

CBRE RESEARCH

2017 SCORING TECH TALENT



Influencing Innovation, Economic
and Real Estate Growth in 50 U.S.
and Canadian Markets

CBRE





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Scoring Tech Talent is a comprehensive analysis of labor market conditions, cost and quality for highly skilled tech workers in the U.S. and Canada. The 50 largest markets were ranked according to their competitive advantages and appeal to tech employers and tech talent. The analysis also provides insight into the quality of tech talent, their demographics and how tech talent growth patterns are impacting cities and real estate markets.

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KEY TAKEAWAYS

Nearly 6 million highly skilled workers comprise the tech talent that is leading global innovation by developing the software and devices we depend on and managing the data and systems that ensure functionality of our tech ecosystems.

MOMENTUM



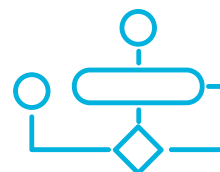
Tech job growth has accelerated in 28 of 50 markets, including surges in Orange County, Kansas City, Madison, Salt Lake City and Pittsburgh.

QUALITY



The quality of tech talent comes at a cost. The San Francisco Bay Area and Seattle were standouts for both quality and cost. The best value markets were in Canada and the Midwest.

#SCORE



13 metrics measured each market's depth, vitality and attractiveness. The top-ranked markets were the San Francisco Bay Area, Seattle and New York. Atlanta and Toronto jumped up in the rankings.



BRAIN GAIN



The number of tech degree graduates or the “brains” were compared with tech job creation in each market to determine gains or drains. The San Francisco Bay Area and Dallas/Ft. Worth led the gains and Boston and Washington, D.C. led the drains.

\$COST



The “typical” 500-person U.S.-based tech company needing 75,000 sq. ft. of office space can expect a total annual cost to range from \$24 million in Vancouver to \$57 million in the San Francisco Bay Area.

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WHAT IS TECH TALENT?

Technology has become integrated into nearly everything we do, highlighting the growing scope of devices and software that form the internet of things. Highly skilled tech talent individuals are creating and enabling this evolving culture between work and home. Computers in the home and workplace are commonplace, but new tools (i.e., wearable technology, Wi-Fi-enabled lightbulbs and voice-activated home assistants) are becoming more universally adopted, and expectations for fast deliveries and real-time information updates are increasing. Technology is the future and companies from all industries are expanding their innovation capabilities to satisfy changing customer and consumer demands.

Nearly 6 million highly skilled tech talent workers are leading global innovation that will shape our daily lives and economy for decades to come. These tech talent workers comprise 20 different occupations, from software developers who enable the devices we

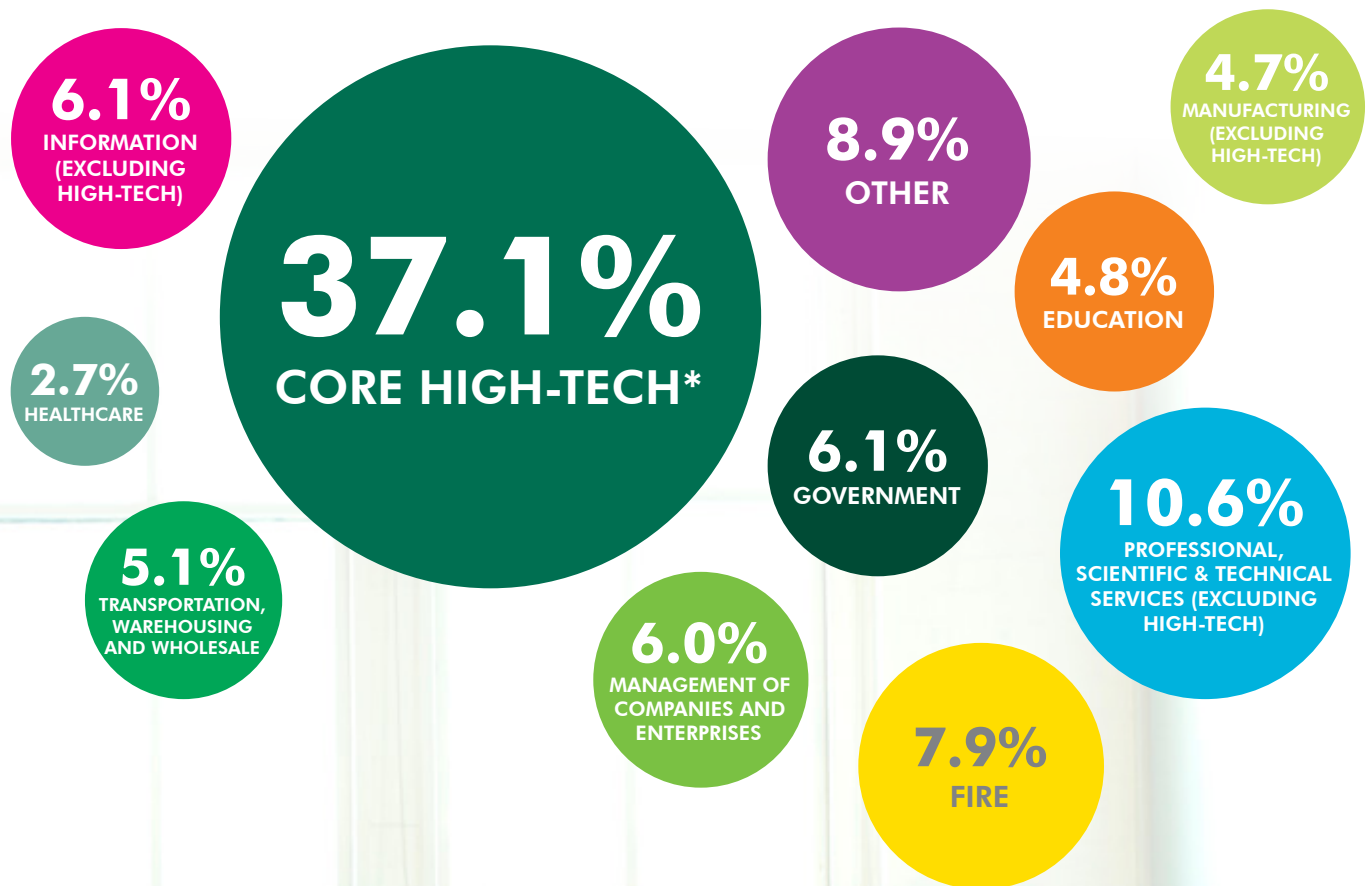
depend on to systems and data managers who ensure that our tech ecosystems function.¹ These positions are highly concentrated within the high-tech services industry but are not limited to any one type of company and are spread across all industry sectors (Figure 1). Using this definition, a software developer who works for a logistics company is included in our data.

The 4.9 million tech talent workers in the U.S. and 776,000 in Canada account for 3.5% and 5.1% of total workers in each country, respectively. This relatively small labor force has an outsized impact on real estate markets and the economy. The number of tech talent workers has increased by 27% in the past five years, adding more than 1 million jobs to the U.S. economy at a pace more than three times the national average. They are fueling new innovation and adapting technology within non-traditional tech sectors to increase productivity and strengthen the national economy.

¹Tech Talent includes the following occupation categories: software developers and programmers; computer support, database and systems; technology and engineering related; and computer and information system managers.



FIGURE 1: TECH TALENT LABOR BY INDUSTRY (2016)
Tech Talent Occupations in Each Industry as a % of U.S. Tech Talent



*Includes computer software and services and computer product manufacturing
Source: U.S. Bureau of Labor Statistics (National), April 2017.

WHICH ARE THE TOP-RANKED TECH TALENT MARKETS?

The highly competitive and supply constrained market for tech talent, along with advanced communications infrastructure, has accelerated the expansion of tech talent labor pools beyond major hubs and into smaller markets. These previously untapped and undersupplied regions are gaining appeal from start-ups and established companies. Accordingly, demand for commercial real estate to accommodate this growing workforce is on the rise.

Fifty of the largest markets by number of tech talent professionals in the U.S. and Canada were analyzed to create a scorecard that ranks them (Figure 2). The scorecard uses 13 metrics to measure each market's depth, vitality and attractiveness to companies seeking tech talent and to tech workers seeking employment. Each metric was weighted by its relative importance to job creation and innovation. Tech

talent concentration metrics have the highest weights because they signify clustering of tech workers. Labor costs for tech talent are weighted more heavily than office rents because companies allocate more capital to labor than to real estate.

The top-three markets were the San Francisco Bay Area, Seattle and New York. Comparing the 2017 market rankings with the previous year, a few markets shifted positions. While the San Francisco Bay Area maintained the top score, Seattle and New York each moved up one spot to second and third, and Washington, D.C. slipped to fourth. Supported by strong tech-centric universities, Atlanta rose four spots to fifth and Toronto rose six spots to sixth. Other large changes came from Denver and Newark—both rose six spots to 12th and 13th, respectively.



FIGURE 2: TECH TALENT SCORECARD RANKINGS

Click on a Market to See the Full Scorecard





Charlotte, NC



Tampa, FL



Columbus, OH



Kansas City, MO



Pittsburgh, PA



Houston, TX



Orlando, FL



Indianapolis, IN



Rochester, NY



St. Louis, MO



Sacramento, CA



Hartford, CT



Long Island, NY



Omaha, NE



Milwaukee, WI



Cincinnati, OH



Ft. Lauderdale, FL



Nashville, TN



Virginia Beach, VA



Cleveland, OH



Richmond, VA



San Antonio, TX



Miami, FL



Jacksonville, FL



Oklahoma City, OK

Source: CBRE Research; CBRE Econometric Advisors; U.S. Bureau of Labor Statistics; Statistics Canada; Moody's Analytics; The National Center of Education Statistics; National Science Foundation; Axiometrics.



WHAT ARE TECH TALENT MOMENTUM MARKETS?

As many companies expand their technology capabilities, demand for tech talent is growing in both large and small markets across all industries. Major gateway markets such as New York, Toronto and the San Francisco Bay Area dominate overall tech talent growth because of their size. These markets, along with others with a tech talent labor pool of more than 50,000 workers, are categorized as “large,” while those below this threshold are categorized as “small.” Both Kansas City and Portland moved up into the large market bracket in 2016. Both large and small markets have their advantages; while large markets tend to have a deeper pool of talent, small markets typically offer savings in business and living costs.

Tech labor concentration—or its percentage of total employment—is an influential factor in how “tech” the market is and its growth potential. Tech talent comprises 10.3% of the San Francisco Bay Area labor force—the highest concentration of the top-50 markets and about three times the national average of tech talent density. Other large tech markets round out the top-five most concentrated tech markets: Seattle, Toronto, Washington, D.C. and Austin have concentrations of highly skilled tech workers ranging from 7.1% to 8.6% of their overall labor force. This

sizeable concentration of highly skilled workers offers an environment conducive to innovation.

In order to evaluate up-and-coming markets, compare them and determine their growth momentum, we considered “large” and “small” categories separately. During the past five years, the five fastest-growing large markets increased their tech talent labor pools by more than 40% (Figure 3), with Raleigh-Durham and the San Francisco Bay Area both growing their tech talent base by 50%. Smaller tech talent markets also grew quickly. The top-10 small tech markets increased by more than 40%. Charlotte and Tampa grew at the fastest pace of all 50 markets, increasing by 77% and 55%, respectively.

Job growth momentum has picked up in more than half of the 50 markets. Tech talent grew faster over the past two years (2015-2016) in 28 markets when compared with the prior two-year period (2013-2014). The top-10 markets for momentum grew at least 10% faster during the recent two-year period (Figure 4). Tech employment growth has a multiplier effect that positively impacts economic growth, which in turn can have an immense impact on commercial real estate.

FIGURE 3: TECH TALENT LABOR POOLS (2016)

Large Tech Talent Markets (>50,000 Labor Pools)

Market	Tech Talent Total	Percent Change ¹	by Volume ²	Concentration ³
SF Bay Area, CA	328,070	49.9%	109,280	10.3%
New York, NY	246,180	32.9%	60,962	3.7%
Washington, D.C.	243,360	9.6%	21,330	7.9%
Toronto, ON	212,500	31.8%	51,300	8.0%
Dallas/Ft. Worth, TX	161,150	33.4%	40,310	4.7%
Chicago, IL	143,190	32.8%	35,370	3.9%
Seattle, WA	136,910	33.4%	34,260	8.6%
Atlanta, GA	133,810	47.6%	43,180	5.2%
Los Angeles, CA	126,730	19.0%	20,230	3.0%
Boston, MA	115,560	11.4%	11,790	6.4%
Houston, TX	97,550	31.4%	23,320	3.3%
Minneapolis, MN	95,220	25.5%	19,340	5.0%
Phoenix, AZ	83,140	33.5%	20,870	4.3%
Detroit, MI	78,510	40.7%	22,710	4.1%
Philadelphia, PA	77,700	27.1%	16,550	4.1%
Denver, CO	77,310	29.0%	17,370	5.5%
Baltimore, MD	72,710	35.2%	18,940	5.4%
Austin, TX	68,810	28.3%	15,170	7.1%
Orange County, CA	68,220	23.2%	12,850	4.4%
San Diego, CA	66,340	27.7%	14,380	4.8%
Vancouver, BC	65,100	36.8%	17,500	5.7%
Raleigh-Durham, NC	60,900	51.3%	20,660	6.9%
Newark, NJ	52,600	16.5%	7,457	4.5%
St. Louis, MO	52,190	7.9%	3,830	3.9%
Kansas City, MO	51,770	39.1%	14,540	5.0%
Portland, OR	50,880	40.4%	14,650	4.5%

Small Tech Talent Markets (<50,000 Labor Pools)

Market	Tech Talent Total	Growth Rate ¹	by Volume ²	Concentration ³
Charlotte, NC	49,830	77.1%	21,690	4.3%
Columbus, OH	48,230	12.9%	5,510	4.7%
Tampa, FL	45,340	55.3%	16,140	3.6%
Pittsburgh, PA	42,130	23.9%	8,140	3.7%
Sacramento, CA	39,430	25.3%	7,970	4.3%
Cincinnati, OH	36,450	21.0%	6,330	3.5%
Orlando, FL	35,320	45.0%	10,960	3.0%
Indianapolis, IN	35,010	42.3%	10,400	3.5%
Cleveland, OH	32,120	18.3%	4,980	3.1%
Salt Lake City, UT	31,750	45.3%	9,900	4.7%
Milwaukee, WI	30,810	21.1%	5,370	3.7%
San Antonio, TX	30,510	32.5%	7,480	3.1%
Long Island, NY	29,870	24.0%	5,790	2.3%
Virginia Beach, VA	27,660	16.9%	3,990	3.7%
Nashville, TN	27,270	43.5%	8,270	3.0%
Richmond, VA	24,940	28.8%	5,570	3.9%
Hartford, CT	24,620	17.1%	3,590	4.2%
Miami, FL	24,180	46.8%	7,710	2.1%
Madison, WI	23,350	51.2%	7,910	6.1%
Ft. Lauderdale, FL	22,370	37.2%	6,060	2.8%
Rochester, NY	21,510	17.8%	3,250	4.2%
Omaha, NE	20,780	25.6%	4,240	4.3%
Jacksonville, FL	19,020	41.0%	5,530	2.9%
Oklahoma City, OK	18,970	46.6%	6,030	3.1%

¹ 2011-2016; ² 2011-2016; ³ 2016.

Source: U.S. Bureau of Labor Statistics (Metro Area) April 2017; Statistics Canada (Metro Area), 2017.

FIGURE 4: CHANGE IN MOMENTUM OF TECH TALENT LABOR POOLS

Market	Change in Momentum in Percentage points (Past 2 years minus Prior 2 years)	Employment Growth Past 2 Years (2015-2016)	Employment Growth Prior 2 years (2013-2014)
Madison, WI	24.8	30.2%	5.4%
Ft. Lauderdale, FL	23.4	21.3%	-2.1%
Salt Lake City, UT	23.0	22.2%	-0.8%
Miami, FL	19.1	22.8%	3.7%
Kansas City, MO	17.7	20.5%	2.8%
Omaha, NE	12.2	11.5%	-0.7%
Columbus, OH	11.9	12.6%	0.6%
Pittsburgh, PA	11.6	12.0%	0.4%
Orange County, CA	11.3	11.8%	0.5%
Sacramento, CA	10.1	10.8%	0.7%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.



WHAT DEFINES A TECH TALENT MARKET?

A key aspect that top tech talent markets share is high educational attainment. Two-thirds of the top-50 tech talent markets have an educational attainment rate above the U.S. average. In Seattle and Washington, D.C., 55% or more of residents over 25 years old hold a bachelor's degree or higher (Figure 5). In Atlanta, the San Francisco Bay Area, Minneapolis and Raleigh-Durham, the educational attainment rate is above 48%.

Education, particularly with a focus on technology,² is best analyzed through degrees completed and issued from higher educational institutions. Metro areas that produced the largest number of tech graduates using the latest data available were New York, Washington, D.C., Los Angeles and Chicago (Figure 6). Large tech talent markets dominate the top-10 degree-granting regions, with the smaller markets of Pittsburgh, Salt Lake City and Minneapolis/St. Paul just missing the list. Demand is high for tech-related classes and degrees, and tech-related degree completions grew by an average of 33% in the top-10 markets since 2011. These numbers provide insight into which markets will produce the highest amount of tech talent entering the labor pool each year.

²Tech degree fields include computer engineering and information sciences; mathematics and statistics; electrical and electronics engineering; mechanical and industrial engineering; other engineering.

Graduates do not always remain in the labor market where they earn their degrees; they often migrate to locations that offer the best pay or have the most job opportunities. Analyzing tech-related graduation data and tech-related employment growth, Figure 7 presents the difference between where tech talent workers are employed and where they were educated. Tech degrees cover the most recent five-year period available (2011-2015) and tech jobs added cover the time period when most graduates would be counted in employment figures (2012-2016). The San Francisco Bay Area stands out as a strong tech-job creator, adding nearly 80,500 more tech jobs than graduates. On the other end of the spectrum, Los Angeles, Washington, D.C. and Boston produce the most tech graduates but post a deep deficit when it comes to employing them locally.



FIGURE 5: TOP 10 MARKETS FOR EDUCATIONAL ATTAINMENT
25+ Years Old, Bachelor's Degree or Higher

Market	Educational Attainment Rate
Seattle, WA	62.1%
Washington, D.C.	56.7%
Madison, WI	55.0%
Portland, OR	48.6%
Raleigh-Durham, NC	48.4%
Atlanta, GA	48.3%
Austin, TX	48.3%
Minneapolis, MN	48.3%
Denver, CO	47.1%
SF Bay Area, CA	46.7%

Source: U.S. Census Bureau (City/County), 2016.

FIGURE 6: TOP 10 REGIONS FOR TECH DEGREE COMPLETIONS

Market	Tech Degree Completions (2015)	Growth (2011-2015)
New York Metro Area ¹	14,419	37.8%
Washington, D.C. Metro Area ²	13,058	40.9%
Los Angeles Metro Area ³	10,632	26.7%
Chicago Metro Area ⁴	7,866	15.6%
Boston Metro Area	7,507	40.5%
SF Bay Area Metro Area ⁵	6,503	27.0%
Atlanta Metro Area	5,120	30.2%
Phoenix Metro Area	4,744	18.9%
Philadelphia Metro Area	4,655	33.8%
Dallas/Ft. Worth Metro Area	4,614	60.7%

¹ Includes Long Island and Newark;

² Includes Baltimore;

³ Includes Orange County;

⁴ Includes Milwaukee;

⁵ Includes Silicon Valley, San Francisco, SF Peninsula and Oakland;
Source: The National Center for Education Statistics (Region), July 2016.

FIGURE 7: WHERE ARE TALENT WORKERS COMING FROM AND WHERE ARE THEY HEADED?

Market	Tech Degrees (2011-2015)*	Tech Jobs Added (2012-2016)*	Brain Gain or Drain?
SF Bay Area, CA	28,804	109,280	80,476
Dallas/Ft. Worth, TX	17,750	40,310	22,560
Seattle, WA	12,043	34,260	22,217
Atlanta, GA	22,634	43,180	20,546
Charlotte, NC	4,639	21,690	17,051
Houston, TX	8,578	23,320	14,742
New York, NY	60,678	74,209	13,531
Kansas City, MO	3,192	14,540	11,348
Tampa, FL	5,808	16,140	10,332
Portland, OR	7,563	14,650	7,087
Raleigh-Durham, NC	13,738	20,660	6,922
Indianapolis, IN	3,514	10,400	6,886
Austin, TX	9,660	15,170	5,510
Minneapolis, MN	14,138	19,340	5,202
Nashville, TN	3,337	8,270	4,933
Chicago, IL	36,459	40,740	4,281
Miami, FL	9,817	13,770	3,953
Jacksonville, FL	1,612	5,530	3,918
San Antonio, TX	4,005	7,480	3,475
Denver, CO	13,918	17,370	3,452
Oklahoma City, OK	3,170	6,030	2,860
Richmond, VA	2,964	5,570	2,606
Orlando, FL	8,806	10,960	2,154
San Diego, CA	12,382	14,380	1,998
Sacramento, CA	5,977	7,970	1,993
Detroit, MI	21,155	22,710	1,555
Omaha, NE	2,916	4,240	1,324
Madison, WI	6,695	7,910	1,215

Market	Tech Degrees (2011-2015)*	Tech Jobs Added (2012-2016)*	Brain Gain or Drain?
Hartford, CT	5,150	3,590	-1,560
Columbus, OH	18,898	16,820	-2,078
St. Louis, MO	6,485	3,830	-2,655
Virginia Beach, VA	6,828	3,990	-2,838
Phoenix, AZ	23,969	20,870	-3,099
Salt Lake City, UT	13,155	9,900	-3,255
Philadelphia, PA	19,891	16,550	-3,341
Rochester, NY	8,953	3,250	-5,703
Pittsburgh, PA	17,795	8,140	-9,655
Los Angeles, CA	45,968	33,080	-12,888
Washington, D.C.	56,623	40,270	-16,353
Boston, MA	31,400	11,790	-19,610

Source: CBRE Research, U.S. Bureau of Labor Statistics, The National Center for Education Statistics (Region).

Los Angeles Metro Area includes Orange County

New York Metro Area includes Newark and Long Island

Miami Metro Area includes Ft. Lauderdale

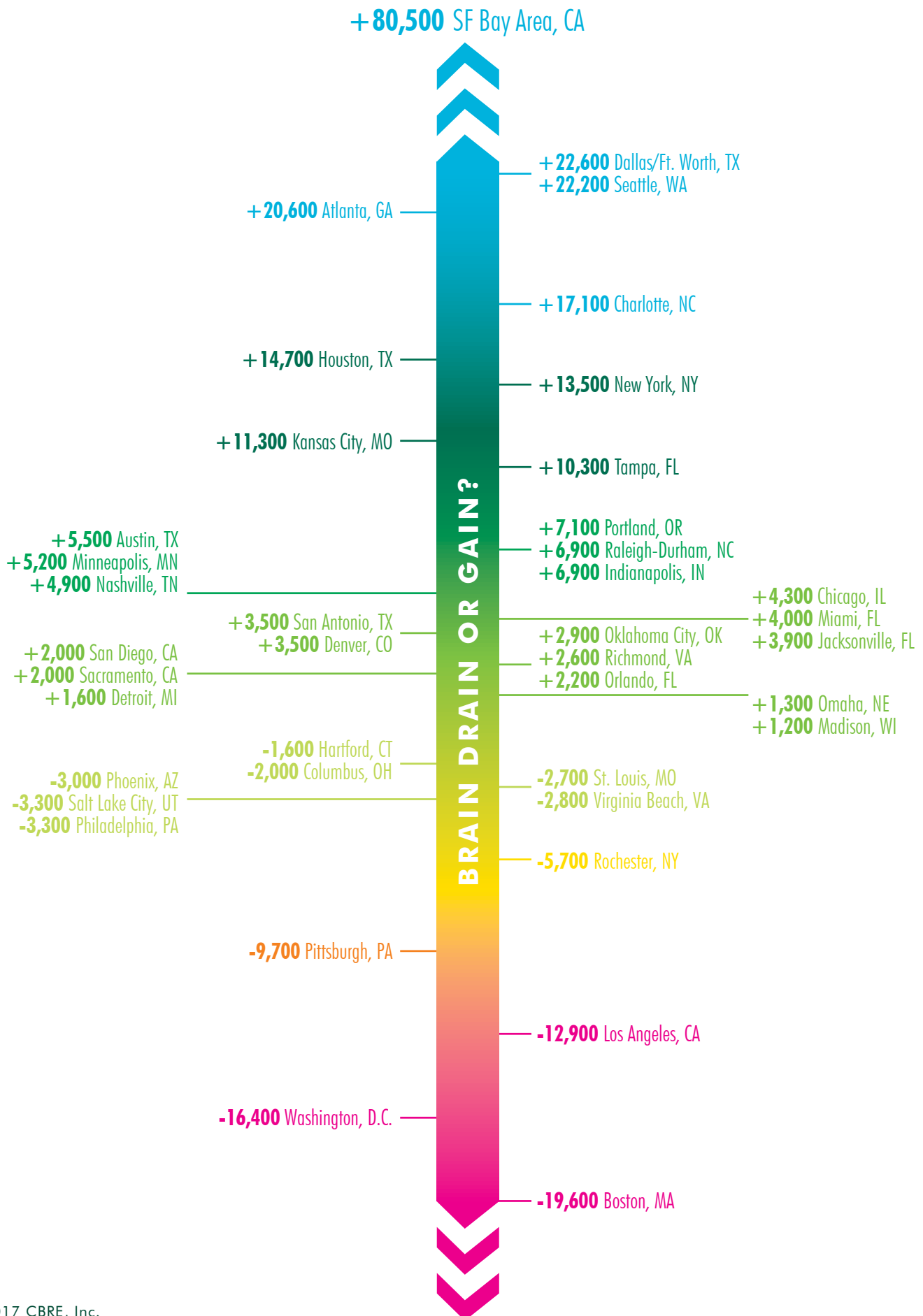
Columbus Metro Area include Columbus, Cleveland and Cincinnati

Bay Area Metro Area includes San Francisco, Oakland and Silicon Valley

Chicago Metro Area includes Chicago and Milwaukee

Washington D.C. Metro Area includes Baltimore

*Tech degrees cover the most recent five-year period available (2011-2015) and tech jobs added cover the time period reflecting when most graduates would be counted in employment figures (2012-2016).



Another notable characteristic of tech talent markets is the presence of millennials³ in the workforce. Having grown up with technology, the younger half of this generation only knows of a world connected by the internet. Millennials generally prefer living in cities rather than suburbs, which has helped revitalize some downtown neighborhoods. This trend is best analyzed using data at the city level. As the largest demographic cohort, their robust entry into and maturity within the labor pool contributes greatly to the growth of tech talent across all 50 markets (Figure 8).

Six large tech markets increased their millennial populations by more than 9% since 2010. Seattle grew the fastest at 16.6%. During the same time period, six of the smaller tech markets increased their

millennial populations by more than 9%, with Pittsburgh and Hartford growing significantly faster than the rest. Aided by the presence of higher educational institutions, Madison, Pittsburgh and Boston rank highest for concentration of millennials as a portion of the urban population, accounting for nearly 25% or more (Figure 9).

Similar traits between markets cause many of them to appear equivalent, but top tech markets distinguish themselves from the rest with tech clusters and higher concentrations of talent. These clusters typically form around preeminent universities where companies have access to a constant flow of new talent. Stanford University is an essential catalyst for tech clustering in the San Francisco Bay Area, as is Georgia Tech for Atlanta.

³Analysis conducted in this report, includes millennials aged 20-29 years.

