cluster. With an LQ of 0.59, this cluster lags the national average by 41 percent but is expected to increase by 5 percent by 2024. The leading occupational strengths within this cluster include marine engineers, with an LQ of 3.66 (more than three times the national average), aerospace engineering and operations technicians, with an LQ of 2.21 (more than twice the national average) and biomedical engineers (1.22).



ARCHITECTURE
AND ENGINEERING

LIFE, PHYSICAL AND SOCIAL SCIENCES

Miami's Life, Physical and Social Sciences cluster, with 11,000 employees, is the smallest of the nine creative occupational clusters. This cluster is half the size of the national average, with an LQ of 0.50. Miami's Science cluster is expected to grow by a substantial 14 percent over the next seven years. The leading occupations within this cluster include psychologists (2.50) and atmospheric and space scientists (1.14).



LIFE, PHYSICAL
AND SOCIAL
SCIENCES



Photo: cfEnergy Zalkin

BUILDING GREATER MIAMI'S CREATIVE FUTURE

B Based on this, our research identifies seven key strengths on which the Greater Miami region can build and deepen its Creative Class, Creative Class clusters and creative economy.

1. LEVERAGE THE CENTRAL ROLE OF THE CREATIVE MEDIA CLUSTER

Media is central to greater Miami's current creative economy, as well as to its future growth. The metro has considerable strength in a wide range of media occupations, reflecting its growing role as a center for media, including media aimed at a Hispanic and Latino audience. This cluster sits at the very heart of the region's Creative Class and creative economy and can be leveraged to grow a range of creative industries and occupations that serve the media industry.

2. BUILD ON MIAMI'S ROLE AS A GLOBAL CITY AND LATIN AMERICAN HUB

Greater Miami can build on its growing role as a global city and Latin American hub. This status is reflected in the region's relatively high concentration of CEOs and high-level business and financial managers, as well as its considerable strength in law. Miami's challenge is to address the gap in skills and talent at its middle levels.

3. CAPITALIZE ON THE BUDDING WEALTH MANAGEMENT CLUSTER

Wealth management is an occupation with significant potential for expansion. Greater Miami is already developing a considerable wealth management cluster in part because of its role as a destination for wealthy individuals and families. The region also succeeds at attracting hedge fund and investment talent, in turn lowering tax rates.

4. DEVELOP HEALTHCARE AS AN EXPORT CLUSTER

Few regions have managed to turn healthcare into an export cluster, but Greater Miami has. With its competitive hospitals, healthcare institutions and strong concentration of healthcare talent, this strength can be expanded in the future. While healthcare typically drives local economic growth, the development of an export cluster can add significantly to Miami's regional economy.

5. DEVELOP REAL ESTATE AS AN EXPORT CLUSTER

Greater Miami has considerable capabilities in real estate, but its history of locally focused development has left it vulnerable to cycles of boom and bust. The region should undertake efforts to develop its real estate capabilities into an export cluster.

6. GROW THE TECHNOLOGY ECONOMY ALONGSIDE THE CREATIVE ECONOMY

Too many places aim, with minimal success, to be the next Silicon Somewhere. Over the past couple of decades, the San Francisco Bay Area has increased its share of venture capital-backed startups from 22 to just over 40 percent (40.2 percent) of the nation's total.⁷ As it stands, less than one percent of all U.S. zip codes—most of which are located in the Bay Area or the Boston-Cambridge metro—account for 60.7 percent of the nation's venture capital investment.⁸ A more successful approach for regions like Greater Miami is to embed tech into the region's own local capabilities. This is how New York created its recent thriving tech scene—by implanting technology in digital media, financial technology and real estate technology. By adapting its technology industry to local skills and capabilities in media, real estate and wealth management, Greater Miami will strengthen and deepen the competitiveness of these clusters.

7. BOLSTER THE EDUCATION CLUSTER, ESPECIALLY IN POST-SECONDARY EDUCATION

All leading creative regions are surrounded by great universities and post-secondary institutions that offer an abundance of university and post-secondary talent. Greater Miami's education cluster lags across the board, from post-secondary to elementary and secondary talent. This is a critical weakness that the region must address. It is especially urgent that the region bridge its gap in post-secondary educators. One major way to accomplish this is to invest in Miami's strong network development skills by implementing additional coding schools. While Florida International University already hosts the largest computer science program in the country, Miami must hold on to its educational institutions if it hopes to become competitive on a national or global scale.

Although Miami's Creative Class has demonstrated considerable growth over the last decade, it continues to lag behind the nation's most advanced regions. That said, the region has considerable strengths upon which to build. Since the Creative Class and creative economy power growth in the post-industrial age, it is important that regional leaders and stakeholders think strategically about how to leverage and enhance these strengths for greater economic gain.

REFERENCES

- ¹ The data in this report come from two primary sources. The creative class data is based the 2015 occupational statistics from the U.S. Bureau of Labor Statistics <https://www.bls.gov/oes/>. The data on occupational sub-groups and related forecasts come from Emsi <http://www.economicmodeling.com/data/>.
- ² Richard Florida, *The Rise of the Creative Class Revisited*, New York, Basic Books, 2012.
- ³ Rob Sentz, “Understanding Location Quotient,” Emsi, 2011, <http://www.economicmodeling.com/2011/10/14/understanding-location-quotient-2/>.
- ⁴ Richard Florida, *The Rise of the Creative Class: Revisited*, New York, Basic Books, 2012.
- ⁵ Richard Florida, Charlotta Mellander and Kevin Stolarick, “Inside the Black Box of Regional Development - Human Capital, Creative Class and Tolerance,” *Journal of Economic Geography*, 8:5, 2008, <https://academic.oup.com/joeg/article-abstract/8/5/615/991426/Inside-the-black-box-of-regional-development-human>
- ⁶ University of Miami Health System, 2017. <http://www.uhealthinternational.com/>
- ⁷ Richard Florida, “A Closer Look at the Geography of Venture Capital in the U.S.,” *CityLab*, 2016. <http://www.citylab.com/tech/2016/02/the-spiky-geography-of-venture-capital-in-the-us/470208/>
- ⁸ Richard Florida and Karen King, *The Rise of the Urban Startup Neighborhood: Mapping Micro-Clusters of Venture Capital-Based Startups*, Martin Prosperity Institute, 2016. <http://martinprosperity.org/content/rise-of-the-urban-startup-neighborhood/>

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