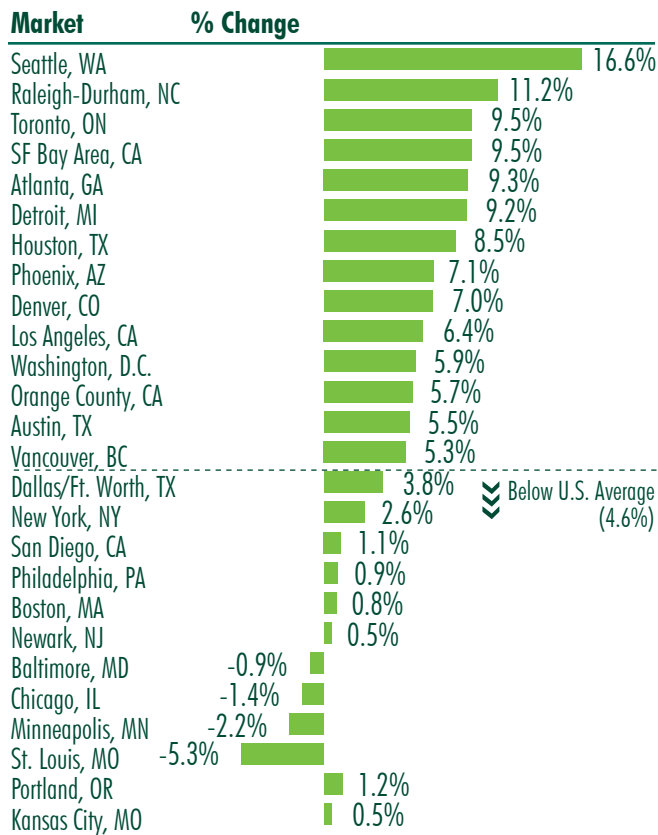


Tech clusters can also form around leading companies that draw other, smaller organizations to its region, in turn supporting entrepreneurs as they develop their innovations. Examples of this can be found in Seattle with large tech firms and in Charlotte with large financial services firms. Tech companies use these clusters to collaborate and compete with each other, thereby accelerating the innovation process. These companies in the core high-tech industry are heavily concentrated with about half of their workers doing tech-related jobs (Figure 10). Consequently, tech clusters are likely to form in markets with a strong concentration of high-tech companies.

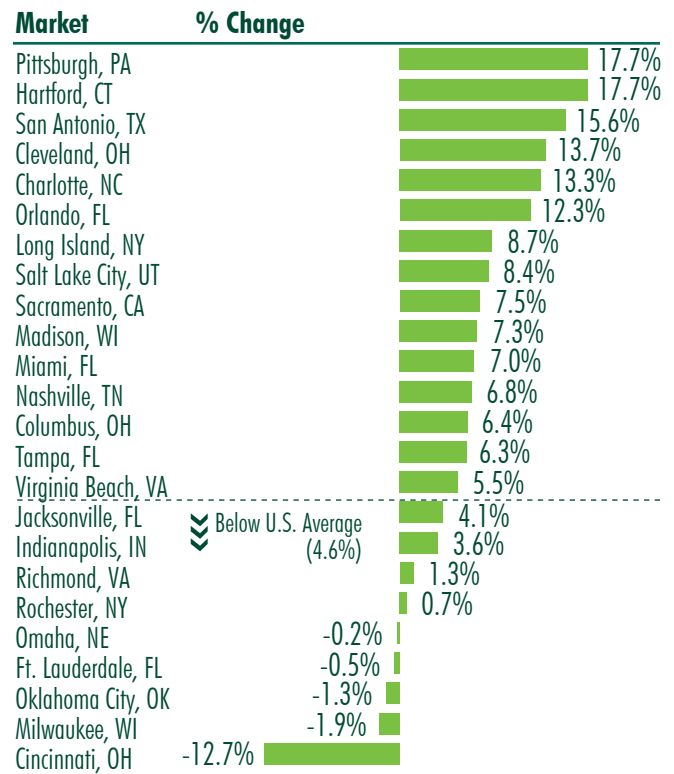


FIGURE 8: MILLENNIAL POPULATION CHANGE BY MARKET* (2010-2015)

Large Tech Talent Markets (>50,000 Labor Pools)

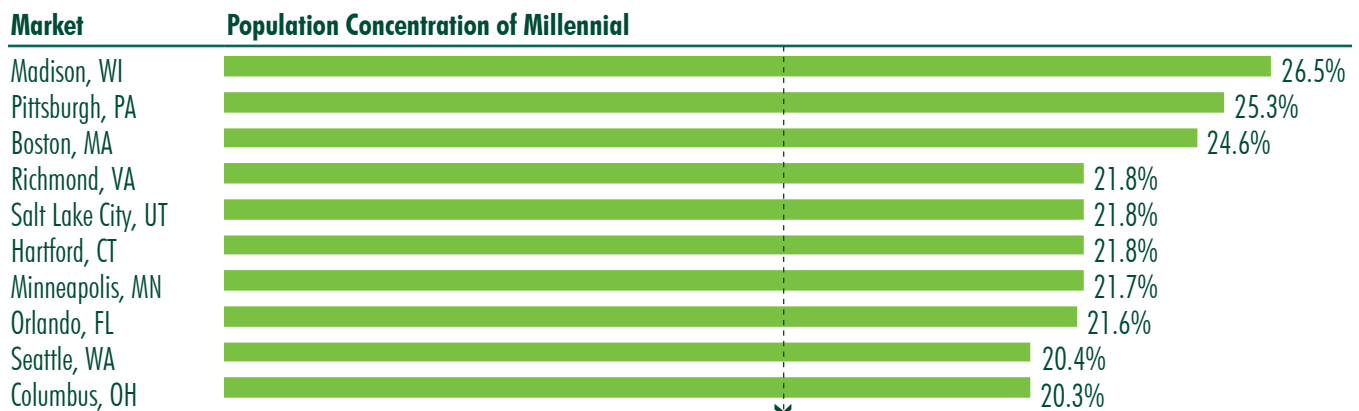


Small Tech Talent Markets (<50,000 Labor Pools)



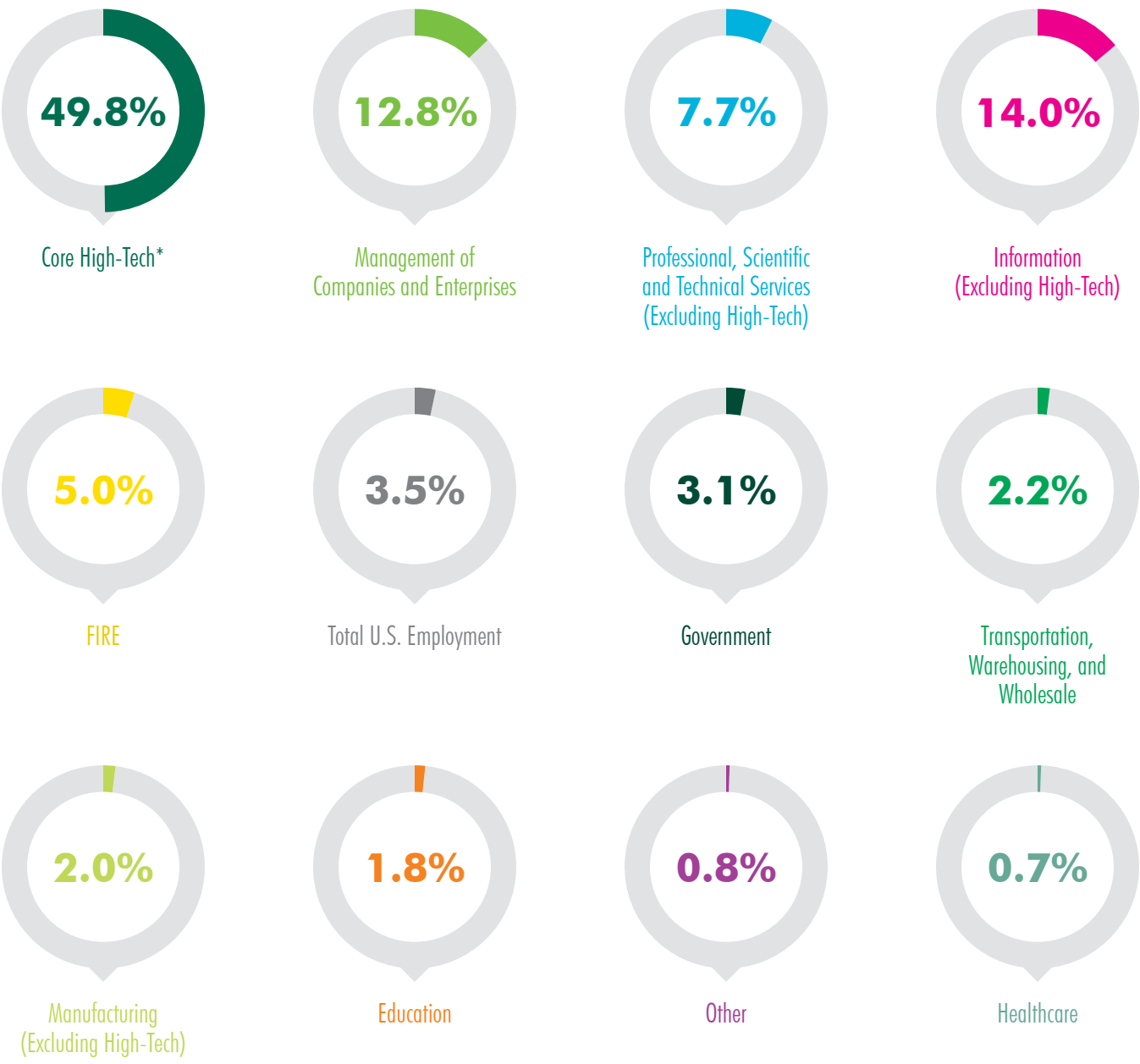
*Millennial aged 20-29 years living in downtown areas.
Source: U.S. Census Bureau (City/County), Statistics Canada, 2016.

FIGURE 9: TOP 10 MOST CONCENTRATED MILLENNIAL MARKETS* (2015)



* Millennial aged 20-29 Years living in downtown areas.
Source: U.S. Census Bureau (City/County), 2016.

FIGURE 10: TECH TALENT LABOR CONCENTRATION BY INDUSTRY (2016)
 Tech Talent Occupations as a % of All Occupations in Each Industry



*Includes computer software and services and computer product manufacturing.
 Source: U.S. Bureau of Labor Statistics (National), April 2017.



WHICH ARE THE HIGHEST- AND LOWEST-COST MARKETS TO OPERATE IN?

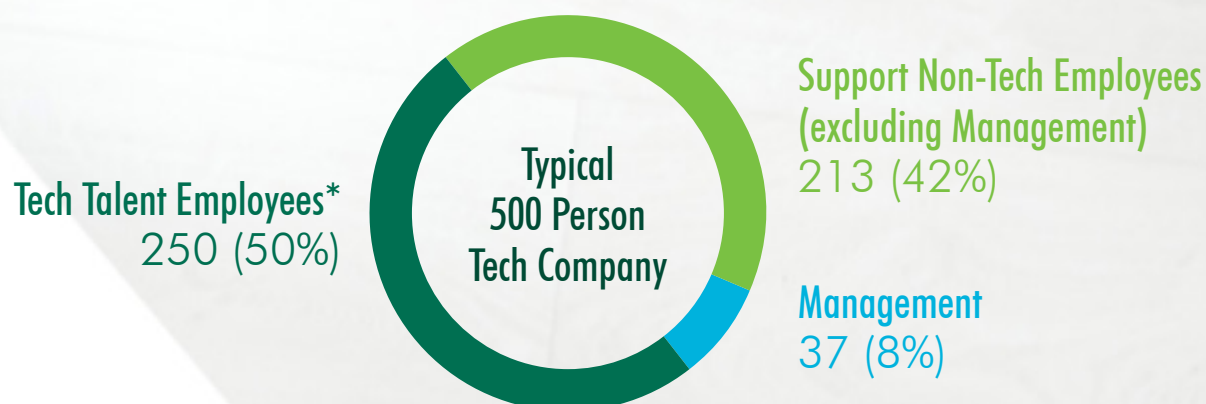
The greatest cost for companies within tech talent markets is employee wages. These highly skilled and educated workers require a premium that can reach more than double the average non-tech salary. The San Francisco Bay Area ranked the highest for average tech talent worker salary at almost \$123,000 per year, more than \$9,000 above the next highest market—Seattle. The average tech worker wage in 19 of the 50 top tech talent markets was above the U.S. tech worker average.

The second highest cost for companies is office rent. Companies continue to pursue the benefits of tech clustering and often place a higher value on specific submarkets and even specific streets where tech talent is ample. This has led to some competition for office space and caused rental rates in these areas to increase. Average office rents are the highest in Manhattan, followed by the San Francisco Bay Area and Washington, D.C. Among the top-10 most expensive office markets, Miami and Ft. Lauderdale are the only small tech markets with an average asking rate above \$30 per sq. ft.

Combining wage and real estate costs provides insight into what a tech company might pay to operate in one or more of the top-50 tech talent markets. For this comparison, U.S. averages were analyzed to determine the occupational makeup of a typical 500-person U.S.-based tech company needing 75,000 sq. ft. of office space. This breakdown provides interesting insight into relative costs, market-by-market (Figure 12).

Local market wages were applied to the various occupations to determine total annual wage costs by market, and local market rents were used to estimate the annual cost of renting a 75,000 sq. ft. office to house the 500 employees. The San Francisco Bay Area topped the list with the highest estimated costs at more than \$57.4 million, followed distantly by the other major tech markets of New York, Washington, D.C., Seattle and Boston. These high-cost markets continue to attract employers seeking to push the boundaries of innovation, as well as the tech talent that makes it possible.

FIGURE 11: AVERAGE U.S. TECH COMPANY OCCUPATION POOLS



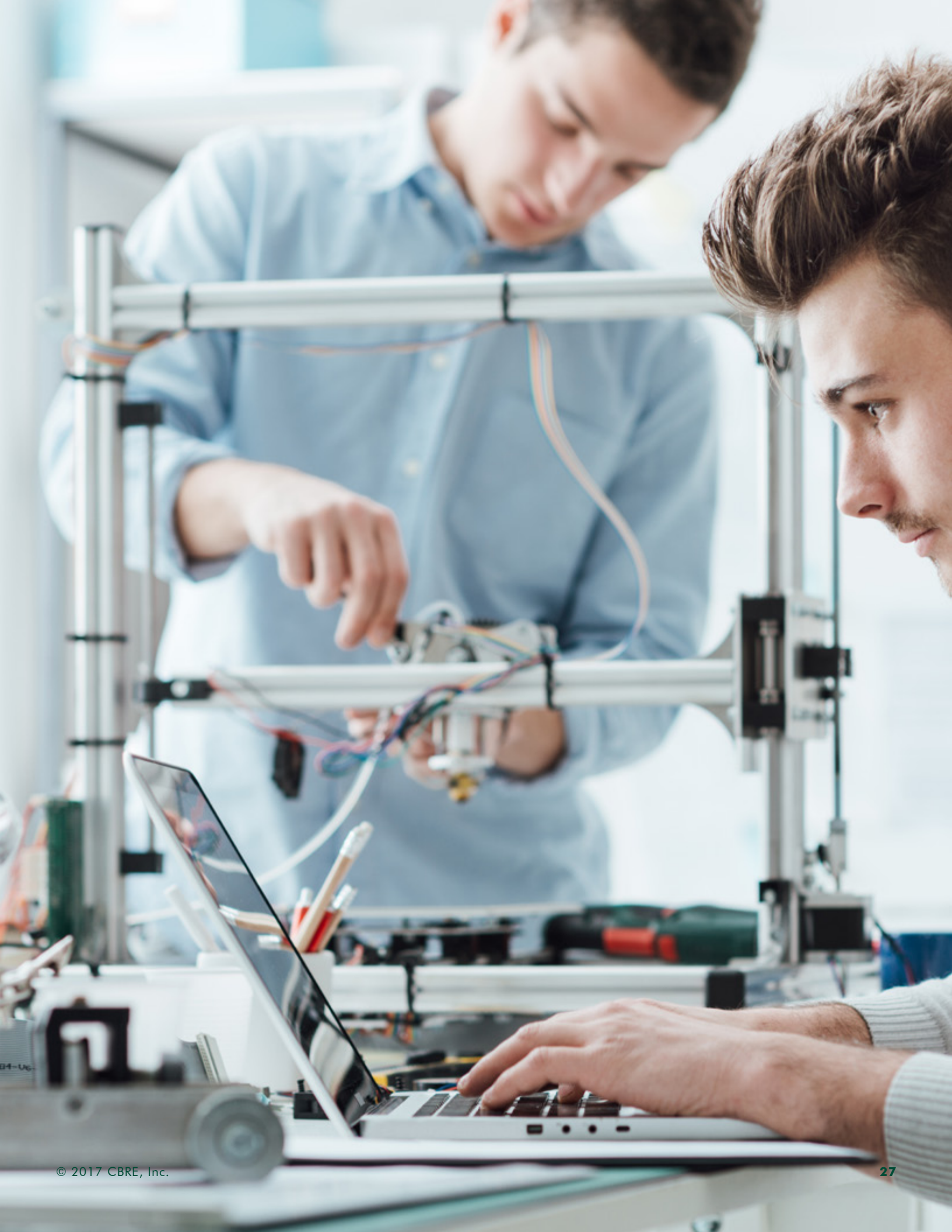
*Tech Talent includes the following occupation categories: software developers and programmers; computer support, database and systems; technology and engineering related; and computer information system managers.

FIGURE 12: ESTIMATED ONE-YEAR WAGE AND RENT OBLIGATIONS FOR SAMPLE U.S.-BASED TECH FIRM BY MARKET

Sample Tech Firm Estimates: 500 Employees, 75,000 Sq. Ft.

Market	Rent Cost (Avg Rent x 75,000 SF)	Tech Talent Wages (Avg. Wage x 250 People)	Support Non-Tech Wages (Avg. Wage x 213 People)	Management Wages (Avg. Wage x 37 People)	Total Estimated Cost
SF Bay Area, CA	\$4,606,500	\$30,789,506	\$14,961,546	\$7,058,433	\$57,415,984
New York, NY	\$5,709,750	\$27,219,566	\$12,445,590	\$6,857,580	\$52,232,486
Washington, D.C.	\$2,793,000	\$27,082,593	\$14,373,118	\$6,106,387	\$50,355,097
Seattle, WA	\$2,393,211	\$28,476,566	\$12,661,133	\$5,774,220	\$49,305,131
Boston, MA	\$2,693,250	\$25,994,778	\$14,576,459	\$5,723,900	\$48,988,387
Newark, NJ	\$1,930,500	\$26,903,042	\$11,510,307	\$6,567,500	\$46,911,349
Denver, CO	\$1,973,250	\$25,095,733	\$12,608,320	\$6,095,010	\$45,772,313
San Diego, CA	\$2,514,311	\$25,064,461	\$11,266,141	\$6,016,940	\$44,861,853
Orange County, CA	\$2,403,000	\$24,813,877	\$12,041,812	\$5,284,710	\$44,543,399
Houston, TX	\$2,218,500	\$23,807,211	\$12,544,424	\$5,823,800	\$44,393,935
Los Angeles, CA	\$2,738,431	\$23,904,222	\$11,949,056	\$5,799,380	\$44,391,090
Austin, TX	\$2,541,750	\$22,860,779	\$12,617,375	\$5,703,180	\$43,723,085
Baltimore, MD	\$1,685,250	\$24,705,908	\$11,862,947	\$5,279,530	\$43,533,635
Philadelphia, PA	\$1,995,000	\$23,387,633	\$12,092,674	\$5,966,990	\$43,442,297
Long Island, NY	\$2,006,250	\$23,136,619	\$12,142,161	\$5,966,990	\$43,252,020
Dallas/Ft. Worth, TX	\$1,796,250	\$23,334,635	\$12,248,403	\$5,801,793	\$43,181,082
Hartford, CT	\$1,487,250	\$24,056,316	\$11,948,182	\$5,376,840	\$42,868,588
Minneapolis, MN	\$1,993,500	\$22,921,399	\$12,036,357	\$5,254,000	\$42,205,256
Chicago, IL	\$2,226,000	\$22,800,090	\$11,820,630	\$5,181,850	\$42,028,571
Raleigh-Durham, NC	\$1,854,750	\$23,600,083	\$11,368,141	\$5,142,053	\$41,965,027
Charlotte, NC	\$1,841,250	\$23,276,138	\$11,050,209	\$5,295,070	\$41,462,667
Atlanta, GA	\$1,828,500	\$23,095,030	\$11,288,020	\$5,173,340	\$41,384,891
Columbus, OH	\$1,442,250	\$23,127,524	\$10,843,517	\$5,477,850	\$40,891,140
Richmond, VA	\$1,466,205	\$22,617,456	\$11,195,630	\$5,374,250	\$40,653,541
Sacramento, CA	\$1,611,000	\$22,973,093	\$11,020,689	\$4,947,640	\$40,552,422
San Antonio, TX	\$1,632,000	\$22,027,208	\$11,080,945	\$5,776,440	\$40,516,593
Portland, OR	\$2,015,250	\$22,509,900	\$11,006,638	\$4,899,540	\$40,431,329
Phoenix, AZ	\$1,863,750	\$21,557,673	\$10,291,074	\$5,249,190	\$38,961,687
Detroit, MI	\$1,380,000	\$20,870,533	\$11,522,909	\$5,014,142	\$38,787,585
St. Louis, MO	\$1,399,500	\$21,793,568	\$10,348,439	\$5,131,160	\$38,672,667
Virginia Beach, VA	\$1,407,750	\$21,128,435	\$10,649,339	\$5,201,090	\$38,386,614
Cincinnati, OH	\$1,431,750	\$20,847,602	\$10,989,513	\$4,736,740	\$38,005,606
Ft. Lauderdale, FL	\$2,379,000	\$19,871,113	\$10,181,506	\$5,189,990	\$37,621,609
Pittsburgh, PA	\$1,634,250	\$20,107,965	\$10,918,471	\$4,857,730	\$37,518,416
Milwaukee, WI	\$1,371,000	\$19,842,064	\$11,594,772	\$4,597,990	\$37,405,827
Kansas City, MO	\$1,381,500	\$20,755,951	\$10,477,658	\$4,749,690	\$37,364,799
Orlando, FL	\$1,572,750	\$20,578,211	\$9,658,866	\$5,220,700	\$37,030,528
Cleveland, OH	\$1,353,750	\$19,594,454	\$11,258,375	\$4,794,830	\$37,001,408
Miami, FL	\$2,733,000	\$18,924,926	\$10,266,416	\$4,974,650	\$36,898,991
Madison, WI	\$1,455,000	\$19,443,166	\$11,513,153	\$4,342,690	\$36,754,009
Salt Lake City, UT	\$1,780,500	\$20,700,658	\$10,040,307	\$4,002,290	\$36,523,756
Tampa, FL	\$1,700,250	\$19,608,621	\$9,780,633	\$5,381,280	\$36,470,784
Omaha, NE	\$1,464,000	\$20,038,872	\$10,230,822	\$4,548,040	\$36,281,734
Rochester, NY	\$1,462,500	\$19,412,227	\$10,472,455	\$4,893,250	\$36,240,432
Indianapolis, IN	\$1,407,000	\$19,418,121	\$10,992,643	\$4,247,600	\$36,065,364
Nashville, TN	\$1,869,750	\$19,855,301	\$10,344,981	\$3,991,190	\$36,061,222
Jacksonville, FL	\$1,430,250	\$20,146,232	\$9,517,984	\$4,576,530	\$35,670,996
Oklahoma City, OK	\$1,296,000	\$18,606,115	\$9,964,585	\$3,819,140	\$33,685,840
Toronto, ON*	\$1,913,318	\$11,802,660	\$9,308,604	\$2,903,021	\$25,927,603
Vancouver, BC*	\$1,720,866	\$11,375,309	\$8,566,251	\$2,658,922	\$24,321,348

*in USD: Source: U.S. Bureau of Labor Statistics, April 2017, Canada Statistics April 2017, CBRE Research (Metro Area), Q1 2017.



HOW IS TECH TALENT QUALITY VS. COST MEASURED?

Assessing the quality of a labor market is challenging because there are no standard metrics to measure. Since the cost of talent is the largest expense category for most firms seeking tech talent, the quality of that tech talent is becoming one of their most important considerations. The skills of the available labor pool do not appear to align with available jobs, causing a structural barrier to growth for companies across North America. Jobs that require specific skills, such as software development, are in high demand and the pool of available talent to fill them is limited. Only 37% of all tech talent workers are employed in the high-tech software/services industry (Figure 1), meaning tech companies must compete with other industries that employ the remaining 63% of tech workers. In addition, the unemployment rate for college-educated workers is around 2.3%, further stiffening competition.

Figure 13 plots a quality assessment for software developers against their average salary by market to visualize this trade-off across the top-50 tech talent markets. Labor quality was measured by the number and concentration of software engineers with three or more years of experience and who have graduated from one of the top 25 computer science programs in the U.S. and Canada, as determined by U.S. News & World Report. The highest cost markets (San Francisco Bay Area and Seattle) also have the highest concentration of quality tech talent. However, good, high and very high concentrations of quality tech talent are available in moderate and low-cost markets, providing a range of options. Due in part to the strong U.S. dollar, Toronto and Vancouver provide the best value when it comes to cost and quality, followed by Indianapolis, Pittsburgh and Detroit.



FIGURE 13: TECH TALENT QUALITY VS. COST ANALYSIS

Average Annual Salary for Software Engineer (USD)



*Concentration of software engineers/developers with 3+ years of experience that have earned degrees from the Top 25 Computer Information Science programs in the U.S. and Canada as rated by U.S. News, 2017.

Source: U.S. Bureau of Labor Statistics, April 2017; Statistics Canada, April 2017; U.S. News & World Report, CBRE Labor Analytics, CBRE Research, 2017.





HOW DOES TECH TALENT IMPACT COMMERCIAL REAL ESTATE?

Tech talent growth, primarily within the high-tech industry, has reached more than 1 million employees in the past five years and has been the top driver of office leasing activity in the U.S. during that time. The high-tech industry's share of major leasing activity⁴ nationwide increased to 19% in 2017 from 11% in 2011—the largest single share of any industry. Many tech talent markets, especially those with high concentrations or clusters of tech companies, have seen rising rents and declining vacancies as a result.

Significant demand for office space in top markets that have added tens of thousands of workers during the past five years raised rents to their highest levels and pushed down vacancy rates to their lowest levels. Rent growth is most prominent in the large tech markets, with office rents in the San Francisco Bay Area more than double what they were five years ago. But the decrease in vacancy rates is present across both large and small tech markets. Vacancy rates in

the San Francisco Bay Area and New York are the lowest of the top-50 tech talent markets, and some small markets like Madison and Nashville are not far behind (Figure 14).

The in-migration of talent to these tech markets has a sizeable impact on residential real estate as well. Although Manhattan remains the most expensive market in which to rent an apartment, 30 of the top-50 tech talent markets have a cost of living above the U.S. national average (Figure 15), according to Moody's Analytics. Comparing the annual average apartment rent with the annual average tech-worker salary, we found that even among the most expensive markets tech salaries can cover the high cost of living (Figure 16) based on the affordability standard of 30% of income to housing. Considering the underlying fundamentals of tech talent markets, we conclude that both occupiers and investors can pursue profitable real estate strategies.

⁴Includes top-25 largest transactions by sq. ft. each quarter for the 54 markets tracked by CBRE Research.

FIGURE 14: OFFICE ASKING RENT BY MARKET (Q1 2017)

Market	Annual Gross Direct Asking Rent Per SF	Vacancy Rate
New York, NY	\$76.13	7.7%
SF Bay Area, CA	\$61.42	7.7%
Washington, D.C.	\$37.24	16.5%
Los Angeles, CA	\$36.51	14.3%
Miami, FL	\$36.44	10.9%
Boston, MA	\$35.91	13.7%
Austin, TX	\$33.89	9.5%
San Diego, CA	\$33.52	11.5%
Orange County, CA	\$32.04	9.3%
Seattle, WA	\$31.91	11.7%
Ft. Lauderdale, FL	\$31.72	12.9%
Vancouver, BC*	\$30.31	10.1%
Chicago, IL	\$29.68	15.0%
Houston, TX	\$29.58	16.8%
Portland, OR	\$26.87	11.2%
Long Island, NY	\$26.75	10.4%
Philadelphia, PA	\$26.60	14.1%
Minneapolis, MN	\$26.58	16.7%
Denver, CO	\$26.31	14.2%
Newark, NJ	\$25.74	16.6%
Toronto, ON*	\$25.51	9.0%
Nashville, TN	\$24.93	8.1%
Phoenix, AZ	\$24.85	17.3%
Raleigh-Durham, NC	\$24.73	14.0%
Charlotte, NC	\$24.55	8.1%
Atlanta, GA	\$24.38	16.9%
Dallas/Ft. Worth, TX	\$23.95	19.1%
Salt Lake City, UT	\$23.74	11.6%
Tampa, FL	\$22.67	11.2%
Baltimore, MD	\$22.47	14.0%
Pittsburgh, PA	\$21.79	11.9%
San Antonio, TX	\$21.76	14.6%
Sacramento, CA	\$21.48	14.5%
Orlando, FL	\$20.97	10.4%
Hartford, CT	\$19.83	16.0%
Richmond, VA	\$19.55	11.8%
Omaha, NE	\$19.52	11.2%
Rochester, NY	\$19.50	14.8%
Madison, WI	\$19.40	8.0%
Columbus, OH	\$19.23	12.3%
Cincinnati, OH	\$19.09	18.8%
Jacksonville, FL	\$19.07	15.9%
Virginia Beach, VA	\$18.77	15.6%
Indianapolis, IN	\$18.76	16.4%
St. Louis, MO	\$18.66	14.2%
Kansas City, MO	\$18.42	12.8%
Detroit, MI	\$18.40	16.7%
Milwaukee, WI	\$18.28	13.0%
Cleveland, OH	\$18.05	18.4%
Oklahoma City, OK	\$17.28	15.1%

*in USD; Source: CBRE Research (Office Market), Q1 2017.

FIGURE 15: APARTMENT ASKING RENT BY MARKET (Q1 2017)

Market	Average Monthly Apartment Rent	Cost of Living (U.S. = 100%)
New York, NY	\$4,418	125%
SF Bay Area, CA	\$2,790	151%
Long Island, NY	\$2,218	125%
Los Angeles, CA	\$2,214	123%
Boston, MA	\$2,154	119%
Orange County, CA	\$1,986	145%
San Diego, CA	\$1,895	126%
Newark, NJ	\$1,732	122%
Washington, D.C.	\$1,696	122%
Seattle, WA	\$1,694	123%
Miami, FL	\$1,664	113%
Ft. Lauderdale, FL	\$1,548	111%
Chicago, IL	\$1,512	98%
Denver, CO	\$1,395	109%
Sacramento, CA	\$1,373	106%
Portland, OR	\$1,370	108%
Hartford, CT	\$1,284	106%
Philadelphia, PA	\$1,278	99%
Minneapolis, MN	\$1,262	101%
Baltimore, MD	\$1,255	107%
Austin, TX	\$1,201	112%
Orlando, FL	\$1,164	103%
Milwaukee, WI	\$1,145	98%
Madison, WI	\$1,137	101%
Nashville, TN	\$1,123	102%
Tampa, FL	\$1,113	100%
Atlanta, GA	\$1,108	101%
Dallas/Ft. Worth, TX	\$1,094	105%
Pittsburgh, PA	\$1,075	93%
Rochester, NY	\$1,056	89%
Houston, TX	\$1,051	108%
Salt Lake City, UT	\$1,044	106%
Raleigh-Durham, NC	\$1,039	99%
Charlotte, NC	\$1,032	99%
Virginia Beach, VA	\$1,027	98%
Richmond, VA	\$1,007	99%
Vancouver, BC*	\$994	97%
Detroit, MI	\$958	92%
Phoenix, AZ	\$956	105%
Jacksonville, FL	\$956	101%
Kansas City, MO	\$940	96%
Toronto, ON*	\$933	91%
San Antonio, TX	\$927	102%
St. Louis, MO	\$916	94%
Cincinnati, OH	\$902	91%
Cleveland, OH	\$894	90%
Omaha, NE	\$883	93%
Columbus, OH	\$874	95%
Indianapolis, IN	\$820	92%
Oklahoma City, OK	\$704	97%

*in USD; Source: CBRE Econometric Advisors (City), Axiometrics, CMHC, Q1 2017.
Note: New York represents Manhattan only.

FIGURE 16: TECH WAGE TO APARTMENT RENT RATIO

Market	Annualized Apartment Rent (2017)	2016 Average Annual Tech Wage	Rent-to-Tech Wage Ratio
New York, NY	\$53,015	\$108,878	30.8%
Long Island, NY	\$26,620	\$92,546	28.8%
Los Angeles, CA	\$26,564	\$95,617	27.8%
SF Bay Area, CA	\$33,483	\$123,158	27.2%
Miami, FL	\$19,964	\$75,700	26.4%
Boston, MA	\$25,845	\$103,979	24.9%
Orange County, CA	\$23,834	\$99,256	24.0%
Ft. Lauderdale, FL	\$18,570	\$79,484	23.4%
San Diego, CA	\$22,735	\$100,258	22.7%
Chicago, IL	\$18,139	\$91,200	19.9%
Vancouver, BC*	\$11,930	\$60,107	19.8%
Newark, NJ	\$20,785	\$107,612	19.3%
Washington, D.C.	\$20,350	\$108,330	18.7%
Portland, OR	\$16,441	\$90,040	18.3%
Toronto, ON*	\$11,198	\$62,365	18.0%
Sacramento, CA	\$16,473	\$91,892	17.9%
Seattle, WA	\$20,328	\$113,906	17.8%
Madison, WI	\$13,647	\$77,773	17.5%
Milwaukee, WI	\$13,746	\$79,368	17.3%
Tampa, FL	\$13,354	\$78,434	17.0%
Orlando, FL	\$13,971	\$82,313	17.0%
Nashville, TN	\$13,474	\$79,421	17.0%
Denver, CO	\$16,741	\$100,383	16.7%
Minneapolis, MN	\$15,146	\$91,686	16.5%
Philadelphia, PA	\$15,338	\$93,551	16.4%
Rochester, NY	\$12,675	\$77,649	16.3%
Pittsburgh, PA	\$12,898	\$80,432	16.0%
Hartford, CT	\$15,411	\$96,225	16.0%
Austin, TX	\$14,408	\$91,443	15.8%
Baltimore, MD	\$15,054	\$98,824	15.2%
Salt Lake City, UT	\$12,528	\$82,803	15.1%
Virginia Beach, VA	\$12,319	\$84,514	14.6%
Atlanta, GA	\$13,301	\$92,380	14.4%
Jacksonville, FL	\$11,469	\$80,585	14.2%
Dallas/Ft. Worth, TX	\$13,127	\$93,339	14.1%
Detroit, MI	\$11,490	\$83,482	13.8%
Cleveland, OH	\$10,726	\$78,378	13.7%
Kansas City, MO	\$11,285	\$83,024	13.6%
Richmond, VA	\$12,089	\$90,470	13.4%
Phoenix, AZ	\$11,478	\$86,231	13.3%
Charlotte, NC	\$12,386	\$93,105	13.3%
Houston, TX	\$12,613	\$95,229	13.2%
Omaha, NE	\$10,600	\$80,155	13.2%
Raleigh-Durham, NC	\$12,464	\$94,400	13.2%
Cincinnati, OH	\$10,825	\$83,390	13.0%
Indianapolis, IN	\$9,836	\$77,672	12.7%
San Antonio, TX	\$11,121	\$88,109	12.6%
St. Louis, MO	\$10,989	\$87,174	12.6%
Oklahoma City, OK	\$8,452	\$74,424	11.4%
Columbus, OH	\$10,491	\$92,510	11.3%

*in USD; Source: U.S. Bureau of Labor Statistics, April 2016; Statistics Canada, May 2017; CBRE Econometric Advisors, Axiometrics, CMHC, Q1 2017.

APPENDIX

APPENDIX A: LOCAL MARKET PROFILES	A2
APPENDIX B: FULL REPORT DATA SUMMARY	B1
What is tech talent and why is it important?	B2
Which are the top-ranked tech-talent markets?	B3
What are tech-talent momentum markets?	B4
What defines a tech talent market?	B6
Tech talent has unique concentrations across markets.	B10
Which are the highest- and lowest-cost markets to operate in?	B14
How does tech talent impact commercial real estate?	B17



1 SF Bay Area, CA

SCORE
81.28

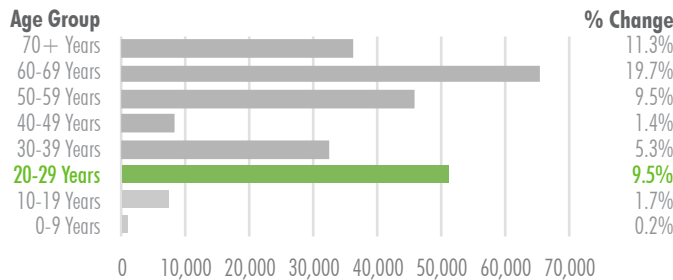
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	328,070	49.9%	\$123,158	13.8%
Software Developers & Programmers	147,580	56.2%	\$128,821	12.6%
Computer Support, Database & Systems	107,560	53.9%	\$102,307	14.9%
Computer & Infor. Systems Managers	25,440	48.1%	\$190,768	15.9%
Technology Engineering-Related	47,490	27.6%	\$116,567	13.7%
TOTAL NON-TECH OCCUPATIONS	374,590	12.3%	\$70,242	7.0%
Sales	61,660	38.2%	\$89,789	-5.1%
Administrative & Office Support	218,680	11.9%	\$54,249	10.1%
Business Operations & Finance	73,500	17.3%	\$98,153	13.0%
Marketing	20,750	-32.9%	\$81,828	-3.3%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.
*Aggregate of San Francisco, Oakland and Silicon Valley Metro Areas

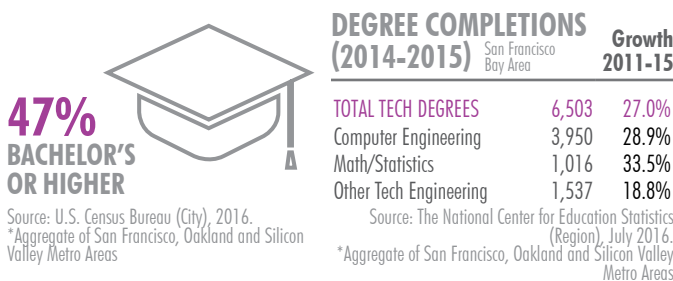
POPULATION TRENDS

The population of millennials in their 20s grew by 51,047 (9.5%) since 2010. That's 20.2% of total growth in a population of 3,967,273.



Source: U.S. Census Bureau (Cities of San Francisco and Oakland, counties of Santa Clara and San Mateo), 2016.
*Aggregate of San Francisco, Oakland and Silicon Valley Metro Areas

EDUCATIONAL ATTAINMENT

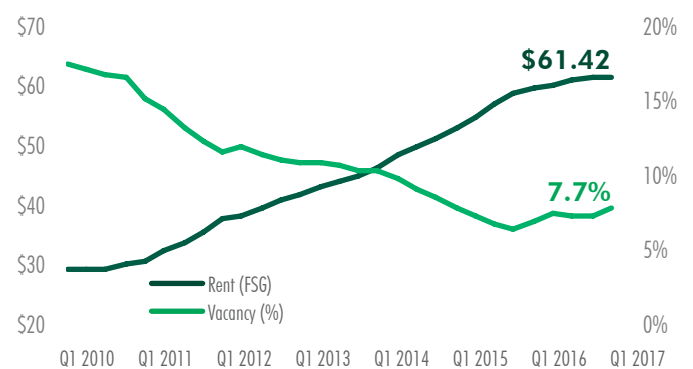


TECH TALENT DIVERSITY



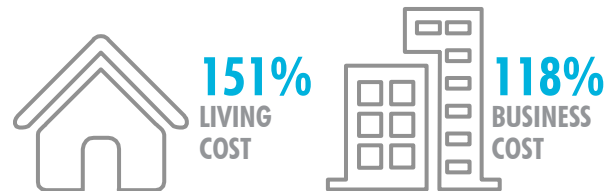
Source: U.S. Census Bureau (Metro Area), 2016.
*Weighted Average of San Francisco, Oakland and Silicon Valley Metro Areas

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



Source: Relative Costs from Moody's Analytics (Metro Area), Q1 2017.

AVERAGE APT. RENT:
\$2,790 PER UNIT/MO.
38% INCREASE SINCE 2011

Source: Apt. rent data from CBRE EA (City), Q1 2017.
*Weighted Average of San Francisco, Oakland and Silicon Valley Metro Areas

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Confidential	905 11th Ave (Sunnyvale)	350,700
Confidential	2100 University Ave (Palo Alto)	214,000
Confidential	121 Spear St (San Francisco)	166,500
Confidential	415 Mission St (San Francisco)	149,000
Confidential	113 20th St (San Francisco)	126,600

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
Stanford	850	\$18,146
UC Berkeley	881	\$14,239

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Snapchat, Solyndra, SunRun, Flipboard, Okta, Cloudera, Zynga, Machine Zone, Sapphire Energy, Harvest Powers

Source: Pitchbook, 2017.

2 Seattle, WA

SCORE
67.83

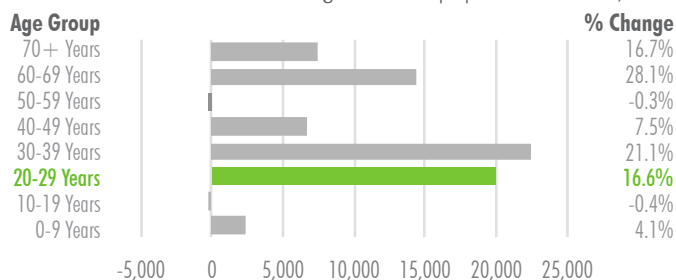
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	136,910	33.4%	\$113,906	20.7%
Software Developers & Programmers	70,740	34.2%	\$125,908	26.4%
Computer Support, Database & Systems	46,240	40.2%	\$88,162	13.7%
Computer & Infor. Systems Managers	9,860	34.3%	\$156,060	13.8%
Technology Engineering-Related	10,070	4.9%	\$106,530	17.5%
TOTAL NON-TECH OCCUPATIONS	189,830	24.6%	\$59,442	7.9%
Sales	17,390	-1.5%	\$72,447	-4.9%
Administrative & Office Support	116,870	23.4%	\$49,288	12.6%
Business Operations & Finance	35,860	38.1%	\$75,901	4.5%
Marketing	19,710	40.0%	\$78,230	7.6%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

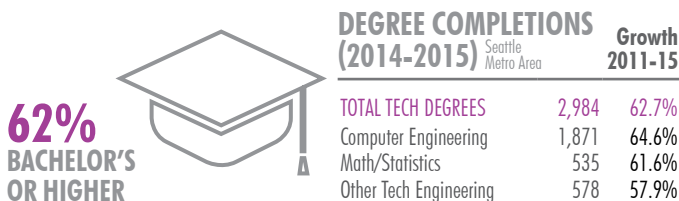
POPULATION TRENDS

The population of millennials in their 20s grew by 19,927 (16.6%) since 2010. That's 27% of total growth in a population of 684,443.



Source: U.S. Census Bureau (City of Seattle), 2016.

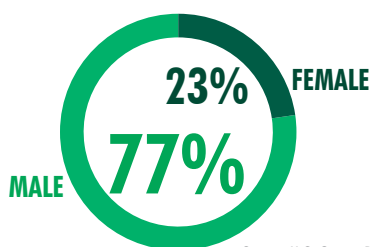
EDUCATIONAL ATTAINMENT



Source: U.S. Census Bureau (City), 2016.

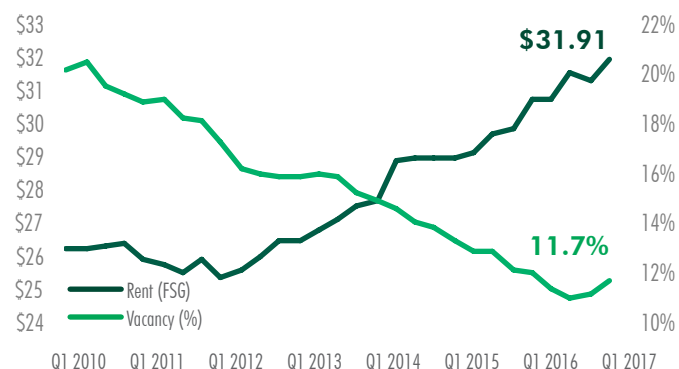
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research (Office Market), Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,694 PER UNIT/MO.
37% INCREASE SINCE 2011

*Seattle Metro Div
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
F5 Networks	801 5th Ave	515,500
Confidential	1812 Boren Ave	290,700
Confidential	101 Westlake Ave N	151,700
Offer Up	1745 114th Ave SE	71,300
Confidential	437 N 34th St	50,900

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Washington	282	\$3,865

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

3 New York, NY

SCORE
64.21

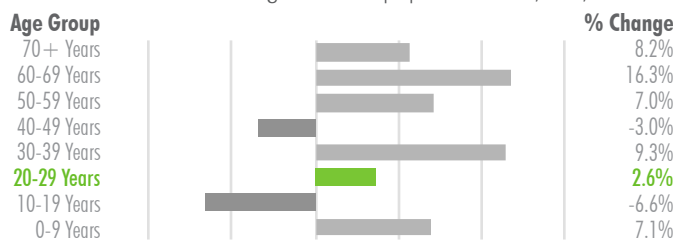
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	246,180	32.9%	\$108,878	16.1%
Software Developers & Programmers	100,310	40.5%	\$108,212	17.1%
Computer Support, Database & Systems	109,870	41.3%	\$92,804	19.2%
Computer & Infor. Systems Managers	24,120	4.9%	\$185,340	20.9%
Technology Engineering-Related	11,880	3.0%	\$107,916	17.7%
TOTAL NON-TECH OCCUPATIONS	940,790	11.3%	\$58,430	16.9%
Sales	86,810	31.1%	\$75,577	9.4%
Administrative & Office Support	575,800	1.3%	\$39,269	10.4%
Business Operations & Finance	188,030	26.6%	\$101,168	16.1%
Marketing	90,150	52.1%	\$75,153	4.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

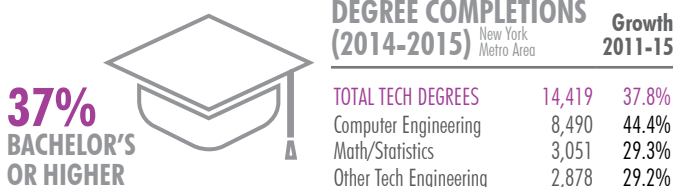
POPULATION TRENDS

The population of millennials in their 20s grew by 36,485 (2.6%) since 2010. That's 10% of total growth in a population of 8,550,405.



Source: U.S. Census Bureau (City of New York), 2016.

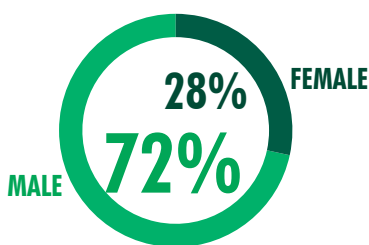
EDUCATIONAL ATTAINMENT



Source: U.S. Census Bureau (City), 2016.

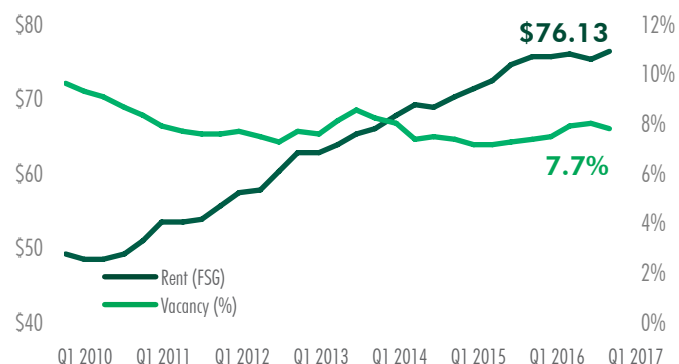
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$4,418 PER UNIT/MO.
17.8% INCREASE SINCE 2011

*New York Metro Div
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Spotify	4 World Trade Ctr	481,263
IPSoft	17 State St	139,642
SS&C Technologies	4 Times Sq	135,572
Snap	229 West 43rd St	121,326
ContextMedia	330 West 34th St	55,758

Source: CBRE Research (Office Market), 2016.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
Columbia	347	\$4,995
NYU	307	\$2,682

VC-Funded Companies Founded by Alumni of Top Regional Universities:

DraftKings, Human Longevity, MediaMath, Serious Energy, Compas (US)

Source: Pitchbook, 2017.

4 Washington, D.C.

SCORE
64.13

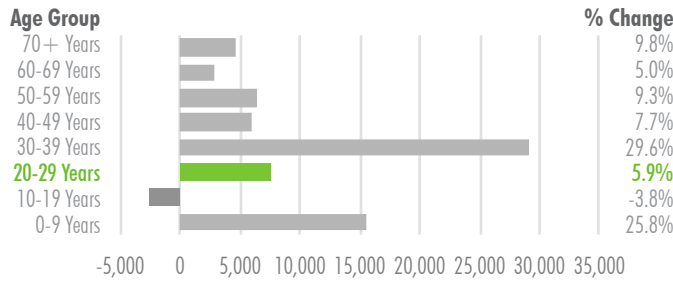
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	243,360	9.6%	\$108,330	9.4%
Software Developers & Programmers	73,100	-2.0%	\$112,721	9.5%
Computer Support, Database & Systems	136,680	25.4%	\$98,805	11.4%
Computer & Infor. Systems Managers	17,620	-9.7%	\$165,037	12.9%
Technology Engineering-Related	15,960	-15.8%	\$107,195	13.4%
TOTAL NON-TECH OCCUPATIONS	394,290	12.5%	\$67,479	9.5%
Sales	37,720	40.3%	\$90,014	13.7%
Administrative & Office Support	219,460	5.8%	\$51,413	3.9%
Business Operations & Finance	89,660	8.9%	\$88,909	9.3%
Marketing	47,450	40.7%	\$83,379	11.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

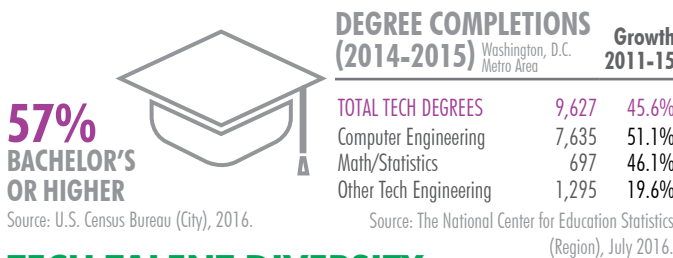
POPULATION TRENDS

The population of millennials in their 20s grew by 7,578 (5.9%) since 2010. That's 11% of total growth in a population of 672,228.

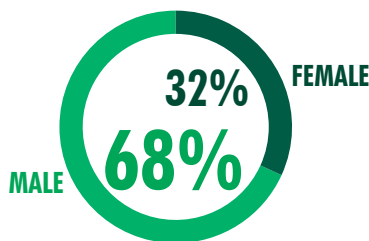


Source: U.S. Census Bureau (City of Washington, D.C.), 2016.

EDUCATIONAL ATTAINMENT

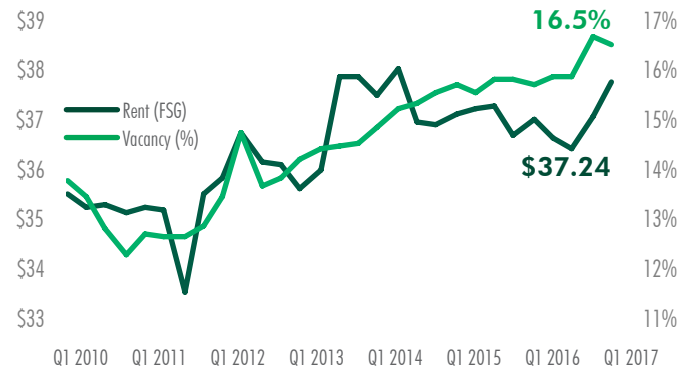


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research (Office Market), Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Confidential	3200 Woodland Park Rd	400,677
Integrity Applications	15020 Conference Center Dr	100,000
Fulcrum IT	5870 Trinity Pkwy	61,125
NTT Data	1660 International Dr	50,000
FiscalNote	1201 Pennsylvania Ave NW	38,411

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Maryland	267	\$3,169
Georgetown	222	\$3,186

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

5 Atlanta, GA

SCORE
59.55

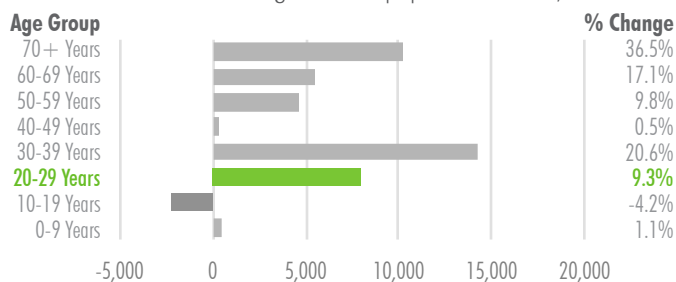
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	133,810	47.6%	\$92,380	15.7%
Software Developers/Programmers	44,290	69.0%	\$98,585	12.2%
Computer Support, Database & Systems	67,510	45.3%	\$82,545	20.0%
Computer & Infor. Systems Managers	10,620	33.4%	\$139,820	14.0%
Technology Engineering-Related	11,390	13.7%	\$82,316	7.9%
TOTAL NON-TECH OCCUPATIONS	334,490	16.4%	\$52,995	8.3%
Sales	37,410	58.9%	\$72,049	5.4%
Administrative & Office Support	216,700	5.5%	\$43,509	4.4%
Business Operations & Finance	55,780	25.0%	\$73,311	6.6%
Marketing	24,600	79.4%	\$61,519	2.1%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

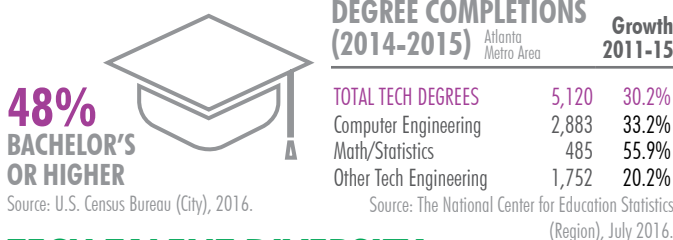
POPULATION TRENDS

The population of millennials in their 20s grew by 7,968 (9.3%) since 2010. That's 19.2% of total growth in a population of 463,875.

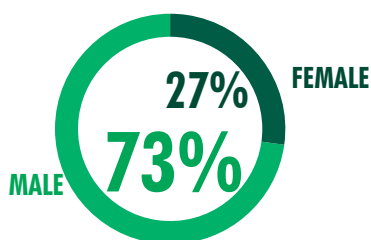


Source: U.S. Census Bureau (City of Atlanta), 2016.

EDUCATIONAL ATTAINMENT

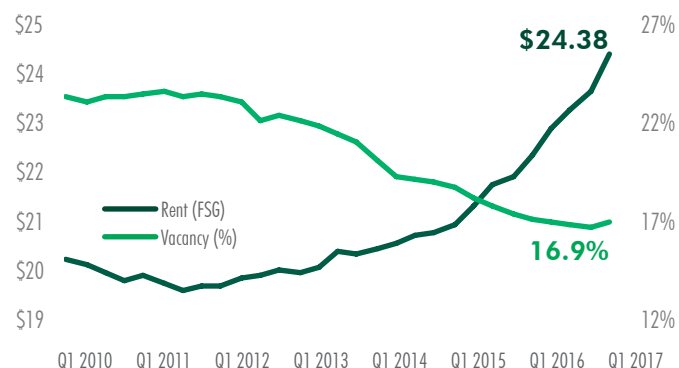


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,108 PER UNIT/MO.
29% INCREASE SINCE 2011

*Atlanta Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
AthenaHealth	675 Ponce De Leon Ave	40,000
CallRail	100 Peachtree St NW	31,943
SalesLoft	1180 W Peachtree St NW	30,524
Blue Sombbrero	746 Willoughby Way	30,392
Membersuite	47 Perimeter Ctr E	17,100

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
Georgia Institute of Technology	217	\$2,718

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

6 Toronto, ON

SCORE
59.30

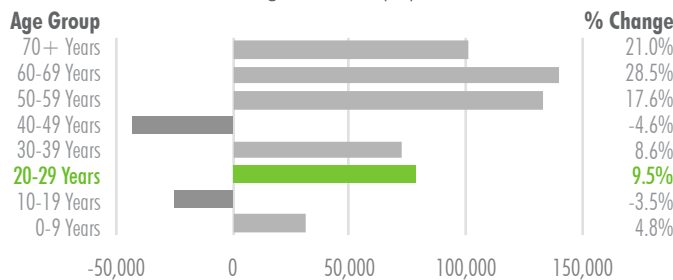
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage*	Growth 2011-16
TOTAL TECH OCCUPATIONS	212,500	31.8%	\$82,385	14.8%
Software Developers & Programmers	52,100	26.2%	\$85,987	18.2%
Computer Support, Database & Systems	83,600	30.8%	\$74,422	6.8%
Computer & Infor. Systems Managers	26,000	150.0%	\$103,646	9.5%
Technology Engineering-Related	50,800	11.4%	\$80,912	17.9%
TOTAL NON-TECH OCCUPATIONS	334,300	4.5%	\$57,731	14.0%
Sales	6,200	1.6%	\$32,656	18.8%
Administrative & Office Support	155,100	-17.7%	\$42,515	5.5%
Business Operations & Finance	118,400	39.5%	\$74,942	8.9%
Marketing	54,600	35.1%	\$66,477	3.5%

*in CAD; Source: Statistics Canada (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 78,182 (9.5%) since 2010. That's 16% of total growth in a population of 6,168,677.



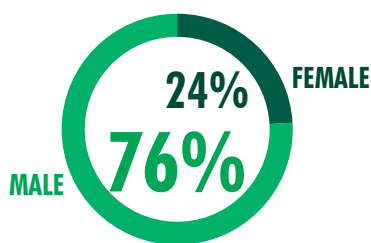
Source: Environics Analytics (City of Toronto), 2016.

EDUCATIONAL ATTAINMENT



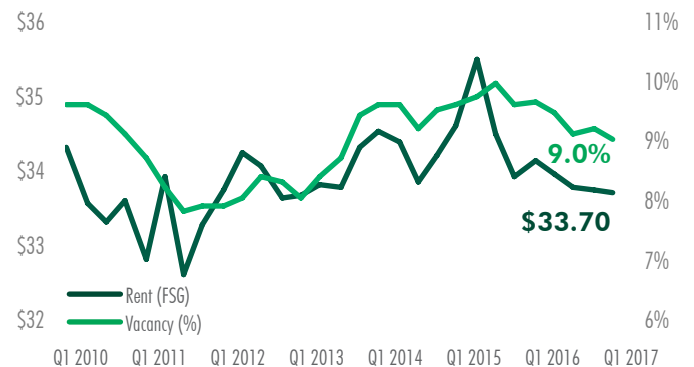
Source: Statistics Canada (City), 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT* & VACANCY TRENDS



*Rent in CAD; Source: CBRE Research (Office Market), Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,233 PER UNIT/MO.
12% INCREASE SINCE 2011

*Toronto Metro Area; Data in CAD
Source: Relative Costs from Moody's Analytics
(metro area), Q1 2017; Apt. rent data from
CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
CDW	185 The West Mall	68,000
Rangle.io	18 York Street	53,000
Indeed Canada	2 Bloor St W	40,000
EventMobi	207 Queens Quay West	17,000
Elemental AI	296 Richmond St W	17,000

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Waterloo	275	\$5,067
University of Toronto	230	\$2,845

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Pivotal Software, Wish, Hangzhou Kuaidi Technology, Instacart, Real Matters

Source: Pitchbook, 2017.

7 Raleigh-Durham, NC

SCORE
59.03

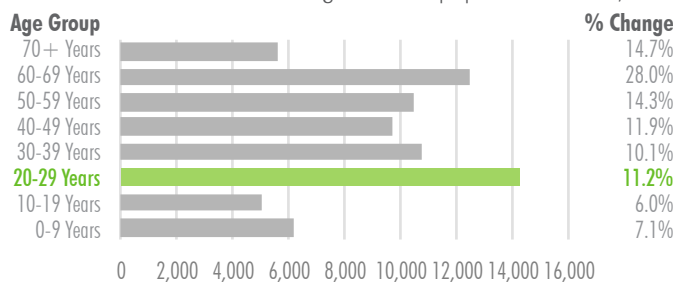
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	60,900	51.3%	\$94,400	15.3%
Software Developers & Programmers	20,600	51.5%	\$98,836	11.7%
Computer Support, Database & Systems	29,630	60.4%	\$83,285	18.1%
Computer & Infor. Systems Managers	4,730	17.7%	\$138,974	17.1%
Technology Engineering-Related	5,940	43.1%	\$98,970	32.4%
TOTAL NON-TECH OCCUPATIONS	117,900	22.4%	\$53,372	11.5%
Sales	15,220	66.0%	\$80,520	5.0%
Administrative & Office Support	75,930	14.6%	\$42,253	8.6%
Business Operations & Finance	17,890	20.0%	\$70,885	6.4%
Marketing	8,860	47.9%	\$66,654	18.6%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

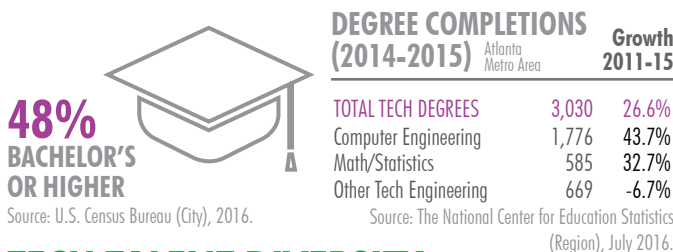
POPULATION TRENDS

The population of millennials in their 20s grew by 14,219 (11.2%) since 2010. That's 19% of total growth in a population of 709,547.



Source: U.S. Census Bureau (Cities of Raleigh and Durham), 2016.

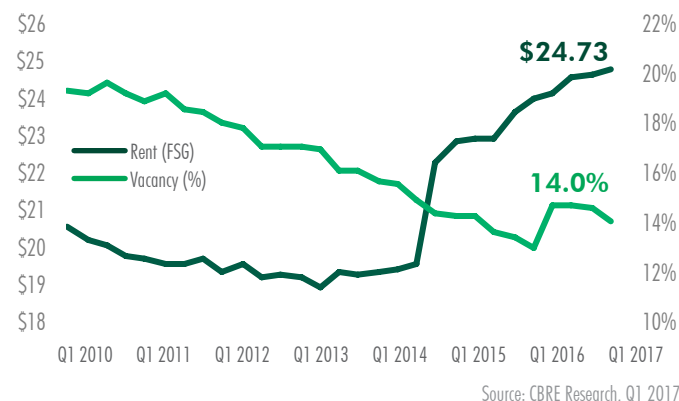
EDUCATIONAL ATTAINMENT



TECH TALENT DIVERSITY



OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,039 PER UNIT/MO.
20% INCREASE SINCE 2010

*Raleigh-Durham Metro Div
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Optum	4242 Six Forks Rd	36,000
Freudenberg IT	12 TW Alexander Drive	27,000
LogMeIn	421 Fayetteville St	17,000

Source: CBRE Research (Office Market), 2016.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
Duke	331	\$5,168
University of North Carolina	212	\$2,475

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

8 Austin, TX

SCORE
58.73

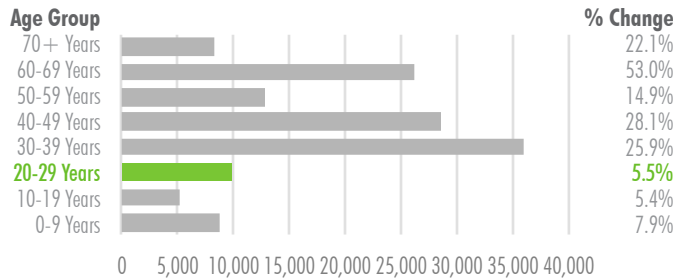
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	68,810	28.3%	\$91,443	7.6%
Software Developers/Programmers	25,150	32.2%	\$97,994	3.2%
Computer Support, Database & Systems	31,910	42.9%	\$79,033	6.5%
Computer & Infor. Systems Managers	3,030	37.1%	\$154,140	14.8%
Technology Engineering-Related	8,720	-13.4%	\$96,180	21.5%
TOTAL NON-TECH OCCUPATIONS	156,030	37.9%	\$59,237	15.0%
Sales	25,380	117.5%	\$83,856	15.7%
Administrative & Office Support	96,070	23.3%	\$47,838	7.9%
Business Operations & Finance	23,140	34.8%	\$72,260	8.2%
Marketing	11,440	79.0%	\$73,993	23.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

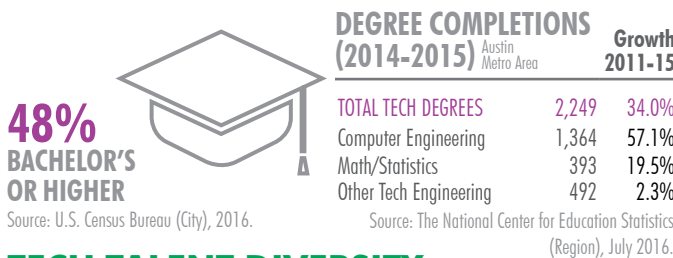
POPULATION TRENDS

The population of millennials in their 20s grew by 9,763 (5.5%) since 2010. That's 7.2% of total growth in a population of 931,840.

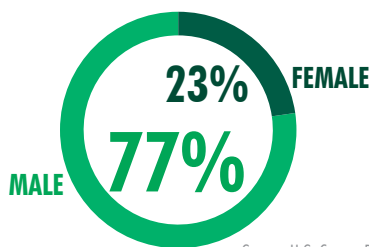


Source: U.S. Census Bureau (City of Austin), 2016.

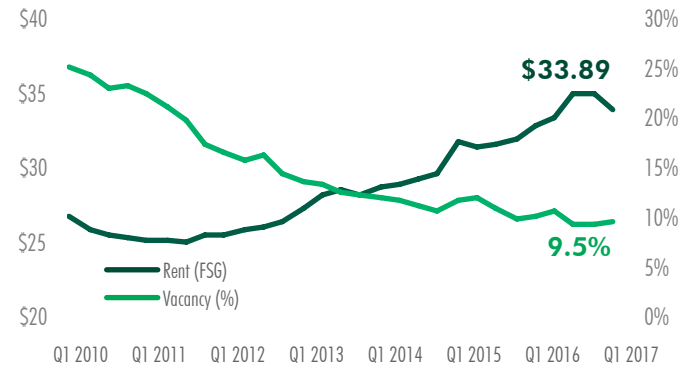
EDUCATIONAL ATTAINMENT



TECH TALENT DIVERSITY



OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,201 PER UNIT/MO.
23% INCREASE SINCE 2010

*Austin Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Newgistics	7171 Southwest Pkwy	42,576
Kingsisle Entertainment	301 Sundance Pkwy	20,871
Broadway Technology	5000 Plaza On The Lake	17,823
Maxim Integrated Products, Inc	3900 N Capital of Texas Hwy	12,828
Lithium Technologies	6850 Austin Center Blvd	12,069

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Texas	511	\$4,763

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Zalora, Apollo Endosurgery, Dermira, AirStrip Technologies, Skyonic

Source: Pitchbook, 2017.

9 Boston, MA

SCORE
57.57

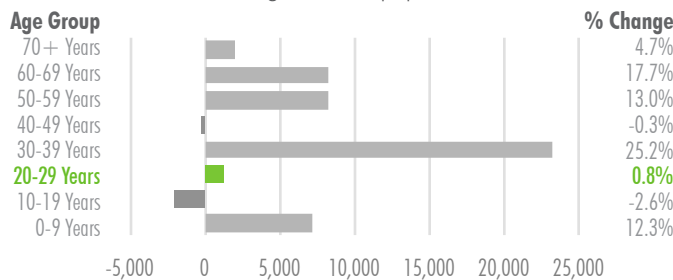
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	115,560	11.4%	\$103,979	9.0%
Software Developers & Programmers	47,840	16.2%	\$108,200	7.2%
Computer Support, Database & Systems	43,900	12.3%	\$88,219	11.1%
Computer & Infor. Systems Managers	11,200	12.4%	\$154,700	10.1%
Technology Engineering-Related	12,620	-6.7%	\$97,790	6.9%
TOTAL NON-TECH OCCUPATIONS	233,080	9.2%	\$68,434	13.0%
Sales	28,040	22.4%	\$92,103	5.8%
Administrative & Office Support	133,470	6.9%	\$55,668	16.9%
Business Operations & Finance	50,080	4.0%	\$86,023	7.6%
Marketing	21,490	23.2%	\$75,852	16.3%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

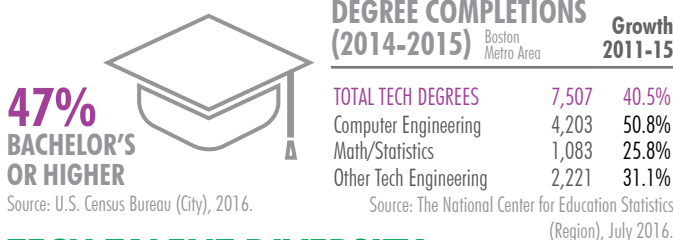
POPULATION TRENDS

The population of millennials in their 20s grew by 1,266 (0.8%) since 2010. That's 2.6% of total growth in a population of 669,469.



Source: U.S. Census Bureau (City of Boston), 2016.

EDUCATIONAL ATTAINMENT

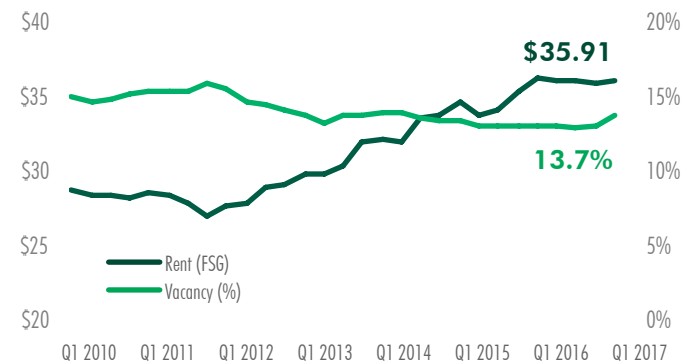


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$2,154 PER UNIT/MO.
20% INCREASE SINCE 2011

*Boston Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Confidential	235 Summer St	144,500
Confidential	120 Turnpike Rd	82,000
Kayak Software	10 Canal Pk	54,000
Zensar Technologies (Akibia)	4 Technology Dr	40,700
Desktop Metal	63 Third Ave	40,000

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
MIT	695	\$12,874
Harvard	673	\$17,204
Boston University	257	\$3,955
Tufts University	200	\$2,713
University of Massachusetts	210	\$2,683

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Oscar, Dropbox, Human Longevity, Gilt, Humacyte, Coupang, Cloudera, BabyTree, Zenefits, Affirm

Source: Pitchbook, 2017.

10 Dallas/Ft. Worth, TX

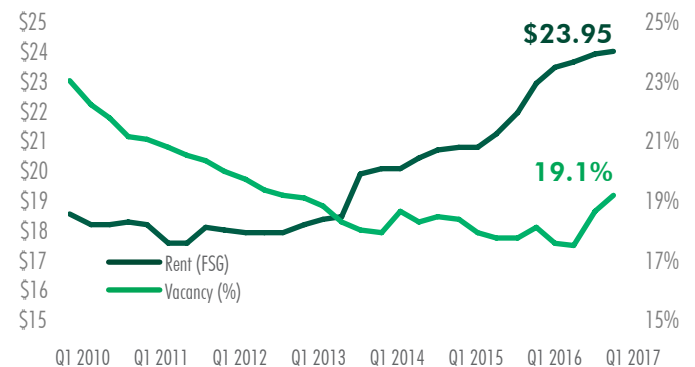
SCORE
55.40

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	161,150	33.4%	\$93,339	8.9%
Software Developers & Programmers	49,410	18.4%	\$102,199	9.8%
Computer Support, Database & Systems	84,750	58.3%	\$83,579	15.8%
Computer & Infor. Systems Managers	8,220	4.3%	\$156,805	1.5%
Technology Engineering-Related	18,770	6.2%	\$86,285	9.8%
TOTAL NON-TECH OCCUPATIONS	468,280	23.7%	\$57,504	16.2%
Sales	50,010	46.5%	\$68,773	-6.5%
Administrative & Office Support	321,730	17.0%	\$49,983	20.3%
Business Operations & Finance	72,600	37.7%	\$78,353	10.1%
Marketing	23,940	43.1%	\$71,814	14.9%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

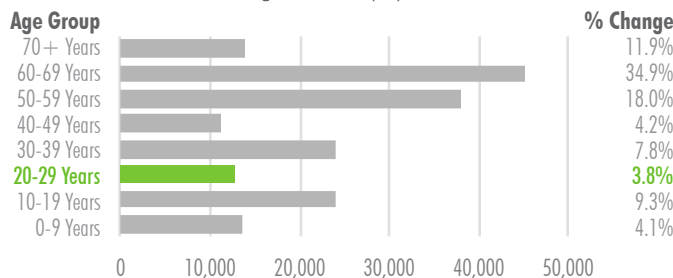
OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 12,757 (3.8%) since 2010. That's 6.7% of total growth in a population of 2,137,051.



Source: U.S. Census Bureau (Cities of Dallas and Ft. Worth), 2016.

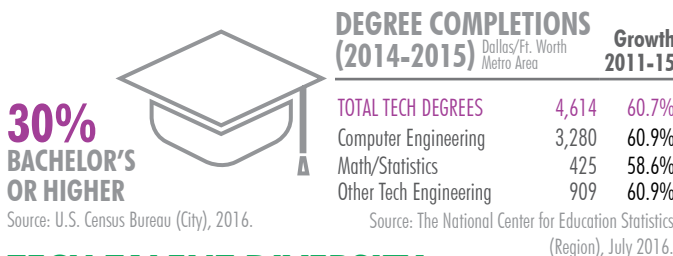
HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,094 PER UNIT/MO.
26% INCREASE SINCE 2011

*Dallas/Ft. Worth Metro Area
Source: Relative Costs from Moody's Analytics
(metro area), Q1 2017; Apt. rent data from
CBRE EA (City), Q1 2017.

EDUCATIONAL ATTAINMENT



TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
NTT Data	7950 Legacy Dr	126,715
CyrusOne LLC	2101 Cedar Springs Rd	30,137
IBM	3010 Gayord Pkwy	26,656
Check Point Software Technologies	6330 Commerce Dr	24,807
Markit On Demand	5575 Flatiron Pkwy	96,267

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

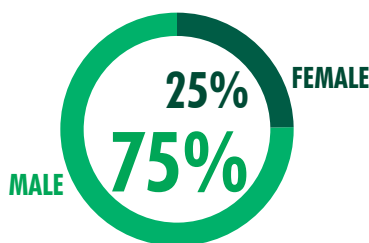
Top Regional Universities	Company Count	Capital Raised (Millions)
University of Texas	511	\$4,763

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Zalora, Apollo Endosurgery, Dermira, AirStrip Technologies, Skyonic

Source: Pitchbook, 2017.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

11 Baltimore, MD

SCORE
55.28

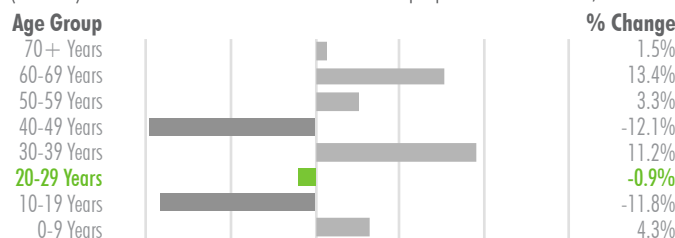
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	72,710	35.2%	\$98,824	12.0%
Software Developers & Programmers	20,010	30.3%	\$100,572	1.7%
Computer Support, Database & Systems	39,560	48.8%	\$93,051	18.2%
Computer & Infor. Systems Managers	4,380	-1.6%	\$142,690	20.1%
Technology Engineering-Related	8,760	18.7%	\$98,966	21.3%
TOTAL NON-TECH OCCUPATIONS	172,380	13.8%	\$55,695	11.1%
Sales	19,330	95.8%	\$75,707	7.2%
Administrative & Office Support	114,720	3.8%	\$46,502	7.6%
Business Operations & Finance	29,610	18.4%	\$76,804	9.5%
Marketing	8,720	44.6%	\$60,595	0.1%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

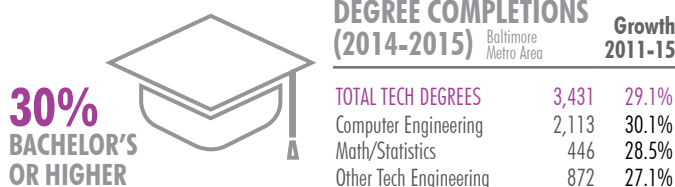
POPULATION TRENDS

The population of millennials in their 20s declined by 1,012 (-0.9%) since 2010. That's -79.9% in a population of 621,849.



Source: U.S. Census Bureau (City of Baltimore), 2016.

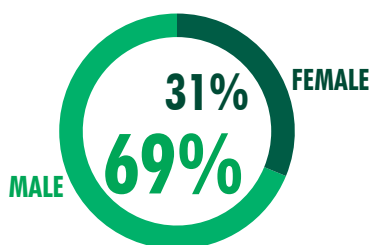
EDUCATIONAL ATTAINMENT



Source: U.S. Census Bureau (City), 2016.

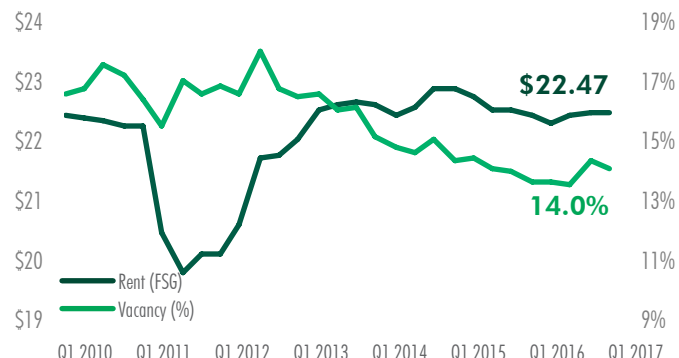
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,255 PER UNIT/MO.
10% INCREASE SINCE 2011

*Baltimore Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
PayPal	9690 Deereco Rd	59,824
Skyline Network Engineering	6956 Aviation Blvd	28,753
PayPal	101 Schilling Rd	28,021
Enlighten IT	991 Corporate Blvd	21,090
Ventech	21 Governors Ct	16,000

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Maryland	267	\$3,169
Georgetown	222	\$3,186

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

12 Denver, CO

SCORE
53.37

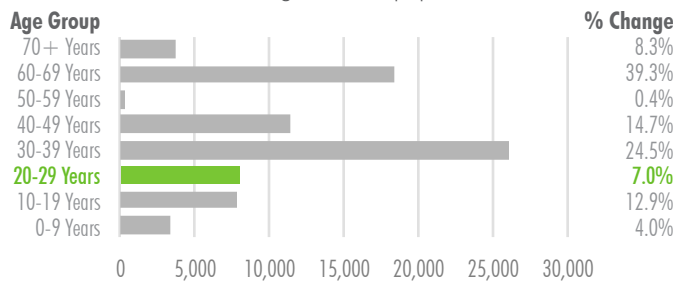
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	77,310	29.0%	\$100,383	19.9%
Software Developers & Programmers	27,750	24.3%	\$109,127	19.7%
Computer Support, Database & Systems	38,050	37.3%	\$88,099	19.8%
Computer & Infor. Systems Managers	4,290	26.9%	\$164,730	28.0%
Technology Engineering-Related	7,220	10.6%	\$93,279	19.3%
TOTAL NON-TECH OCCUPATIONS	189,160	15.3%	\$59,194	17.3%
Sales	25,180	69.6%	\$81,514	10.7%
Administrative & Office Support	111,150	4.6%	\$45,980	17.4%
Business Operations & Finance	37,920	16.8%	\$78,916	8.2%
Marketing	14,910	42.1%	\$69,844	11.9%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

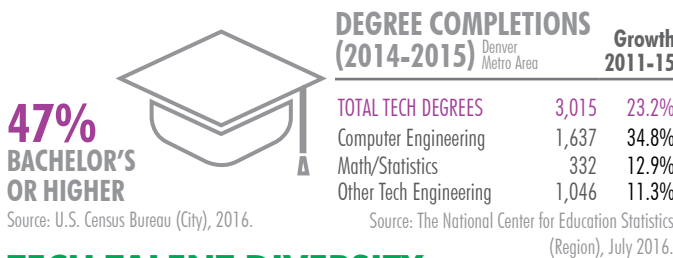
POPULATION TRENDS

The population of millennials in their 20s grew by 7,941 (7.0%) since 2010. That's 10.2% of total growth in a population of 682,545.



Source: U.S. Census Bureau (City of Denver), 2016.

EDUCATIONAL ATTAINMENT

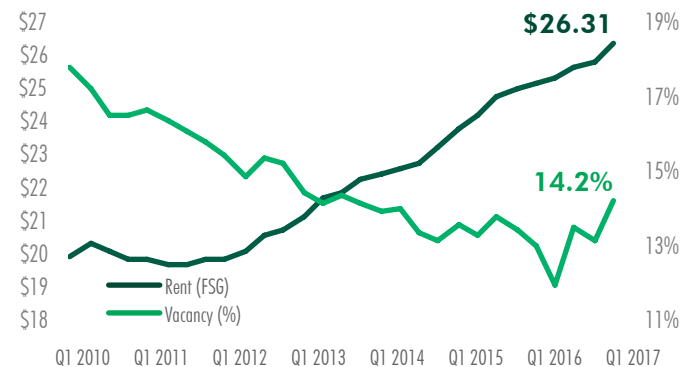


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,395 PER UNIT/MO.
39% INCREASE SINCE 2011

*Denver Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Vertafore	999 18th St	62,179
Confidential	7595 Technology Way	29,907
Cisco Systems	9155 East Nichols Ave	25,944
RingCentral	8005 South Chester St	19,074
SAIC	105 Technology Dr	18,937

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	VC-Backed Firms Founded Since 2010	Capital Raised (Millions)
University of Colorado	265	\$3,470

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

13 Newark, NJ

SCORE
52.55

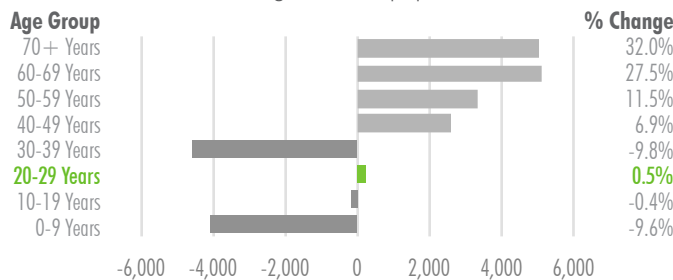
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	52,600	16.5%	\$107,612	11.1%
Software Developers & Programmers	18,910	13.2%	\$104,276	6.7%
Computer Support, Database & Systems	24,070	25.6%	\$95,513	19.4%
Computer & Infor. Systems Managers	5,340	-2.4%	\$177,500	15.9%
Technology Engineering-Related	4,280	-3.7%	\$103,198	8.9%
TOTAL NON-TECH OCCUPATIONS	142,050	3.5%	\$54,039	4.4%
Sales	15,420	12.9%	\$85,947	-16.7%
Administrative & Office Support	96,920	0.9%	\$39,544	8.9%
Business Operations & Finance	21,250	-0.8%	\$87,841	6.5%
Marketing	8,460	20.9%	\$77,031	15.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

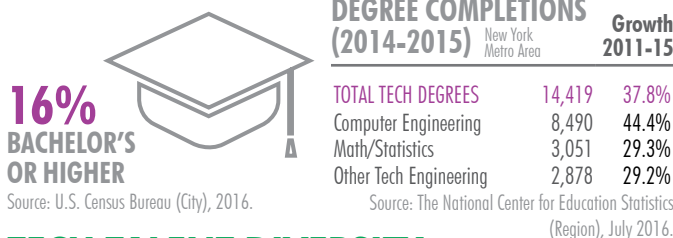
POPULATION TRENDS

The population of millennials in their 20s grew by 223 (0.5%) since 2010. That's 4.8% of total growth in a population of 281,913.



Source: U.S. Census Bureau (City of Newark), 2016.

EDUCATIONAL ATTAINMENT

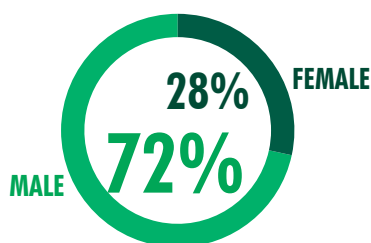


16%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

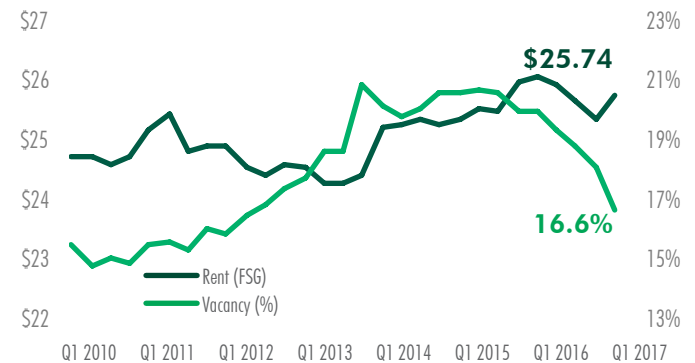
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,732 PER UNIT/MO.
12.1% INCREASE SINCE 2011

*Newark Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Confidential	33 Washington St	24,692
Applegate	10 Exchange Pl	12,960
Combustion Innovation Group	695 Route 46 W	12,882
Mediaocean	777 Terrace Ave	12,428
The FORT Group	100 Challenger Rd	11,500

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
Princeton	382	\$6,976
Columbia	347	\$4,995
NYU	307	\$2,682

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Jet, Demand Media, AppNexus, Harvest Power, Mosaic (Residential Solar Lending Platform)

Source: Pitchbook, 2017.

14 Orange County, CA

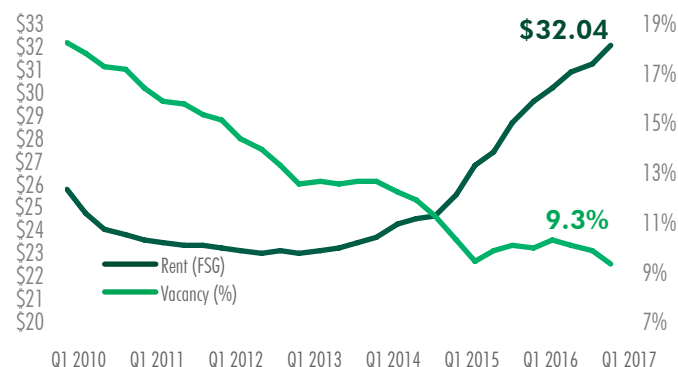
SCORE
51.87

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	68,220	23.2%	\$99,256	10.7%
Software Developers/Programmers	25,360	24.9%	\$109,418	13.6%
Computer Support, Database & Systems	27,230	40.4%	\$81,692	12.5%
Computer & Infor. Systems Managers	4,920	19.4%	\$142,830	6.9%
Technology Engineering-Related	10,710	-7.3%	\$99,831	9.9%
TOTAL NON-TECH OCCUPATIONS	199,600	11.1%	\$56,534	5.9%
Sales	25,180	7.7%	\$75,918	-1.0%
Administrative & Office Support	127,920	7.0%	\$45,817	4.5%
Business Operations & Finance	30,830	20.9%	\$78,929	9.4%
Marketing	15,670	40.8%	\$68,816	7.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

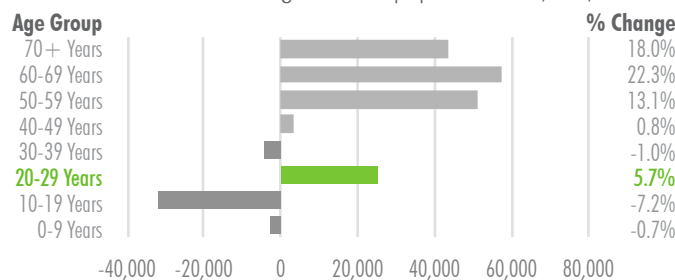
OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 25,188 (5.7%) since 2010. That's 16.7% of total growth in a population of 3,169,776.



Source: U.S. Census Bureau (Orange County), 2016.

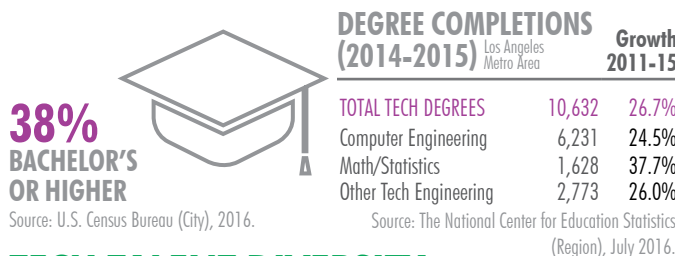
HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,986 PER UNIT/MO.
19% INCREASE SINCE 2011

*Santa Ana Metro Div
Source: Relative Costs from Moody's Analytics
(metro area), Q1 2017; Apt. rent data from
CBRE EA (City), Q1 2017.

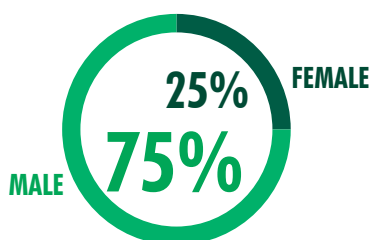
EDUCATIONAL ATTAINMENT



Source: U.S. Census Bureau (City), 2016.

Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Kelley Blue Book	189, 195 & 217 Technology Dr	146,970
Toshiba America	5231-5241 California	96,352
Toshiba America	25530 Commercentre Dr	70,558
Blizzard Entertainment	15253 Bake Pky	65,006
Qualcomm	3347 Michelson Dr	25,968

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of California Los Angeles	406	\$6,988
University of Southern California	341	\$3,476

VC-Funded Companies Founded by Alumni of Top Regional Universities:

BabyTree, BrightSource Energy, Demand Media, The Honest Company, Hortonworks, Lookout, Instacart, CrowdStrike, Moda Operandi, Crescendo Bioscience

Source: Pitchbook, 2017.

15 Chicago, IL

SCORE
51.78

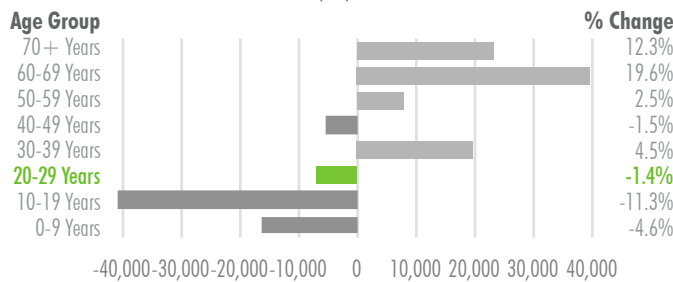
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	143,190	32.8%	\$91,200	11.8%
Software Developers & Programmers	44,390	7.9%	\$95,180	7.7%
Computer Support, Database & Systems	77,120	74.7%	\$82,131	19.1%
Computer & Infor. Systems Managers	11,410	11.0%	\$140,050	21.5%
Technology Engineering-Related	10,270	-16.2%	\$87,830	15.1%
TOTAL NON-TECH OCCUPATIONS	442,650	7.5%	\$55,496	8.9%
Sales	46,910	10.1%	\$70,887	-2.6%
Administrative & Office Support	298,130	2.7%	\$47,574	10.2%
Business Operations & Finance	70,330	25.5%	\$76,475	6.8%
Marketing	27,280	18.5%	\$61,519	5.3%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

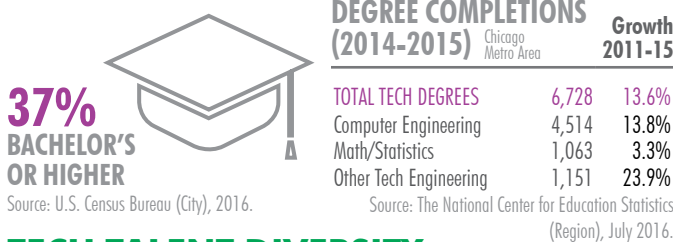
POPULATION TRENDS

The population of millennials in their 20s declined by 6,820 (-1.4%) since 2010. That's -31.4% in a population of 2,720,556.



Source: U.S. Census Bureau (City of Chicago), 2016.

EDUCATIONAL ATTAINMENT



37%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

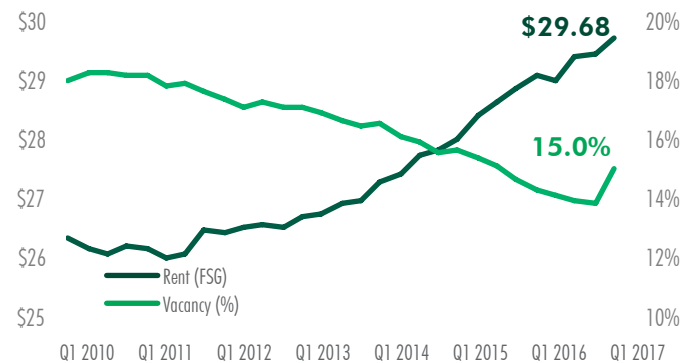
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,512 PER UNIT/MO.
21% INCREASE SINCE 2011

*Chicago Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
Outcome Health	515 N State St	393,763
Paylocity Corporation	1400 American Ln	309,559
Echo Global Logistics	600 W Chicago Ave	224,678
Cars.com	300 S Riverside Plz	158,000
Expedia	500 W Madison St	96,980

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Illinois	415	\$5,462
Northwestern	259	\$3,385

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Avant, Affirm, ZocDoc, CRISPR Therapeutics, Otonomy

Source: Pitchbook, 2017.

16 Vancouver, BC

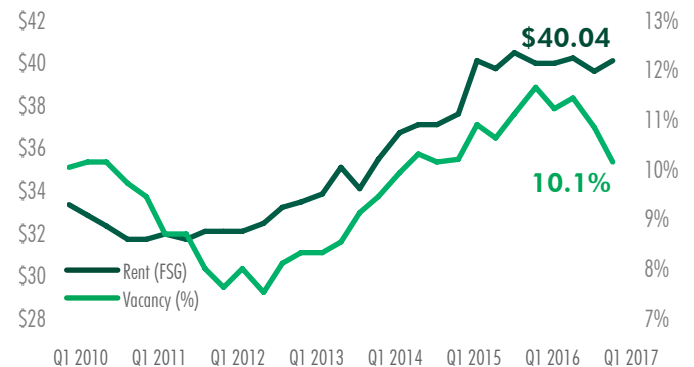
SCORE
51.40

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage*	Growth 2011-16
TOTAL TECH OCCUPATIONS	65,100	36.8%	\$79,402	12.8%
Software Developers & Programmers	22,000	44.7%	\$79,518	9.4%
Computer Support, Database & Systems	19,900	53.1%	\$75,046	18.0%
Computer & Infor. Systems Managers	6,500	71.1%	\$94,931	9.7%
Technology Engineering-Related	16,700	7.1%	\$78,395	12.2%
TOTAL NON-TECH OCCUPATIONS	124,700	18.8%	\$53,127	8.5%
Sales	3,300	37.5%	\$31,574	7.3%
Administrative & Office Support	68,900	8.5%	\$44,949	12.4%
Business Operations & Finance	33,800	17.8%	\$67,371	2.0%
Marketing	18,700	79.8%	\$61,318	0.4%

*in CAD; Source: Statistics Canada (Metro Area), April 2017.

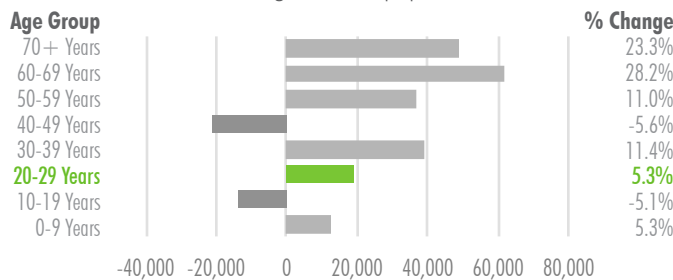
OFFICE RENT* & VACANCY TRENDS



*Rent in CAD; Source: CBRE Research, Q1 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 19,138 (5.3%) since 2010. That's 10.5% of total growth in a population of 2,526,685.



Source: Environics Analytics (Vancouver Metro), 2016.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,313 PER UNIT/MO.
17% INCREASE SINCE 2010

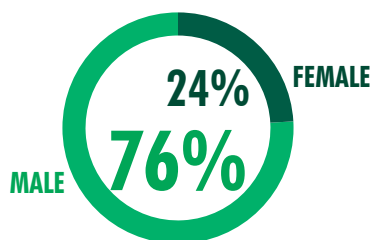
*Vancouver Metro Area; Data in CAD
Source: Relative Costs from Moody's Analytics
(metro area), Q1 2017; Apt. rent data from
CBRE EA (City), Q1 2017.

EDUCATIONAL ATTAINMENT



Source: Statistics Canada (City), 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Hootsuite	2015 Main St	42,000
Visier	858 Beatty St	40,000
Image Engine	929 Granville St	38,000
Scanline VFX	580 Granville St	36,000
Thunderbird Games	123 W 7th St	35,000

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of British Columbia	159	\$1,010

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

17 Phoenix, AZ

SCORE
51.24

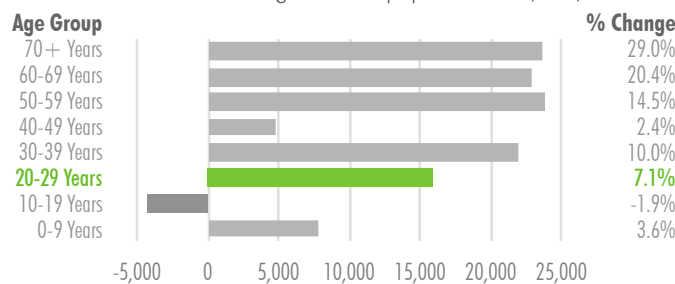
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	83,140	33.5%	\$86,231	10.0%
Software Developers/Programmers	26,700	53.3%	\$90,673	1.8%
Computer Support, Database & Systems	44,720	59.3%	\$76,625	17.7%
Computer & Infor. Systems Managers	5,570	33.9%	\$141,870	26.1%
Technology Engineering-Related	6,150	-51.3%	\$86,401	5.4%
TOTAL NON-TECH OCCUPATIONS	257,360	17.6%	\$48,315	2.5%
Sales	25,160	24.3%	\$62,104	-10.4%
Administrative & Office Support	186,510	17.7%	\$42,827	5.3%
Business Operations & Finance	31,900	4.5%	\$63,546	4.8%
Marketing	13,790	42.0%	\$62,151	-2.5%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

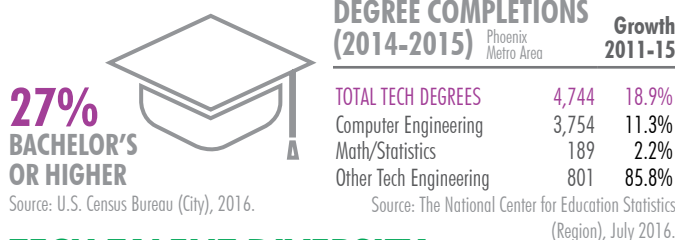
POPULATION TRENDS

The population of millennials in their 20s grew by 15,919 (7.1%) since 2010. That's 14.0% of total growth in a population of 1,563,001.



Source: U.S. Census Bureau (City of Phoenix), 2016.

EDUCATIONAL ATTAINMENT

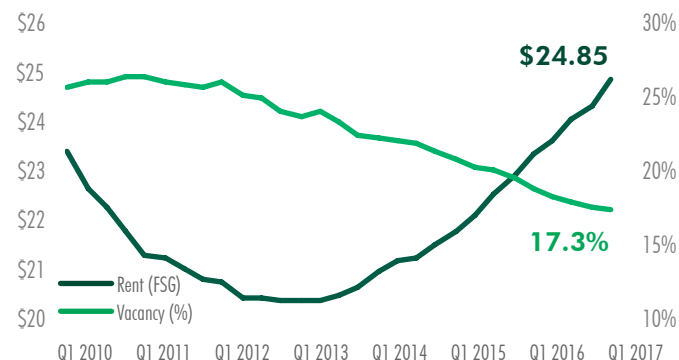


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$956 PER UNIT/MO.
26% INCREASE SINCE 2011

*Phoenix Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Endurance International Group	1500 N Priest Dr	71,618
Scientific Technologies Corporation	411 S 1st St	26,174
Indeed	4343 N Scottsdale Rd	24,398
Opendoor	6360 E Thomas Rd	12,546
Safe Streets USA	5710 W Chandler Blvd	12,394

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Arizona	168	\$1,938

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

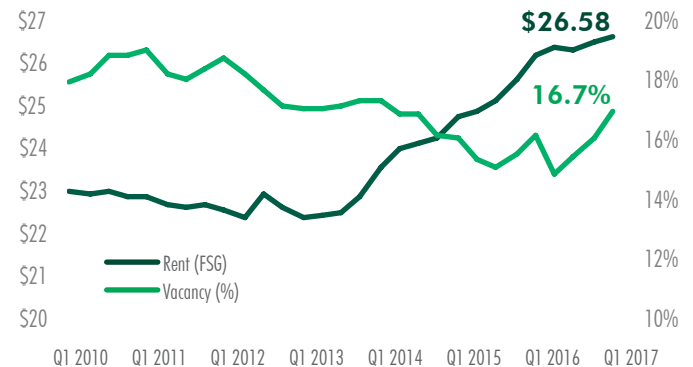
18 Minneapolis/St. Paul, MN SCORE 51.06

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	95,220	25.5%	\$91,686	11.8%
Software Developers & Programmers	28,630	28.4%	\$94,747	6.7%
Computer Support, Database & Systems	50,330	36.8%	\$82,078	17.0%
Computer & Infor. Systems Managers	8,530	4.2%	\$142,000	18.0%
Technology Engineering-Related	7,730	-10.0%	\$87,380	10.9%
TOTAL NON-TECH OCCUPATIONS	239,390	15.6%	\$56,509	10.7%
Sales	25,260	19.0%	\$82,020	16.6%
Administrative & Office Support	149,680	10.5%	\$46,245	7.5%
Business Operations & Finance	44,830	27.9%	\$72,194	9.7%
Marketing	19,620	27.5%	\$66,128	7.4%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

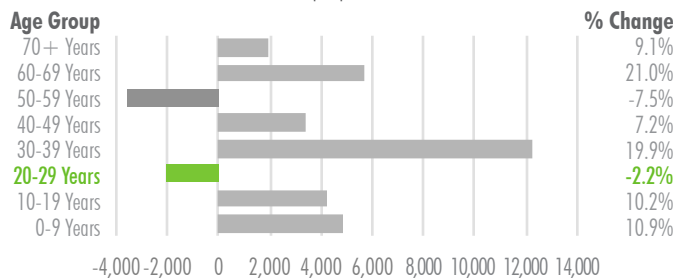
OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

POPULATION TRENDS

The population of millennials in their 20s declined by 2,048 (-2.2%) since 2010. That's -7.4% in a population of 410,935.



Source: U.S. Census Bureau (City of Minneapolis), 2016.

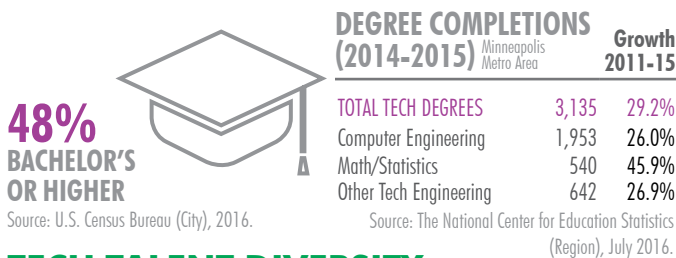
HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,262 PER UNIT/MO.
19% INCREASE SINCE 2011

*Minneapolis Metro Area
 Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

EDUCATIONAL ATTAINMENT



TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Confidential	316 3rd Ave N	103,083
Mobile Soft	120 S 6th St	31,590
Eaton Cooper Power Systems	3033 Campus Dr	28,404
Magenic Technologies	1600 Utica Ave	26,588
EXB Solutions	12755 Hwy 55	10,120

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

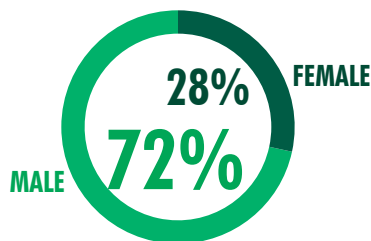
Top Regional Universities	Company Count	Capital Raised (Millions)
University of Minnesota	181	\$3,089

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

19 San Diego, CA

SCORE
50.83

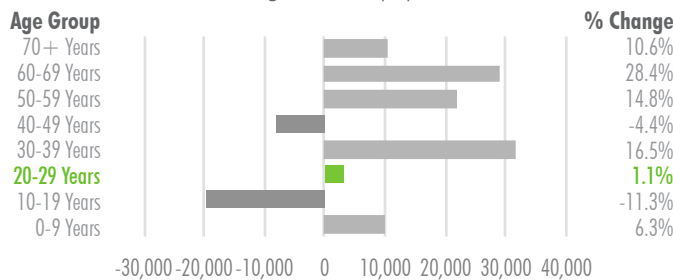
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	66,340	27.7%	\$100,258	13.3%
Software Developers/Programmers	23,870	29.9%	\$102,872	7.5%
Computer Support, Database & Systems	23,620	30.5%	\$84,166	16.0%
Computer & Infor. Systems Managers	4,160	16.9%	\$162,620	21.0%
Technology Engineering-Related	14,690	23.1%	\$104,224	18.5%
TOTAL NON-TECH OCCUPATIONS	158,040	9.6%	\$52,893	-0.4%
Sales	17,180	20.0%	\$66,958	-9.4%
Administrative & Office Support	106,510	6.2%	\$43,758	-3.5%
Business Operations & Finance	22,300	8.8%	\$78,157	6.8%
Marketing	12,050	32.1%	\$66,827	10.5%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

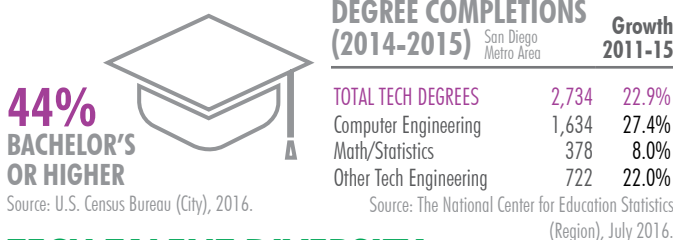
POPULATION TRENDS

The population of millennials in their 20s grew by 3,070 (1.1%) since 2010. That's 3.7% of total growth in a population of 1,394,907.



Source: U.S. Census Bureau (City of San Diego), 2016.

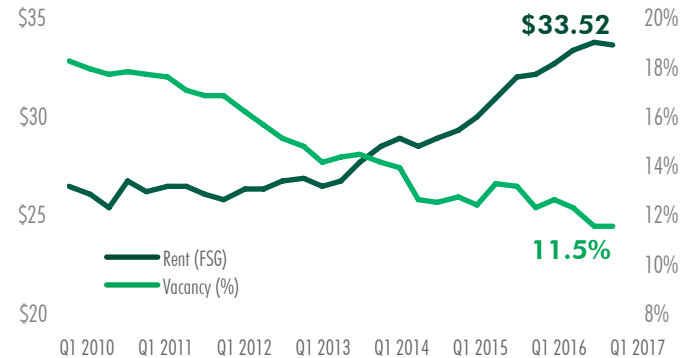
EDUCATIONAL ATTAINMENT



TECH TALENT DIVERSITY



OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Broadcom	16340-16470 Brenardo Dr	90,610
ServiceNow	4820 Eastgate Mall	63,532
XIFIN Inc	12225 El Camino Real	44,121
Psyonix	401 W A St	39,127
SmartDrive	4790 Eastgate Mall	38,807

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of California San Diego	288	\$3,424
University of California Los Angeles	406	\$6,988

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

20 Portland, OR

SCORE
49.88

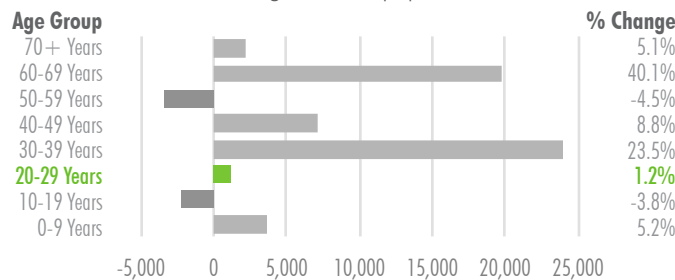
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	50,880	40.4%	\$90,040	12.9%
Software Developers/Programmers	20,410	92.4%	\$94,990	7.6%
Computer Support, Database & Systems	21,320	38.0%	\$77,554	11.8%
Computer & Infor. Systems Managers	4,160	46.5%	\$132,420	16.3%
Technology Engineering-Related	4,990	-31.9%	\$87,805	15.3%
TOTAL NON-TECH OCCUPATIONS	129,530	15.5%	\$51,674	6.3%
Sales	11,680	12.2%	\$68,977	-13.2%
Administrative & Office Support	88,590	11.5%	\$44,216	11.5%
Business Operations & Finance	19,620	18.6%	\$68,998	2.8%
Marketing	9,640	66.8%	\$63,992	1.4%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

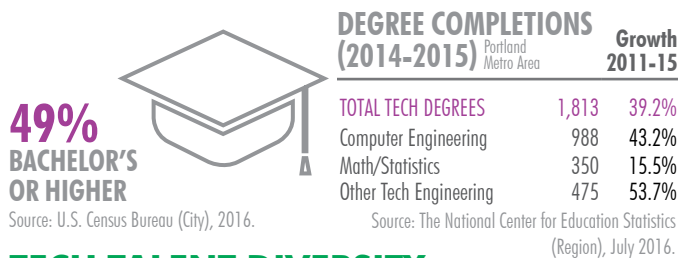
POPULATION TRENDS

The population of millennials in their 20s grew by 1,182 (1.2%) since 2010. That's 2.5% of total growth in a population of 632,187.



Source: EnviroAnalytics (City of Portland), 2016.

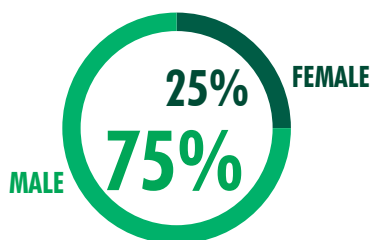
EDUCATIONAL ATTAINMENT



Source: U.S. Census Bureau (City), 2016.

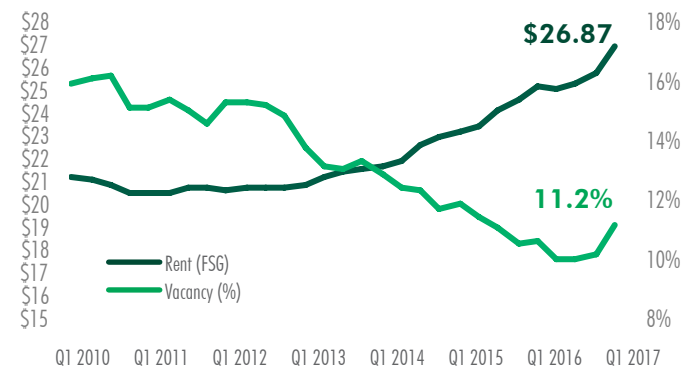
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,370 PER UNIT/MO.
39% INCREASE SINCE 2011

*Portland Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
Autodesk	17 SE 3rd Street	108,750
Simple	120 SE Clay St	53,000
D+H	1320 SW Broadway	45,600
Expensify	401 SW 5th Ave	24,400
Cloudability	334 NW 11th Avenue	22,600

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
N/A	N/A	N/A

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, 2017.

21 Detroit, MI

SCORE
49.34

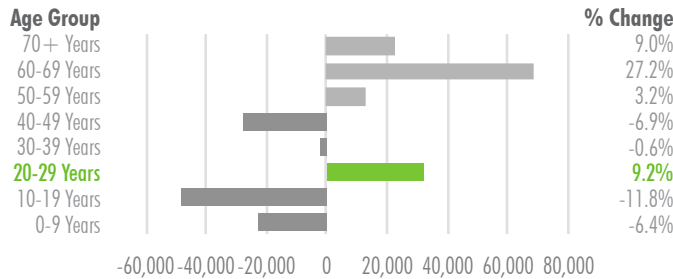
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	78,510	40.7%	\$83,482	9.4%
Software Developers & Programmers	24,500	38.3%	\$85,165	7.7%
Computer Support, Database & Systems	36,960	36.0%	\$76,437	18.2%
Computer & Infor. Systems Managers	5,080	54.9%	\$135,517	-13.2%
Technology Engineering-Related	11,970	56.9%	\$79,709	3.6%
TOTAL NON-TECH OCCUPATIONS	229,180	18.9%	\$54,098	8.2%
Sales	21,940	71.8%	\$75,798	-3.0%
Administrative & Office Support	163,050	13.8%	\$46,090	5.7%
Business Operations & Finance	31,110	11.1%	\$75,322	13.7%
Marketing	13,080	50.5%	\$67,047	8.7%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

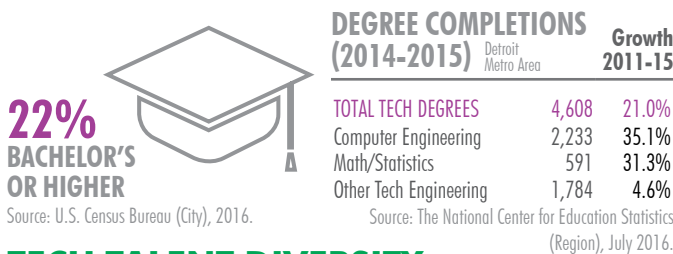
POPULATION TRENDS

The population of millennials in their 20s grew by 32,028 (9.2%) since 2010. That's 113.5% of total growth in a population of 2,784,268.



Source: U.S. Census Bureau (City of Detroit and Macomb/Oakland Counties), 2016.

EDUCATIONAL ATTAINMENT

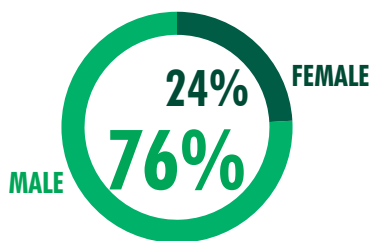


22%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

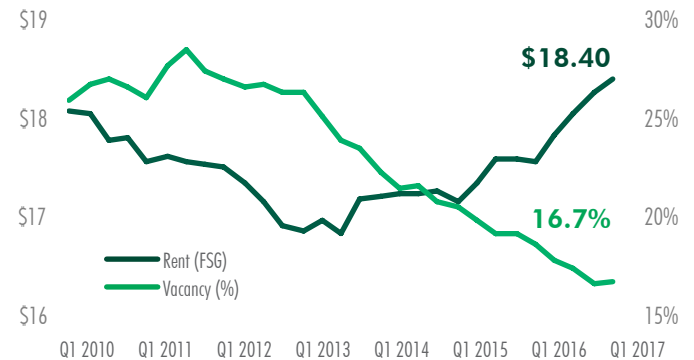
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$958 PER UNIT/MO.
18% INCREASE SINCE 2011

*Detroit Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
Confidential	1 Campus Martius Ave	40,000
Tyco Electronics	900 Wilshire Dr	15,954
HERE	400 Galleria	52,000
Netlink	6322 Progress Dr	32,120
EWI Worldwide	27777 Inkster Rd	31,428

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of Michigan	546	\$7,767

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Groupon, Medallia, Twilio, 23andMe, Calera

Source: Pitchbook, 2017.

22 Philadelphia, PA

SCORE
49.17

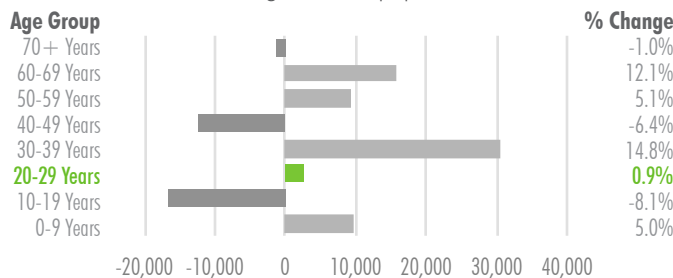
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	77,700	27.1%	\$93,551	9.6%
Software Developers/Programmers	26,910	32.6%	\$97,300	5.7%
Computer Support, Database & Systems	39,310	30.5%	\$82,372	10.8%
Computer & Infor. Systems Managers	5,530	34.9%	\$161,270	14.8%
Technology Engineering-Related	5,950	-10.3%	\$87,505	8.0%
TOTAL NON-TECH OCCUPATIONS	261,650	5.8%	\$56,773	4.0%
Sales	25,610	42.1%	\$80,864	1.7%
Administrative & Office Support	174,970	0.7%	\$46,669	-0.1%
Business Operations & Finance	41,910	5.5%	\$78,841	6.5%
Marketing	19,160	20.5%	\$68,571	7.1%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

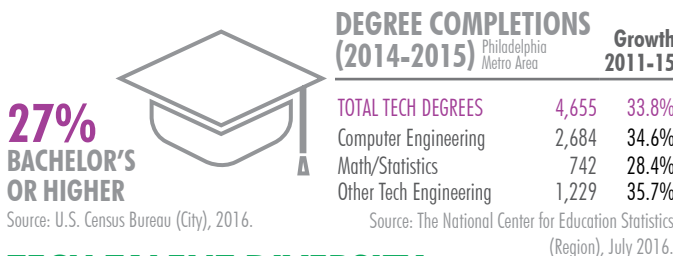
POPULATION TRENDS

The population of millennials in their 20s grew by 2,655 (0.9%) since 2010. That's 6.8% of total growth in a population of 1,567,442.



Source: U.S. Census Bureau (City of Philadelphia), 2016.

EDUCATIONAL ATTAINMENT

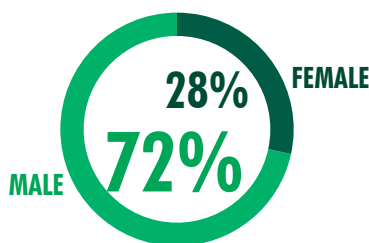


27%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

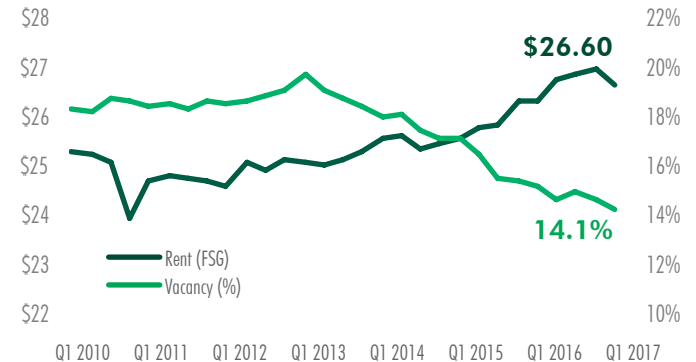
Source: The National Center for Education Statistics (Region), July 2016.

TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,278 PER UNIT/MO.
8% INCREASE SINCE 2011

*Philadelphia Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Cotiviti	785 Arbor Way	86,620
DecisionOne	640 Lee Rd	25,570
Freedom Pay	2929 Walnut St	24,813
TargetX	1001 E Hector Rd	10,787
The Neat Company	1500 Jonh F Kennedy Blvd	6,000

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	VC-Backed Firms Founded Since 2010	Capital Raised (Millions)
University of Pennsylvania	648	\$9,475
Penn State	236	\$2,180

VC-Funded Companies Founded by Alumni of Top Regional Universities:

Zynga, Flatiron Health, ZocDoc, Fuze, SolarCity

Source: Pitchbook, 2017.

23 Salt Lake City, UT

SCORE
49.12

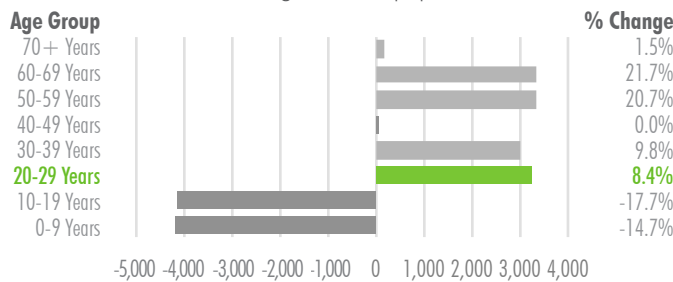
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	31,750	45.3%	\$82,803	13.2%
Software Developers/Programmers	12,130	59.0%	\$91,508	8.0%
Computer Support, Database & Systems	13,440	29.6%	\$68,594	13.5%
Computer & Infor. Systems Managers	2,810	111.3%	\$108,170	-5.2%
Technology Engineering-Related	3,370	33.7%	\$86,983	26.5%
TOTAL NON-TECH OCCUPATIONS	105,970	18.8%	\$47,138	8.0%
Sales	12,440	20.0%	\$63,018	1.7%
Administrative & Office Support	73,770	17.2%	\$39,671	9.3%
Business Operations & Finance	13,790	20.3%	\$67,906	5.8%
Marketing	5,970	33.9%	\$58,340	11.6%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

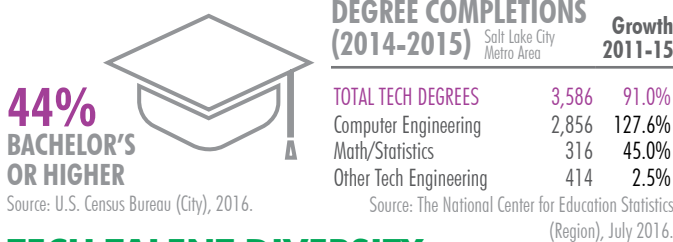
POPULATION TRENDS

The population of millennials in their 20s grew by 3,246 (8.4%) since 2010. That's 59.6% of total growth in a population of 192,660.

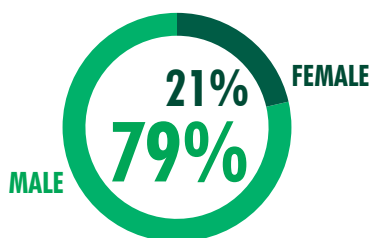


Source: U.S. Census Bureau (City of Salt Lake City), 2016.

EDUCATIONAL ATTAINMENT

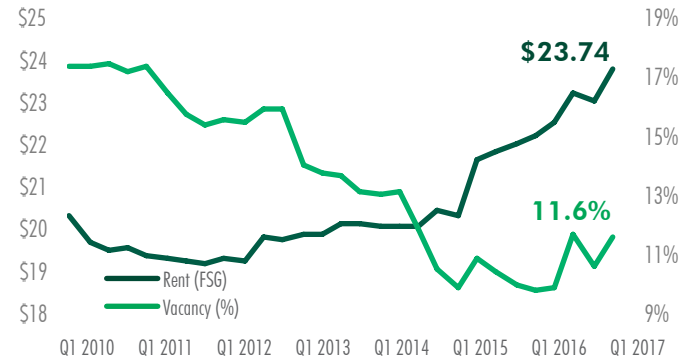


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,044 PER UNIT/MO.
28% INCREASE SINCE 2011

*Salt Lake City Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
U of Utah Information Tech Services	102 S 200 E	140,000
Lucid Software	10355 S South Jordan Parkway	90,000
Connexion Point	9500 S 300 W	75,000
Imagine Learning	400 Qualtrics Dr	75,000
Instructure	Pleasant Grove Blvd	65,000

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
Brigham Young	255	\$3,692

VC-Funded Companies Founded by Alumni of Top Regional Universities:

N/A

Source: Pitchbook, Q3 2015.

24 Los Angeles, CA

SCORE
47.08

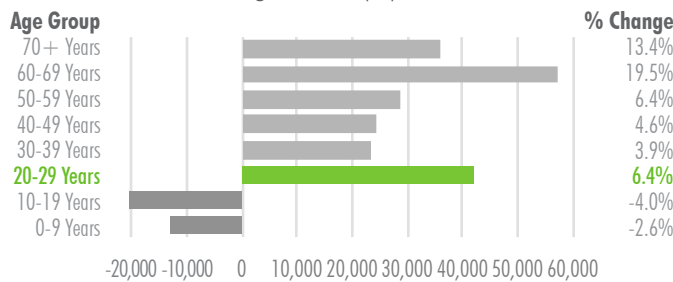
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	126,730	19.0%	\$95,617	6.8%
Software Developers & Programmers	43,480	19.3%	\$102,811	6.4%
Computer Support, Database & Systems	58,990	29.4%	\$82,740	13.2%
Computer & Infor. Systems Managers	8,910	-4.9%	\$156,740	15.2%
Technology Engineering-Related	15,350	1.8%	\$89,244	-4.1%
TOTAL NON-TECH OCCUPATIONS	516,190	9.7%	\$56,099	10.4%
Sales	49,690	33.1%	\$72,067	3.0%
Administrative & Office Support	346,230	4.0%	\$46,575	10.8%
Business Operations & Finance	77,920	11.9%	\$81,243	6.4%
Marketing	42,350	39.0%	\$68,961	6.3%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

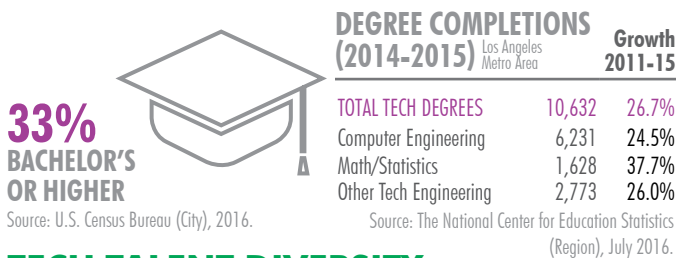
POPULATION TRENDS

The population of millennials in their 20s grew by 41,973 (6.4%) since 2010. That's 24% of total growth in a population of 3,971,896.



Source: U.S. Census Bureau (City of Los Angeles), 2016.

EDUCATIONAL ATTAINMENT

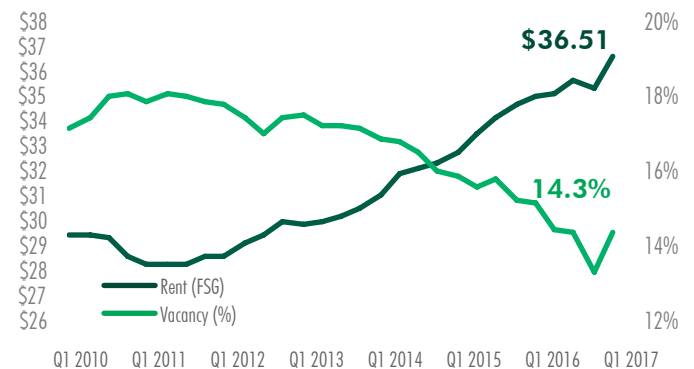


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2015.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$2,214 PER UNIT/MO.
24% INCREASE SINCE 2011

*Los Angeles Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Farfetch.com	700 S Flower St	24,750
Honey Science Corporation	990 W 8th St	23,305
Interactive Data Corp	2901 28th St	22,877
Connexity	2120 Colorado Ave	20,933
Upload VR	4505 Glencoe Ave	20,000

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
University of California Los Angeles	406	\$6,988
University of Southern California	341	\$3,476

VC-Funded Companies Founded by Alumni of Top Regional Universities:

BabyTree, BrightSource Energy, Demand Media, The Honest Company, Hortonworks, Lookout, Instacart, CrowdStrike, Moda Operandi, Crescendo Bioscience

Source: Pitchbook, 2017.

25 Madison, WI

SCORE
46.91

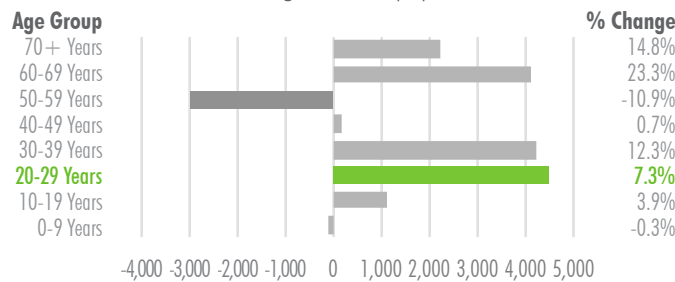
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	23,350	51.2%	\$77,773	8.8%
Software Developers/Programmers	9,490	115.2%	\$79,344	-2.1%
Computer Support, Database & Systems	10,860	31.0%	\$70,379	13.8%
Computer & Infor. Systems Managers	1,600	8.1%	\$117,370	19.5%
Technology Engineering-Related	1,400	11.1%	\$79,218	13.6%
TOTAL NON-TECH OCCUPATIONS	48,420	15.9%	\$54,052	13.5%
Sales	3,470	1.5%	\$72,705	2.7%
Administrative & Office Support	31,840	8.3%	\$48,480	15.8%
Business Operations & Finance	8,570	36.2%	\$64,394	9.2%
Marketing	4,540	70.7%	\$59,354	8.7%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

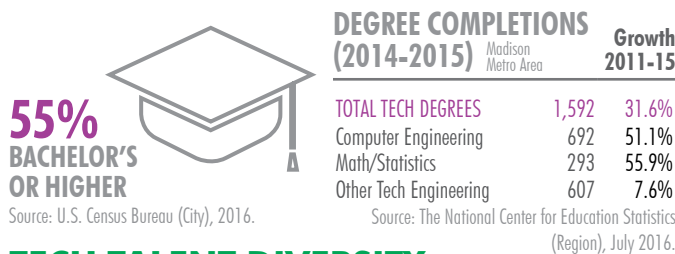
POPULATION TRENDS

The population of millennials in their 20s grew by 4,490 (7.3%) since 2010. That's 29.6% of total growth in a population of 248,956.

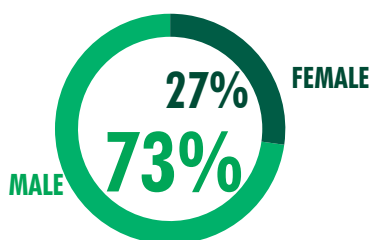


Source: U.S. Census Bureau (City of Madison), 2016.

EDUCATIONAL ATTAINMENT

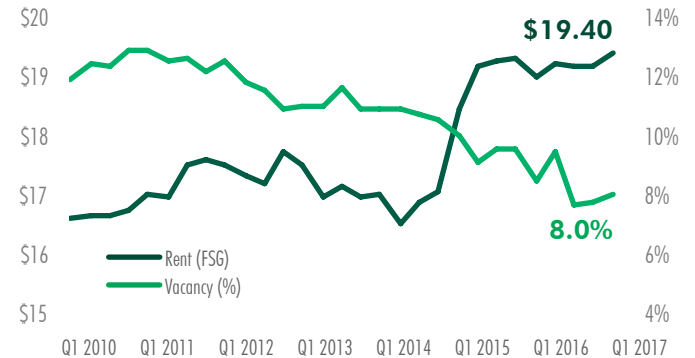


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS* (US=100%)



TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Performance Gateway	2418 Crossroads Dr	5,533
ScheduleSoft	301 S Blount St	3,861
Stealthbits	555 D'Onofrio Dr	3,094

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
N/A		
VC-Funded Companies Founded by Alumni of Top Regional Universities:		
N/A		

Source: Pitchbook, 2017.

26 Charlotte, NC

SCORE
46.29

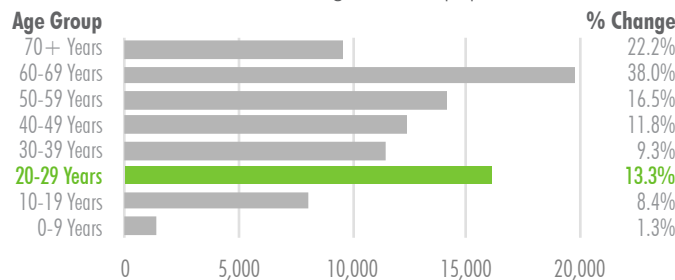
EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH OCCUPATIONS	49,830	77.1%	\$93,105	8.0%
Software Developers & Programmers	15,250	73.1%	\$98,688	9.1%
Computer Support, Database & Systems	26,650	103.1%	\$80,861	10.4%
Computer & Infor. Systems Managers	4,800	31.1%	\$143,110	10.6%
Technology Engineering-Related	3,130	22.7%	\$93,464	22.8%
TOTAL NON-TECH OCCUPATIONS	137,390	29.7%	\$51,879	10.9%
Sales	14,980	54.3%	\$70,676	9.4%
Administrative & Office Support	97,150	32.1%	\$42,711	12.5%
Business Operations & Finance	22,020	28.8%	\$78,916	12.4%
Marketing	3,240	-41.8%	\$56,111	-7.2%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

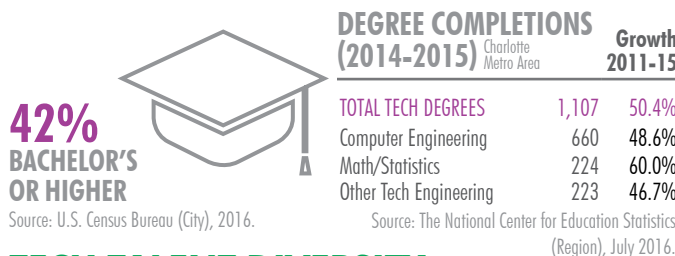
POPULATION TRENDS

The population of millennials in their 20s grew by 16,123 (13.3%) since 2010. That's 17.4% of total growth in a population of 827,121.



Source: U.S. Census Bureau (City of Charlotte), 2016.

EDUCATIONAL ATTAINMENT

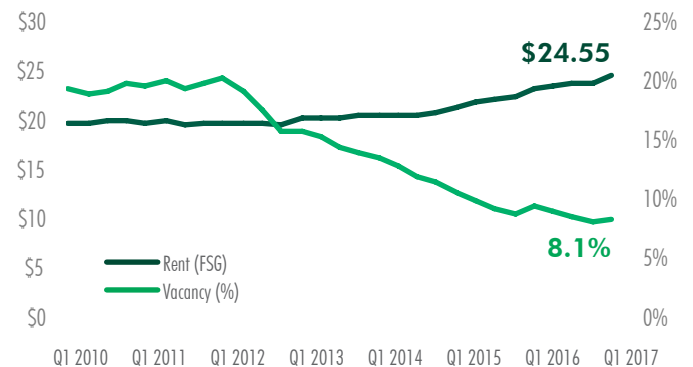


TECH TALENT DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2015.

OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q1 2017.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,032 PER UNIT/MO.
24% INCREASE SINCE 2011

*Charlotte Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
AvidXchange	935 Hamilton St	200,000
Fidelity Information Services	2359 Perimeter Pointe Pkwy	23,196
IBM	10925 David Taylor Dr	21,461
FANUC America	13425 W Reese Blvd	21,217
Comp Tech Systems	3426 Toringdon Way	7,364

Source: CBRE Research (Office Market), 2017.

START-UP PIPELINE

Top Regional Universities	Company Count	Capital Raised (Millions)
N/A		
VC-Funded Companies Founded by Alumni of Top Regional Universities:		
N/A		

Source: Pitchbook, 2017.

27 Tampa, FL

SCORE
45.48

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	45,340	55.3%	\$78,434	6.2%
Software Developers & Programmers	14,220	39.0%	\$85,872	7.1%
Computer Support, Database & Systems	25,340	81.3%	\$68,996	5.2%
Computer & Infor. Systems Managers	2,210	33.1%	\$145,440	15.4%
Technology Engineering-Related	3,570	7.2%	\$74,321	17.8%
TOTAL NON-TECH TALENT	191,860	20.9%	\$45,918	10.9%
Sales	19,530	16.5%	\$63,874	1.4%
Administrative & Office Support	140,720	23.1%	\$38,953	13.3%
Business Operations & Finance	23,250	5.4%	\$67,512	14.0%
Marketing	8,360	48.2%	\$61,162	22.2%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 3,673 (6.3%) since 2010. That's 11.4% of total growth in a population of 369,028.

Source: U.S. Census Bureau (City of Tampa), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$22.67 PSF (up 14.8%); Vacancy: 11.2% (down -920 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Intelligent Software Solutions	5100 W Lemon St	4,196
Lockheed Martin	101 E Kennedy Blvd	2,721
Xcirca	410 S Ware Blvd	1,459

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Tampa Metro area	Growth 2011-15
TOTAL TECH DEGREES	1,324	35.2%
Computer Engineering	976	47.2%
Math/Statistics	119	43.4%
Other Tech Engineering	229	-1.7%

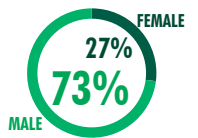
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

36%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$1,113 PER UNIT/MO.
23% INCREASE SINCE 2011

*Tampa MSA

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

28 Columbus, OH

SCORE
45.17

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	48,230	12.9%	\$92,510	20.1%
Software Developers & Programmers	16,080	17.0%	\$100,410	22.2%
Computer Support, Database & Systems	25,700	14.2%	\$81,378	18.5%
Computer & Infor. Systems Managers	3,720	11.0%	\$148,050	22.4%
Technology Engineering-Related	2,730	-12.5%	\$75,092	11.5%
TOTAL NON-TECH TALENT	127,930	9.7%	\$50,909	5.0%
Sales	11,740	21.4%	\$75,432	12.8%
Administrative & Office Support	86,300	6.0%	\$42,129	0.6%
Business Operations & Finance	21,770	15.9%	\$67,890	6.4%
Marketing	8,120	20.3%	\$63,237	6.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 10,423 (6.4%) since 2010. That's 17.6% of total growth in a population of 849,067.

Source: U.S. Census Bureau (City of Columbus), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$19.23 PSF (up 10.5%); Vacancy: 12.3% (down -590 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Pillar Technology Group, LLC	711 N High St	25,000
BarkBox	445 N High St	12,976
Illumination Works, LLC	5550 Blazer Memorial Pkwy	4,545

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Columbus Metro area	Growth 2011-15
TOTAL TECH DEGREES	2,068	25.7%
Computer Engineering	1,042	30.3%
Math/Statistics	246	35.9%
Other Tech Engineering	780	17.5%

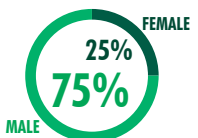
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

35%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016..

HOUSING & RELATIVE COSTS* (US=100%)



AVERAGE APT. RENT:
\$874 PER UNIT/MO.
19% INCREASE SINCE 2011

*Columbus Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

29 Kansas City, MO

SCORE
44.93

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	51,770	39.1%	\$83,024	8.7%
Software Developers & Programmers	15,400	29.3%	\$88,117	5.7%
Computer Support, Database & Systems	27,390	57.4%	\$73,572	8.2%
Computer & Infor. Systems Managers	3,730	54.8%	\$128,370	20.0%
Technology Engineering-Related	5,250	-4.7%	\$85,178	15.0%
TOTAL NON-TECH TALENT	138,490	10.6%	\$49,191	5.6%
Sales	11,810	-2.2%	\$70,041	2.2%
Administrative & Office Support	96,340	11.8%	\$41,463	5.0%
Business Operations & Finance	21,040	4.3%	\$67,209	10.9%
Marketing	9,300	36.2%	\$62,004	11.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 347 (0.5%) since 2010. That's 2.4% of total growth in a population of 475,361.

Source: U.S. Census Bureau (City of Kansas City), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$18.42 PSF (up 9.3%); Vacancy: 12.8% (down -480 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
AutoAlert	114 W 11th St	45,000
Digital Evolution Group	6601 College Blvd	31,000
Vendor Credentialing	10950 Grandview Dr	23,830

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Kansas City Metro area	Growth 2011-15
TOTAL TECH DEGREES	835	40.8%
Computer Engineering	748	47.8%
Math/Statistics	47	11.9%
Other Tech Engineering	40	-11.1%

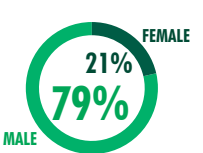
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

33%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$940 PER UNIT/MO.
14% INCREASE SINCE 2011

*Kansas City Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

30 Pittsburgh, PA

SCORE
43.50

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	42,130	23.9%	\$80,432	11.5%
Software Developers & Programmers	12,760	31.1%	\$83,190	6.2%
Computer Support, Database & Systems	21,280	24.2%	\$72,829	14.3%
Computer & Infor. Systems Managers	2,870	40.0%	\$131,290	14.4%
Technology Engineering-Related	5,220	2.8%	\$76,724	7.6%
TOTAL NON-TECH TALENT	147,560	2.6%	\$51,260	10.7%
Sales	11,060	17.8%	\$70,530	-6.3%
Administrative & Office Support	106,020	-1.1%	\$44,567	10.2%
Business Operations & Finance	21,810	9.0%	\$70,628	14.8%
Marketing	8,670	20.4%	\$59,807	11.3%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 11,577 (17.7%) since 2010. That's 843% of total growth in a population of 304,385.

Source: U.S. Census Bureau (City of Pittsburgh), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$21.79 PSF (up 9.6%); Vacancy: 11.4% (up 100 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Confidential	3011 Smallman St	117,609
Argo AI	40 24th Street	23,350
JazzHR	1501 Reedsdale St	8,356

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Pittsburgh Metro area	Growth 2011-15
TOTAL TECH DEGREES	4,081	36.8%
Computer Engineering	2,643	30.1%
Math/Statistics	472	17.4%
Other Tech Engineering	966	76.0%

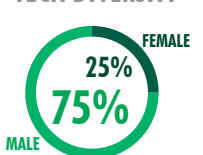
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

41%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,075 PER UNIT/MO.
3% DECREASE SINCE 2011

*Pittsburgh Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

31 Houston, TX

SCORE
42.57

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	97,550	31.4%	\$95,229	14.6%
Software Developers & Programmers	27,020	21.7%	\$100,653	11.9%
Computer Support, Database & Systems	50,530	41.8%	\$85,743	17.0%
Computer & Infor. Systems Managers	5,790	20.9%	\$157,400	19.0%
Technology Engineering-Related	14,210	22.4%	\$93,314	17.2%
TOTAL NON-TECH TALENT	373,940	24.8%	\$58,894	14.2%
Sales	37,650	56.9%	\$74,312	1.3%
Administrative & Office Support	251,230	14.0%	\$49,137	10.1%
Business Operations & Finance	68,820	56.5%	\$84,742	17.0%
Marketing	16,240	42.5%	\$64,546	9.1%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 31,200 (8.5%) since 2010. That's 16.3% of total growth in a population of 2,298,628.

Source: U.S. Census Bureau (City of Houston), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$29.58 PSF (up 27.3%); Vacancy: 16.8% (up 230 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Forum Energy Technologies	920 Memorial City	23,652
Houston Technology Center	13501 Katy Freeway	20,000
Omni AI	1400 Broadfield	8,473

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Houston Metro area	Growth 2011-15
TOTAL TECH DEGREES	2,217	45.2%
Computer Engineering	1,437	57.6%
Math/Statistics	369	29.5%
Other Tech Engineering	411	24.5%

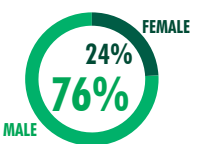
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

31%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,051 PER UNIT/MO.
14% INCREASE SINCE 2011

*Houston Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

32 Orlando, FL

SCORE
38.99

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	35,320	45.0%	\$82,313	12.6%
Software Developers & Programmers	11,450	42.8%	\$91,159	15.3%
Computer Support, Database & Systems	18,330	56.8%	\$70,503	8.5%
Computer & Infor. Systems Managers	2,060	89.0%	\$141,100	10.9%
Technology Engineering-Related	3,480	-2.2%	\$80,614	15.1%
TOTAL NON-TECH TALENT	143,170	15.7%	\$45,347	8.6%
Sales	14,940	-12.4%	\$61,554	3.6%
Administrative & Office Support	104,210	21.6%	\$38,883	13.0%
Business Operations & Finance	20,090	25.1%	\$65,464	10.7%
Marketing	3,930	-21.1%	\$52,292	0.4%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 6,408 (12.3%) since 2010. That's 20.1% of total growth in a population of 270,917.

Source: U.S. Census Bureau (City of Orlando), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$20.97 PSF (up 3.7%); Vacancy: 10.4% (down -880 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
IANPAGE Services, LLC	725 Primera Blvd	37,874
Kittelson & Associations Inc	225 E Robinson St	7,608
iVenture	1901 Summit Tower Blvd	5,840

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Orlando Metro area	Growth 2011-15
TOTAL TECH DEGREES	2,129	43.2%
Computer Engineering	1,367	36.4%
Math/Statistics	105	78.0%
Other Tech Engineering	657	54.2%

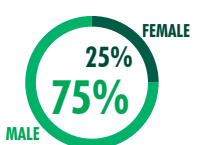
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

36%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,164 PER UNIT/MO.
28% INCREASE SINCE 2011

*Orlando Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

33 Indianapolis, IN

SCORE
36.39

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	35,010	42.3%	\$77,672	7.7%
Software Developers & Programmers	10,880	52.2%	\$77,970	1.4%
Computer Support, Database & Systems	18,990	43.0%	\$73,289	14.1%
Computer & Infor. Systems Managers	2,530	29.7%	\$114,800	4.0%
Technology Engineering-Related	2,610	17.0%	\$72,331	2.2%
TOTAL NON-TECH TALENT	117,510	19.2%	\$51,609	6.4%
Sales	12,900	22.4%	\$72,770	10.7%
Administrative & Office Support	78,010	16.6%	\$44,568	7.0%
Business Operations & Finance	19,070	19.9%	\$64,586	1.2%
Marketing	7,530	43.7%	\$55,428	0.7%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 4,797 (3.6%) since 2010. That's 19.8% of total growth in a population of 848,423.

Source: U.S. Census Bureau (City of Indianapolis), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$18.76 PSF (up 8.6%); Vacancy: 16.4% (down -280 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
RCR Technology Corp	251 Illinois St	19,139
Core BTS	10201 Illinois Sr	7,800
SMARI Research	135 Pennsylvania St	4,309

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Indianapolis Metro area	Growth 2011-15
TOTAL TECH DEGREES	855	38.1%
Computer Engineering	567	28.3%
Math/Statistics	100	2.0%
Other Tech Engineering	188	138.0%

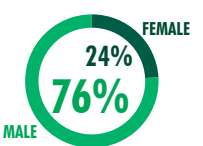
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

29%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$820 PER UNIT/MO.
15% INCREASE SINCE 2011

*Indianapolis Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

34 Rochester, NY

SCORE
35.51

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	21,510	17.8%	\$77,649	8.6%
Software Developers & Programmers	6,290	5.7%	\$85,737	11.8%
Computer Support, Database & Systems	10,870	48.7%	\$65,924	8.1%
Computer & Infor. Systems Managers	1,270	8.5%	\$132,250	10.8%
Technology Engineering-Related	3,080	-19.6%	\$79,996	16.2%
TOTAL NON-TECH TALENT	68,570	14.7%	\$49,166	8.8%
Sales	5,580	45.3%	\$73,383	4.1%
Administrative & Office Support	49,620	14.4%	\$41,624	12.0%
Business Operations & Finance	9,200	0.4%	\$69,087	2.6%
Marketing	4,170	22.3%	\$62,557	5.4%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 269 (0.7%) since 2010. That's 34.1% of total growth in a population of 209,808.

Source: U.S. Census Bureau (City of Rochester), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$19.50 PSF (up 1.8%); Vacancy: 14.8% (down -470 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Conduent	Medley Centre	125,000
Datto	The Metropolitan	42,000
CoreLogic Solutions	Calkins Road Business Park	41,000

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Rochester Metro area	Growth 2011-15
TOTAL TECH DEGREES	1,951	20.7%
Computer Engineering	1,233	30.6%
Math/Statistics	326	-4.1%
Other Tech Engineering	392	17.7%

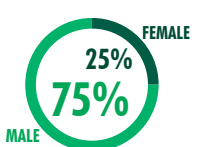
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

22%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,056 PER UNIT/MO.
22% INCREASE SINCE 2011

*Rochester Metro Area
Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

35 St. Louis, MO

SCORE
35.44

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	52,190	7.9%	\$87,174	13.1%
Software Developers & Programmers	14,170	-4.2%	\$94,268	10.9%
Computer Support, Database & Systems	30,500	20.7%	\$77,712	15.6%
Computer & Infor. Systems Managers	3,240	10.6%	\$138,680	19.9%
Technology Engineering-Related	4,280	-20.3%	\$92,127	14.7%
TOTAL NON-TECH TALENT	172,920	14.1%	\$48,584	1.1%
Sales	16,370	39.6%	\$60,583	-5.5%
Administrative & Office Support	122,790	14.7%	\$41,052	-1.4%
Business Operations & Finance	23,630	-7.2%	\$73,096	12.7%
Marketing	10,130	38.4%	\$63,313	9.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s declined by 3,178 (-5.3%) since 2010. That's 91.6% in a population of 315,685.

Source: U.S. Census Bureau (City of St. Louis), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$18.66 PSF (up 1.6%); Vacancy: 14.2% (down -350 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
Amdocs Inc	1390 Timberlake Manor Pkwy	70,881
Riot Games	7777 Bonhomme Ave	23,591
Teksystems	1 Cityplace Dr	15,941

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	St. Louis Metro Area	Growth 2011-15
TOTAL TECH DEGREES	1,555	37.0%
Computer Engineering	823	21.9%
Math/Statistics	303	71.2%
Other Tech Engineering	429	51.6%

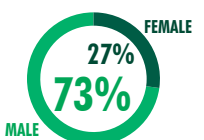
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

35%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$916 PER UNIT/MO.
20% INCREASE SINCE 2011

*St. Louis Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

36 Sacramento, CA

SCORE
35.11

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	39,430	25.3%	\$91,892	7.5%
Software Developers & Programmers	14,680	31.4%	\$95,217	4.3%
Computer Support, Database & Systems	17,150	18.4%	\$80,353	7.9%
Computer & Infor. Systems Managers	2,290	-13.6%	\$133,720	12.5%
Technology Engineering-Related	5,310	68.0%	\$101,930	16.7%
TOTAL NON-TECH TALENT	111,460	8.6%	\$51,740	4.0%
Sales	7,330	17.1%	\$66,762	-8.2%
Administrative & Office Support	79,300	3.0%	\$44,178	1.8%
Business Operations & Finance	19,230	28.4%	\$73,078	11.0%
Marketing	5,600	26.4%	\$65,896	-10.0%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 5,816 (7.5%) since 2010. That's 25.1% of total growth in a population of 490,715.

Source: U.S. Census Bureau (City of Sacramento), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$21.48 PSF (up 4.7%); Vacancy: 14.5% (down -920 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
VOXPRO Group	225 Parkshore Dr	54,784
JLM Energy	3735 Placer Corporate	39,869
New Star Laser	9085 Foothills Blvd	19,000

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Sacramento Metro Area	Growth 2011-15
TOTAL TECH DEGREES	1,412	41.3%
Computer Engineering	634	34.6%
Math/Statistics	251	49.4%
Other Tech Engineering	527	46.4%

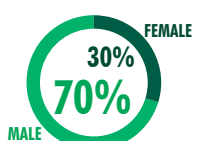
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

30%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,373 PER UNIT/MO.
39% INCREASE SINCE 2011

*Sacramento Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

37 Hartford, CT

SCORE
34.71

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	24,620	17.1%	\$96,225	15.2%
Software Developers & Programmers	8,050	45.6%	\$95,103	12.4%
Computer Support, Database & Systems	11,660	7.7%	\$85,951	13.1%
Computer & Infor. Systems Managers	2,990	-2.0%	\$145,320	27.3%
Technology Engineering-Related	1,920	18.5%	\$86,869	19.1%
TOTAL NON-TECH TALENT	74,120	16.3%	\$56,095	8.9%
Sales	5,760	101.4%	\$76,360	-19.8%
Administrative & Office Support	52,400	12.7%	\$47,595	10.5%
Business Operations & Finance	12,390	10.8%	\$78,693	8.0%
Marketing	3,570	10.9%	\$69,732	14.9%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 4,063 (17.7%) since 2010. That's 487.8% of total growth in a population of 124,014.

Source: U.S. Census Bureau (City of Hartford), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$19.83 PSF (up 1.0%); Vacancy: 16.0% (down -260 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016)

Tenant	Address	Sq. Ft.
United Technologies	755 Main St	74,200
Tallan	45 Glastonbury Blvd	20,000
Vertafore	5 Waterside Crossing	15,400

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Hartford Metro area	Growth 2011-15
TOTAL TECH DEGREES	1,242	44.1%
Computer Engineering	404	46.9%
Math/Statistics	399	55.9%
Other Tech Engineering	439	32.6%

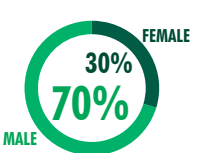
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

17%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,284 PER UNIT/MO.
11% INCREASE SINCE 2011

*Indianapolis Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

38 Long Island, NY

SCORE
34.62

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	29,870	24.0%	\$92,546	9.0%
Software Developers & Programmers	8,810	21.2%	\$95,200	4.6%
Computer Support, Database & Systems	14,590	39.0%	\$79,608	10.7%
Computer & Infor. Systems Managers	2,560	14.3%	\$161,270	23.4%
Technology Engineering-Related	3,910	-3.9%	\$89,851	9.4%
TOTAL NON-TECH TALENT	175,940	5.7%	\$57,005	9.3%
Sales	12,920	44.8%	\$81,171	0.7%
Administrative & Office Support	134,320	1.6%	\$49,869	9.6%
Business Operations & Finance	21,140	9.3%	\$84,878	5.0%
Marketing	7,560	26.6%	\$64,568	-0.2%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 28,950 (8.7%) since 2010. That's 106.2% of total growth in a population of 2,862,937.

Source: U.S. Census Bureau (Nassau and Suffolk Counties), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$26.75 PSF (up 0.6%); Vacancy: 10.4% (down -440 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
LBi Software	999 Walt Whitman Rd	16,000
Frontline Technologies	100 Merrick Rd	14,000
Driven Local	CA Plz	12,000

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	New York Metro Area	Growth 2011-15
TOTAL TECH DEGREES	14,419	37.8%
Computer Engineering	8,490	44.4%
Math/Statistics	3,051	29.3%
Other Tech Engineering	2,878	29.2%

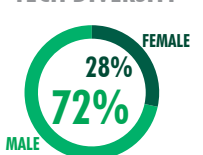
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

38%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$2,218 PER UNIT/MO.
17% INCREASE SINCE 2011

*Long Island Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

39 Omaha, NE

SCORE
31.54

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	20,780	25.6%	\$80,155	9.6%
Software Developers & Programmers	7,110	10.2%	\$85,138	14.3%
Computer Support, Database & Systems	11,170	36.6%	\$72,195	7.1%
Computer & Infor. Systems Managers	1,310	52.3%	\$122,920	0.3%
Technology Engineering-Related	1,190	13.3%	\$78,035	13.1%
TOTAL NON-TECH TALENT	58,920	10.9%	\$48,032	7.1%
Sales	5,490	15.6%	\$61,180	-1.5%
Administrative & Office Support	38,440	8.0%	\$39,871	8.6%
Business Operations & Finance	11,310	25.9%	\$66,422	4.0%
Marketing	3,680	-3.2%	\$57,150	5.0%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s declined by 156 (-0.2%) since 2010. That's -0.5% in a population of 443,887.

Source: U.S. Census Bureau (City of Omaha), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$19.52 PSF (up 11.0%); Vacancy: 11.2% (down -400 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
N/A		

Source: CBRE Research (Office Market), 2017.

LABOR POOL DEGREE COMPLETIONS (2014-2015)

	Omaha Metro Area	Growth 2011-15
TOTAL TECH DEGREES	665	33.8%
Computer Engineering	611	38.9%
Math/Statistics	54	-5.3%
Other Tech Engineering	0	0.0%

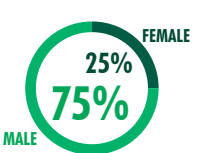
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

35%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS* (US=100%)



40 Milwaukee, WI

SCORE
31.14

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	30,810	21.1%	\$79,368	7.8%
Software Developers & Programmers	8,660	13.2%	\$82,179	8.7%
Computer Support, Database & Systems	16,450	38.0%	\$71,198	7.0%
Computer & Infor. Systems Managers	2,590	21.6%	\$124,270	11.6%
Technology Engineering-Related	3,110	-16.8%	\$77,362	9.5%
TOTAL NON-TECH TALENT	103,360	11.9%	\$54,436	11.9%
Sales	8,860	9.9%	\$68,729	-6.3%
Administrative & Office Support	71,500	11.4%	\$49,053	16.9%
Business Operations & Finance	16,160	7.9%	\$68,286	10.3%
Marketing	6,840	32.6%	\$59,465	8.6%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s declined by -2,151 (-1.9%) since 2010. That's -47.1% in a population of 600,154.

Source: U.S. Census Bureau (City of Milwaukee), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$18.28 PSF (up 5.8%); Vacancy: 13.4% (down -330 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Montage Talent	514 Wells St	10,615
Capital Data	1360 S Moorland Rd	5,106
Telkonet	20800 Swenson Dr	3,982

Source: CBRE Research (Office Market), 2017.

LABOR POOL DEGREE COMPLETIONS (2014-2015)

	Milwaukee Metro Area	Growth 2011-15
TOTAL TECH DEGREES	1,138	28.7%
Computer Engineering	576	22.0%
Math/Statistics	113	46.8%
Other Tech Engineering	449	34.0%

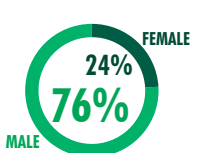
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

24%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS* (US=100%)



41 Cincinnati, OH

SCORE
30.11

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	36,450	21.0%	\$83,390	11.9%
Software Developers & Programmers	10,170	15.7%	\$85,158	12.3%
Computer Support, Database & Systems	20,650	29.1%	\$76,321	13.5%
Computer & Infor. Systems Managers	3,190	22.2%	\$128,020	15.3%
Technology Engineering-Related	2,440	-10.6%	\$77,504	-0.4%
TOTAL NON-TECH TALENT	119,340	5.4%	\$51,594	7.1%
Sales	13,690	10.0%	\$73,914	3.8%
Administrative & Office Support	77,790	-0.9%	\$42,433	4.3%
Business Operations & Finance	19,580	24.4%	\$68,521	6.0%
Marketing	8,280	27.6%	\$60,727	11.7%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s declined by -8,012 (-12.7%) since 2010. That's -491.5% in a population of 298,537.

Source: U.S. Census Bureau (City of Cincinnati), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$19.09 PSF (down -0.9%); Vacancy: 18.8% (down -430 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
COMDOC	9999 Carver Rd	7,168
EMI Research Solutions	8280 Montgomery Rd	4,995
Forcam	4030 Smith Rd	3,706

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Cincinnati Metro Area	Growth 2011-15
TOTAL TECH DEGREES	1,372	42.6%
Computer Engineering	713	77.8%
Math/Statistics	201	28.0%
Other Tech Engineering	458	13.4%

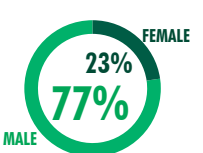
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

34%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$902 PER UNIT/MO.
16% INCREASE SINCE 2011

*Cincinnati Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

42 Ft. Lauderdale, FL

SCORE
29.98

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	22,370	37.2%	\$79,484	15.3%
Software Developers & Programmers	7,770	73.4%	\$82,695	12.0%
Computer Support, Database & Systems	11,910	29.2%	\$71,008	16.6%
Computer & Infor. Systems Managers	1,390	51.1%	\$140,270	10.5%
Technology Engineering-Related	1,300	-23.1%	\$72,955	6.8%
TOTAL NON-TECH TALENT	122,550	22.4%	\$47,800	6.0%
Sales	14,040	1.7%	\$68,343	1.9%
Administrative & Office Support	87,900	26.6%	\$40,291	9.9%
Business Operations & Finance	14,700	9.3%	\$68,355	8.1%
Marketing	5,910	71.8%	\$59,558	6.6%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s declined by -104 (-0.5%) since 2010. That's -0.8% in a population of 178,587.

Source: U.S. Census Bureau (City of Ft. Lauderdale), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$31.72 PSF (up 20.5%); Vacancy: 12.9% (down -620 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Ford Motor Co	1200 Sawgrass Corporate Pkwy	60,648
Housing & Development Software	3034 Universal Blvd	7,948

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Ft. Lauderdale Metro Area	Growth 2011-15
TOTAL TECH DEGREES	2,275	41.7%
Computer Engineering	1,656	42.3%
Math/Statistics	156	28.9%
Other Tech Engineering	463	44.2%

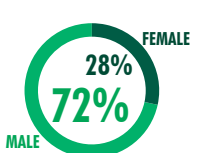
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

36%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,548 PER UNIT/MO.
26% INCREASE SINCE 2011

*Ft. Lauderdale Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

43 Nashville, TN

SCORE
28.87

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	27,270	43.5%	\$79,421	12.7%
Software Developers & Programmers	7,400	42.9%	\$83,458	11.8%
Computer Support, Database & Systems	14,570	44.5%	\$71,721	14.8%
Computer & Infor. Systems Managers	3,040	68.0%	\$107,870	7.1%
Technology Engineering-Related	2,260	17.1%	\$77,580	6.8%
TOTAL NON-TECH TALENT	114,830	20.6%	\$48,568	7.0%
Sales	11,810	20.0%	\$64,872	4.0%
Administrative & Office Support	81,660	18.7%	\$42,146	6.8%
Business Operations & Finance	15,890	21.3%	\$65,958	6.0%
Marketing	5,470	58.6%	\$58,723	13.7%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 7,444 (6.8%) since 2010. That's 14.3% of total growth in a population of 654,596.

Source: U.S. Census Bureau (City of Nashville), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$24.93 PSF (up 38.3%); Vacancy: 8.1% (down -450 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
Digital Reasoning	701 Cool Springs Blvd	50,000
Houzz	315 Deadrick St	37,421
SouthComm	427 Chestnut St	14,160

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Nashville Metro Area	Growth 2011-15
TOTAL TECH DEGREES	720	27.7%
Computer Engineering	405	55.2%
Math/Statistics	165	12.2%
Other Tech Engineering	150	-3.8%

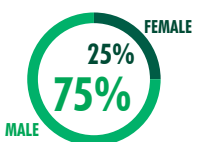
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

38%
BACHELOR'S OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS* (US=100%)



*Nashville Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt, rent data from CBRE EA (City), Q1 2017.

44 Virginia Beach, VA

SCORE
27.68

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	27,660	16.9%	\$84,514	10.8%
Software Developers & Programmers	6,750	23.9%	\$96,754	18.1%
Computer Support, Database & Systems	14,260	18.6%	\$75,614	7.3%
Computer & Infor. Systems Managers	1,280	-5.2%	\$140,570	20.9%
Technology Engineering-Related	5,370	10.7%	\$79,398	8.6%
TOTAL NON-TECH TALENT	79,460	-0.2%	\$49,997	11.2%
Sales	5,680	19.1%	\$62,325	13.9%
Administrative & Office Support	57,950	-4.2%	\$43,670	7.1%
Business Operations & Finance	12,460	10.1%	\$71,631	18.6%
Marketing	3,370	12.7%	\$58,029	4.4%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 4,118 (5.5%) since 2010. That's 30.3% of total growth in a population of 452,745.

Source: U.S. Census Bureau (City of Norfolk), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$18.77 PSF (down -11.5%); Vacancy: 15.6% (down -200 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Mythics	4525 Main Street Tower	38,951
Harris Corporation	7007 Harbour View Blvd	15,131
Decisions LLC	238 S Battlefield Blvd	10,450

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Virginia Beach Metro Area	Growth 2011-15
TOTAL TECH DEGREES	1,495	39.7%
Computer Engineering	910	40.6%
Math/Statistics	171	71.0%
Other Tech Engineering	414	28.2%

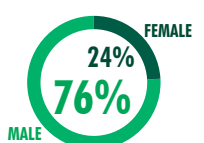
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

27%
BACHELOR'S OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS* (US=100%)



*Virginia Beach Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt, rent data from CBRE EA (City), Q1 2017.

45 Cleveland, OH

SCORE
26.93

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	32,120	18.3%	\$78,378	11.6%
Software Developers & Programmers	10,330	50.6%	\$81,313	9.7%
Computer Support, Database & Systems	16,480	10.6%	\$68,809	10.4%
Computer & Infor. Systems Managers	2,640	31.3%	\$129,590	12.5%
Technology Engineering-Related	2,670	-20.8%	\$75,444	7.0%
TOTAL NON-TECH TALENT	116,820	2.3%	\$52,856	12.1%
Sales	12,970	5.3%	\$74,633	10.4%
Administrative & Office Support	77,680	-1.4%	\$44,126	11.0%
Business Operations & Finance	18,210	9.2%	\$69,617	9.4%
Marketing	7,960	25.6%	\$64,226	14.0%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 8,094 (13.7%) since 2010. That's 98.9% of total growth in a population of 388,059.

Source: U.S. Census Bureau (City of Cleveland), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$18.05 PSF (up 7.0%); Vacancy: 18.4% (down -280 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
MIM Software	25800 Science Park Dr	28,160
EMC Corporation	6480 Rockside Woods Blvd	13,030
BrightEdge Technologies	50 Public Sq	8,691

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Cleveland Metro Area	Growth 2011-15
TOTAL TECH DEGREES	844	20.2%
Computer Engineering	452	43.0%
Math/Statistics	123	-7.5%
Other Tech Engineering	269	6.3%

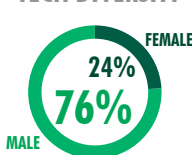
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

16%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



90%
LIVING
COST



97%
BUSINESS
COST

AVERAGE APT. RENT:
\$894 PER UNIT/MO.
11% INCREASE SINCE 2011

*Cleveland Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt, rent data from CBRE EA (City), Q1 2017.

46 Richmond, VA

SCORE
26.86

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	24,940	28.8%	\$90,470	13.2%
Software Developers & Programmers	8,290	37.5%	\$95,630	7.7%
Computer Support, Database & Systems	13,200	35.1%	\$80,425	16.6%
Computer & Infor. Systems Managers	1,720	10.3%	\$145,250	20.3%
Technology Engineering-Related	1,730	-13.9%	\$87,920	17.4%
TOTAL NON-TECH TALENT	82,990	5.2%	\$52,562	6.0%
Sales	5,840	-6.0%	\$70,066	0.8%
Administrative & Office Support	56,740	2.4%	\$44,143	3.4%
Business Operations & Finance	15,360	14.5%	\$72,658	9.6%
Marketing	5,050	30.5%	\$65,781	12.9%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 605 (1.3%) since 2010. That's 38% of total growth in a population of 220,289.

Source: U.S. Census Bureau (City of Richmond), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$19.55 PSF (up 8.2%); Vacancy: 11.8% (down -470 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
CoStar Global Research	501 S 5th St	135,000
Retail Data	11013 W Broad St	42,539
Tridium	3957 Westerre Pky	35,731

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Richmond Metro Area	Growth 2011-15
TOTAL TECH DEGREES	711	55.9%
Computer Engineering	459	69.4%
Math/Statistics	121	51.3%
Other Tech Engineering	131	24.8%

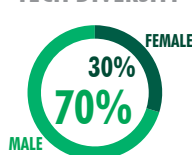
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

38%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



99%
LIVING
COST



94%
BUSINESS
COST

AVERAGE APT. RENT:
\$1,007 PER UNIT/MO.
11% INCREASE SINCE 2011

*Richmond Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt, rent data from CBRE EA (City), Q1 2017.

47 San Antonio, TX

SCORE
26.56

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	30,510	32.5%	\$88,109	16.3%
Software Developers & Programmers	8,680	39.8%	\$103,529	21.8%
Computer Support, Database & Systems	18,190	35.6%	\$76,814	11.9%
Computer & Infor. Systems Managers	1,150	5.5%	\$156,120	42.3%
Technology Engineering-Related	2,490	7.3%	\$85,458	12.2%
TOTAL NON-TECH TALENT	131,220	25.3%	\$52,023	17.2%
Sales	10,160	47.0%	\$61,544	5.2%
Administrative & Office Support	96,690	22.1%	\$46,581	19.9%
Business Operations & Finance	18,990	29.4%	\$70,714	10.6%
Marketing	5,380	36.2%	\$65,869	13.7%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 33,568 (15.6%) since 2010. That's 24.8% of total growth in a population of 1,469,824.

Source: U.S. Census Bureau (City of San Antonio), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$21.76 PSF (up 4.4%); Vacancy 14.6% (down -290 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
Hulu	4511 Horizon Hill Blvd	60,000
Oracle	613 NW Loop 410	27,500
Parlevel Systems	112 E Pecan	16,700

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	San Antonio Metro Area	Growth 2011-15
TOTAL TECH DEGREES	935	44.7%
Computer Engineering	570	52.4%
Math/Statistics	143	26.5%
Other Tech Engineering	222	39.6%

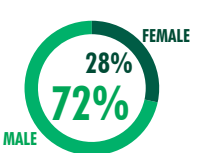
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

24%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$927 PER UNIT/MO.
11% INCREASE SINCE 2011

*San Antonio Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

48 Miami, FL

SCORE
24.64

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	24,180	46.8%	\$75,700	2.5%
Software Developers & Programmers	7,540	64.6%	\$78,606	1.7%
Computer Support, Database & Systems	13,490	46.9%	\$68,534	2.8%
Computer & Infor. Systems Managers	1,370	42.7%	\$134,450	1.1%
Technology Engineering-Related	1,780	1.7%	\$72,473	3.1%
TOTAL NON-TECH TALENT	154,680	16.1%	\$48,199	6.0%
Sales	15,930	-3.7%	\$64,532	-1.6%
Administrative & Office Support	111,000	17.4%	\$41,584	12.4%
Business Operations & Finance	19,500	16.7%	\$67,617	-1.4%
Marketing	8,250	54.2%	\$59,763	-1.3%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20's grew by 4,210 (7.0%) since 2010. That's 10.5% of growth in a population 440,989.

Source: U.S. Census Bureau (City of Miami), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$36.44 PSF (up 20.7%); Vacancy: 10.9% (down -830 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
WIX	1691 Michigan Ave	28,300
PCM	9250 W Flagler St	16,000
Amadeus North America	3470 NW 82nd Ave	9,800

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Miami Metro Area	Growth 2011-15
TOTAL TECH DEGREES	2,275	41.7%
Computer Engineering	1,656	42.3%
Math/Statistics	156	28.9%
Other Tech Engineering	463	44.2%

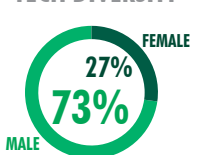
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

26%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$1,664 PER UNIT/MO.
22% INCREASE SINCE 2011

*Miami Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt. rent data from CBRE EA (City), Q1 2017.

49 Jacksonville, FL

SCORE
23.70

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	19,020	41.0%	\$80,585	19.5%
Software Developers & Programmers	6,170	82.0%	\$90,128	21.2%
Computer Support, Database & Systems	10,450	37.3%	\$71,215	19.5%
Computer & Infor. Systems Managers	1,030	45.1%	\$123,690	5.5%
Technology Engineering-Related	1,370	-23.0%	\$76,672	12.6%
TOTAL NON-TECH TALENT	87,970	9.1%	\$44,685	6.1%
Sales	7,630	11.4%	\$60,302	-2.0%
Administrative & Office Support	64,890	5.7%	\$38,447	6.2%
Business Operations & Finance	11,960	24.3%	\$64,726	2.8%
Marketing	3,490	26.9%	\$57,846	9.6%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s grew by 5,508 (4.1%) since 2010. That's 12.3% of total growth in a population of 868,031.

Source: U.S. Census Bureau (City of Jacksonville), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$19.07 PSF (up 10.7%); Vacancy: 15.9% (down -730 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2016/2017)

Tenant	Address	Sq. Ft.
Puma Aero Marine	1005 Bunker Ave	60,000
Wyle Laboratories	320 & 340 Corporate Way	19,970
GRACE Aerospace	13541 Lake Newman St	13,000

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Jacksonville Metro Area	Growth 2011-15
TOTAL TECH DEGREES	360	54.5%
Computer Engineering	257	52.1%
Math/Statistics	46	31.4%
Other Tech Engineering	57	96.6%

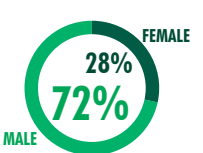
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

28%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$965 PER UNIT/MO.
16% INCREASE SINCE 2011

*Jacksonville Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt, rent data from CBRE EA (City), Q1 2017.

50 Oklahoma City, OK

SCORE
15.86

EMPLOYMENT BREAKDOWN

	Employment 2016	Growth 2011-16	Average Wage	Growth 2011-16
TOTAL TECH TALENT	18,970	46.6%	\$74,424	12.6%
Software Developers & Programmers	5,330	71.9%	\$80,015	18.3%
Computer Support, Database & Systems	9,180	52.0%	\$62,763	10.0%
Computer & Infor. Systems Managers	1,680	44.8%	\$103,220	15.1%
Technology Engineering-Related	2,780	5.3%	\$84,814	13.8%
TOTAL NON-TECH TALENT	74,990	5.9%	\$46,782	13.4%
Sales	7,680	51.5%	\$58,338	6.2%
Administrative & Office Support	52,940	-3.2%	\$41,319	11.4%
Business Operations & Finance	11,070	24.1%	\$63,534	8.9%
Marketing	3,300	56.4%	\$51,335	16.8%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

POPULATION TRENDS

The population of millennials in their 20s declined by 1,288 (-1.3%) since 2010. That's -2.6% in a population of 631,263.

Source: U.S. Census Bureau (City of Oklahoma City), 2016.

OFFICE RENT & VACANCY TRENDS

Asking Rent: \$17.28 PSF (up 14.0%); Vacancy: 15.1% (up 230 bps) (Q1 2017 data with change since Q1 2012)

Source: CBRE Research (Office Market), Q1 2017.

TOP TECH OFFICE DEALS (2017)

Tenant	Address	Sq. Ft.
Stim-Lab, Inc	7406 N Highway 81	17,000
Spiers New Technologies	3815 N Sante Fe Ave	11,214
TEKsystems	29 E Reno Ave	9,728

Source: CBRE Research (Office Market), 2017.

LABOR POOL

DEGREE COMPLETIONS (2014-2015)

	Oklahoma City Metro Area	Growth 2011-15
TOTAL TECH DEGREES	679	15.9%
Computer Engineering	331	20.4%
Math/Statistics	78	-8.2%
Other Tech Engineering	270	19.5%

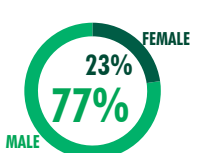
Source: The National Center for Education Statistics (Region), July 2016.

EDUCATION ATTAINMENT

30%
BACHELOR'S
OR HIGHER

Source: U.S. Census Bureau (City), 2016.

TECH DIVERSITY



Source: U.S. Census Bureau (Metro Area), 2016.

HOUSING & RELATIVE COSTS*

(US=100%)



AVERAGE APT. RENT:
\$704 PER UNIT/MO.
5% INCREASE SINCE 2011

*Oklahoma City Metro Area

Source: Relative Costs from Moody's Analytics (metro area), Q1 2017; Apt, rent data from CBRE EA (City), Q1 2017.



FULL REPORT DATA SUMMARY

WHAT IS TECH TALENT AND WHY IS IT IMPORTANT?

TABLE 1
TECH TALENT LABOR BY INDUSTRY (2016)
Tech Talent Occupations in Each Industry as a % of U.S. Tech Talent

Industry	% of Total Tech Talent Labor
Core High-Tech*	37.1%
Management of Companies and Enterprises	6.0%
Professional, Scientific, and Technical Services (Excluding High-Tech)	10.6%
Information (Excluding High-Tech)	6.1%
FIRE	7.9%
Government	6.1%
Transportation, Warehousing, and Wholesale	5.1%
Manufacturing (Excluding High-Tech)	4.7%
Education	4.8%
Other	8.9%
Healthcare	2.7%

*Includes computer software and services and computer product manufacturing.
Source: U.S. Bureau of Labor Statistics (National), April 2016.

WHICH ARE THE TOP-RANKED TECH-TALENT MARKETS?

TABLE 2
TECH TALENT SCORECARD RANKING

Rank	Market	Score	Rank	Market	Score
1	SF Bay Area, CA	81.28	26	Charlotte, NC	46.29
2	Seattle, WA	67.83	27	Tampa, FL	45.48
3	New York, NY	64.21	28	Columbus, OH	45.17
4	Washington, D.C.	64.13	29	Kansas City, MO	44.93
5	Atlanta, GA	59.55	30	Pittsburgh, PA	43.50
6	Toronto, ON	59.30	31	Houston, TX	42.57
7	Raleigh-Durham, NC	59.03	32	Orlando, FL	38.99
8	Austin, TX	58.73	33	Indianapolis, IN	36.39
9	Boston, MA	57.57	34	Rochester, NY	35.51
10	Dallas/Ft. Worth, TX	55.40	35	St. Louis, MO	35.44
11	Baltimore, MD	55.28	36	Sacramento, CA	35.11
12	Denver, CO	53.37	37	Hartford, CT	34.71
13	Newark, NJ	52.55	38	Long Island, NY	34.62
14	Orange County, CA	51.87	39	Omaha, NE	31.54
15	Chicago, IL	51.78	40	Milwaukee, WI	31.14
16	Vancouver, BC	51.40	41	Cincinnati, OH	30.11
17	Phoenix, AZ	51.24	42	Ft. Lauderdale, FL	29.98
18	Minneapolis, MN	51.06	43	Nashville, TN	28.87
19	San Diego, CA	50.83	44	Virginia Beach, VA	27.68
20	Portland, OR	49.88	45	Cleveland, OH	26.93
21	Detroit, MI	49.34	46	Richmond, VA	26.86
22	Philadelphia, PA	49.17	47	San Antonio, TX	26.56
23	Salt Lake City, UT	49.12	48	Miami, FL	24.64
24	Los Angeles, CA	47.08	49	Jacksonville, FL	23.70
25	Madison, WI	46.91	50	Oklahoma City, OK	15.86

Source: CBRE Research; CBRE Econometric Advisors; U.S. Bureau of Labor Statistics; Statistics Canada; CMHC; Moody's Analytics; The National Center of Education Statistics; National Science Foundation; Axiometrics.

WHAT ARE TECH-TALENT MOMENTUM MARKETS?

TABLE 3
TECH TALENT LABOR CONCENTRATION

Market	Tech Talent Jobs as % of Total Jobs	Market	Tech Talent Jobs as % of Total Jobs
SF Bay Area, CA	10.3%	Hartford, CT	4.2%
Seattle, WA	8.6%	Rochester, NY	4.2%
Toronto, ON	8.0%	Detroit, MI	4.1%
Washington, D.C.	7.9%	Philadelphia, PA	4.1%
Austin, TX	7.1%	Chicago, IL	3.9%
Raleigh-Durham, NC	6.9%	Richmond, VA	3.9%
Boston, MA	6.4%	St. Louis, MO	3.9%
Madison, WI	6.1%	Virginia Beach, VA	3.7%
Vancouver, BC	5.7%	Pittsburgh, PA	3.7%
Denver, CO	5.5%	New York, NY	3.7%
Baltimore, MD	5.4%	Milwaukee, WI	3.7%
Atlanta, GA	5.2%	Tampa, FL	3.6%
Minneapolis, MN	5.0%	Cincinnati, OH	3.5%
Kansas City, MO	5.0%	Indianapolis, IN	3.5%
San Diego, CA	4.8%	Houston, TX	3.3%
Dallas/Ft. Worth, TX	4.7%	Cleveland, OH	3.1%
Columbus, OH	4.7%	Oklahoma City, OK	3.1%
Salt Lake City, UT	4.7%	San Antonio, TX	3.1%
Newark, NJ	4.5%	Orlando, FL	3.0%
Portland, OR	4.5%	Los Angeles, CA	3.0%
Orange County, CA	4.4%	Nashville, TN	3.0%
Sacramento, CA	4.3%	Jacksonville, FL	2.9%
Omaha, NE	4.3%	Ft. Lauderdale, FL	2.8%
Phoenix, AZ	4.3%	Long Island, NY	2.3%
Charlotte, NC	4.3%	Miami, FL	2.1%

Source: U.S. Bureau of Labor Statistics (Metro Area), April 2016.

TABLE 4
TECH TALENT LABOR POOLS
BY MARKET (2016)

Labor Pool Size	Market	Tech Talent Total
Large Tech Talent Markets (> 50,000 Labor Pool)	SF Bay Area, CA	328,070
	New York, NY	246,180
	Washington, D.C.	243,360
	Toronto, ON	212,500
	Dallas/Ft. Worth, TX	161,150
	Chicago, IL	143,190
	Seattle, WA	136,910
	Atlanta, GA	133,810
	Los Angeles, CA	126,730
	Boston, MA	115,560
	Houston, TX	97,550
	Minneapolis, MN	95,220
	Phoenix, AZ	83,140
	Detroit, MI	78,510
	Philadelphia, PA	77,700
	Denver, CO	77,310
	Baltimore, MD	72,710
	Austin, TX	68,810
	Orange County, CA	68,220
	San Diego, CA	66,340
	Vancouver, BC	65,100
	Raleigh-Durham, NC	60,900
	Newark, NJ	52,600
	St. Louis, MO	52,190
	Kansas City, MO	51,770
	Portland, OR	50,880
Small Tech Talent Markets (< 50,000 Labor Pool)	Charlotte, NC	49,830
	Columbus, OH	48,230
	Tampa, FL	45,340
	Pittsburgh, PA	42,130
	Sacramento, CA	39,430
	Cincinnati, OH	36,450
	Orlando, FL	35,320
	Indianapolis, IN	35,010
	Cleveland, OH	32,120
	Salt Lake City, UT	31,750
	Milwaukee, WI	30,810
	San Antonio, TX	30,510
	Long Island, NY	29,870
	Virginia Beach, VA	27,660
	Nashville, TN	27,270
	Richmond, VA	24,940
	Hartford, CT	24,620
	Miami, FL	24,180
	Madison, WI	23,350
	Ft. Lauderdale, FL	22,370
	Rochester, NY	21,510
	Omaha, NE	20,780
	Jacksonville, FL	19,020
	Oklahoma City, OK	18,970

Source: U.S. Bureau of Labor Statistics (Metro Area) April 2017,
Statistics Canada (Metro Area), 2017.

TABLE 5
TECH LABOR POOL
GROWTH RATES (2011-2016)

Labor Pool Size	Market	% Change	by Volume
Large Tech Talent Markets (> 50,000 Labor Pool)	Raleigh-Durham, NC	51.3%	20,660
	SF Bay Area, CA	49.9%	109,280
	Atlanta, GA	47.6%	43,180
	Detroit, MI	40.7%	22,710
	Portland, OR	40.4%	14,650
	Kansas City, MO	39.1%	14,540
	Vancouver, BC	36.8%	17,500
	Baltimore, MD	35.2%	18,940
	Phoenix, AZ	33.5%	20,870
	Seattle, WA	33.4%	34,260
	Dallas/Ft. Worth, TX	33.4%	40,310
	New York, NY	32.9%	60,962
	Chicago, IL	32.8%	35,370
	Toronto, ON	31.8%	51,300
	Houston, TX	31.4%	23,320
	Denver, CO	29.0%	17,370
	Austin, TX	28.3%	15,170
	San Diego, CA	27.7%	14,380
	Philadelphia, PA	27.1%	16,550
	Minneapolis, MN	25.5%	19,340
	Orange County, CA	23.2%	12,850
	Los Angeles, CA	19.0%	20,230
	Newark, NJ	16.5%	7,457
	Boston, MA	11.4%	11,790
	Washington, D.C.	9.6%	21,330
	St. Louis, MO	7.9%	3,830
Small Tech Talent Markets (< 50,000 Labor Pool)	Charlotte, NC	77.1%	21,690
	Tampa, FL	55.3%	16,140
	Madison, WI	51.2%	7,910
	Miami, FL	46.8%	7,710
	Oklahoma City, OK	46.6%	6,030
	Salt Lake City, UT	45.3%	9,900
	Orlando, FL	45.0%	10,960
	Nashville, TN	43.5%	8,270
	Indianapolis, IN	42.3%	10,400
	Jacksonville, FL	41.0%	5,530
	Ft. Lauderdale, FL	37.2%	6,060
	San Antonio, TX	32.5%	7,480
	Richmond, VA	28.8%	5,570
	Omaha, NE	25.6%	4,240
	Sacramento, CA	25.3%	7,970
	Long Island, NY	24.0%	5,790
	Pittsburgh, PA	23.9%	8,140
	Milwaukee, WI	21.1%	5,370
	Cincinnati, OH	21.0%	6,330
	Cleveland, OH	18.3%	4,980
	Rochester, NY	17.8%	3,250
	Hartford, CT	17.1%	3,590
	Virginia Beach, VA	16.9%	3,990
	Columbus, OH	12.9%	5,510

Source: U.S. Bureau of Labor Statistics (Metro Area) April 2017,
Statistics Canada (Metro Area), 2017.

WHAT DEFINES A TECH TALENT MARKET?

TABLE 6
TOP 10 MARKETS FOR
EDUCATIONAL
ATTAINMENT

**25+ Years Old, Bachelors
Degree or Higher**

Market	Educational Attainment Rate
Seattle, WA	62.1%
Washington, D.C.	56.7%
Madison, WI	55.0%
Portland, OR	48.6%
Raleigh-Durham, NC	48.4%
Atlanta, GA	48.3%
Austin, TX	48.3%
Minneapolis, MN	48.3%
Denver, CO	47.1%
SF Bay Area, CA	46.7%

Source: U.S. Census Bureau (City/County), 2016.

TABLE 7
TOP 10 REGIONS FOR TECH DEGREE
COMPLETIONS (2014-2015)

Market	Tech Degree Completions (2014-2015)	Growth (2011-2015)
New York Metro Area	14,419	37.8%
Long Island, NY		
New York, NY		
Newark, NJ		
Washington, D.C. Metro Area	13,058	40.9%
Washington, D.C.		
Baltimore, MD		
Los Angeles Metro Area	10,632	26.7%
Los Angeles, CA		
Orange County, CA		
Chicago Metro Area	7,866	15.6%
Chicago, IL		
Milwaukee, WI		
Boston Metro Area	7,507	40.5%
SF Bay Area Metro Area	6,503	27.0%
Silicon Valley, CA		
San Francisco, CA		
San Francisco Peninsula, CA		
Oakland, CA		
Atlanta Metro Area	5,120	30.2%
Phoenix Metro Area	4,744	18.9%
Columbus Metro Area	4,655	33.8%
Detroit Metro Area	4,614	60.7%

Source: The National Center for Education Statistics (Region), July 2016.

TABLE 8
WHERE ARE TECH TALENT WORKERS COMING FROM
AND WHERE ARE THEY HEADED?

Market	Tech Degrees (2011-2015)*	Tech Jobs Added (2012-2016)*	Brain Gain/Drain
SF Bay Area, CA	28,804	109,280	80,476
Dallas/Ft. Worth, TX	17,750	40,310	22,560
Seattle, WA	12,043	34,260	22,217
Atlanta, GA	22,634	43,180	20,546
Charlotte, NC	4,639	21,690	17,051
Houston, TX	8,578	23,320	14,742
New York, NY	60,678	74,209	13,531
Kansas City, MO	3,192	14,540	11,348
Tampa, FL	5,808	16,140	10,332
Portland, OR	7,563	14,650	7,087
Raleigh-Durham, NC	13,738	20,660	6,922
Indianapolis, IN	3,514	10,400	6,886
Austin, TX	9,660	15,170	5,510
Minneapolis, MN	14,138	19,340	5,202
Nashville, TN	3,337	8,270	4,933
Chicago, IL	36,459	40,740	4,281
Miami, FL	9,817	13,770	3,953
Jacksonville, FL	1,612	5,530	3,918
San Antonio, TX	4,005	7,480	3,475
Denver, CO	13,918	17,370	3,452
Oklahoma City, OK	3,170	6,030	2,860
Richmond, VA	2,964	5,570	2,606
Orlando, FL	8,806	10,960	2,154
San Diego, CA	12,382	14,380	1,998
Sacramento, CA	5,977	7,970	1,993
Detroit, MI	21,155	22,710	1,555
Omaha, NE	2,916	4,240	1,324
Madison, WI	6,695	7,910	1,215
Hartford, CT	5,150	3,590	-1,560
Columbus, OH	18,898	16,820	-2,078
St. Louis, MO	6,485	3,830	-2,655
Virginia Beach, VA	6,828	3,990	-2,838
Phoenix, AZ	23,969	20,870	-3,099
Salt Lake City, UT	13,155	9,900	-3,255
Philadelphia, PA	19,891	16,550	-3,341
Rochester, NY	8,953	3,250	-5,703
Pittsburgh, PA	17,795	8,140	-9,655
Los Angeles, CA	45,968	33,080	-12,888
Washington, D.C.	56,623	40,270	-16,353
Boston, MA	31,400	11,790	-19,610

Source: CBRE Research, U.S. Bureau of Labor Statistics, The National Center for Education Statistics (Region)

Los Angeles Metro Area includes Orange County

New York Metro Area includes Newark and Long Island

Miami Metro Area includes Ft. Lauderdale

Columbus Metro Area include Columbus, Cleveland and Cincinnati

Bay Area Metro Area includes San Francisco, Oakland and Silicon Valley

Chicago Metro Area includes Chicago and Milwaukee

Washington D.C. Metro Area includes Baltimore

*Tech degrees cover the most recent five-year period available (2011-2015) and tech jobs added cover the time period reflecting when most graduates would be counted in employment figures (2012-2016).

TABLE 9
TOP 10 MOST CONCENTRATED
MILLENNIAL MARKETS* (2016)

Market	Population Concentration of Millennials
UNITED STATES	14.2%
Madison, WI	26.5%
Pittsburgh, PA	25.3%
Boston, MA	24.6%
Richmond, VA	21.8%
Salt Lake City, UT	21.8%
Hartford, CT	21.8%
Minneapolis, MN	21.7%
Orlando, FL	21.6%
Seattle, WA	20.4%
Columbus, OH	20.3%

* Millennials aged 20-29 years living in downtown areas.
Source: U.S. Census Bureau (City/County), 2016.

TABLE 11
TOP AND BOTTOM 10 MARKETS
BY GENDER DIVERSITY IN TECH
OCCUPATIONS (2015)

Market		% Male	% Female
Washington, D.C.	▼ TOP 10 (most diverse)	68.20	31.80
Baltimore, MD		68.80	31.20
Hartford, CT		69.50	30.50
Sacramento, CA		69.80	30.20
Richmond, VA		70.20	29.80
Raleigh-Durham, NC		70.30	29.70
Boston, MA		71.20	28.80
Minneapolis, MN		71.50	28.50
Philadelphia, PA		71.60	28.40
San Antonio, TX		72.00	28.00
Kansas City, MO	▼ BOTTOM 10 (least diverse)	79.20	20.80
Salt Lake City, UT		78.90	21.10
Phoenix, AZ		78.60	21.40
Seattle, WA		77.30	22.70
Oklahoma City, OK		77.20	22.80
Austin, TX		76.80	23.20
Cincinnati, OH		76.50	23.50
Detroit, MI		75.91	24.09
Cleveland, OH		75.90	24.10
Indianapolis, IN		75.90	24.10

Source: U.S. Census Bureau (City/County), 2016.

TABLE 10
MILLENNIAL POPULATION CHANGE
BY MARKET* (2010-2015)

U.S. Average = 4.6%

Labor Pool Size	Market	% Change
Large Tech Talent Markets (> 50,000 Labor Pool)	Seattle, WA	16.6%
	Raleigh-Durham, NC	11.2%
	Toronto, ON	9.5%
	SF Bay Area, CA	9.5%
	Atlanta, GA	9.3%
	Detroit, MI	9.2%
	Houston, TX	8.5%
	Phoenix, AZ	7.1%
	Denver, CO	7.0%
	Los Angeles, CA	6.4%
	Washington, D.C.	5.9%
	Orange County, CA	5.7%
	Austin, TX	5.5%
	Vancouver, BC	5.3%
	Dallas/Ft. Worth, TX	3.8%
	New York, NY	2.6%
	San Diego, CA	1.1%
	Philadelphia, PA	0.9%
	Boston, MA	0.8%
	Newark, NJ	0.5%
	Baltimore, MD	-0.9%
	Chicago, IL	-1.4%
	Minneapolis, MN	-2.2%
	St. Louis, MO	-5.3%
Small Tech Talent Markets (< 50,000 Labor Pool)	Portland, OR	1.2%
	Kansas City, MO	0.5%
	Pittsburgh, PA	17.7%
	Hartford, CT	17.7%
	San Antonio, TX	15.6%
	Cleveland, OH	13.7%
	Charlotte, NC	13.3%
	Orlando, FL	12.3%
	Long Island, NY	8.7%
	Salt Lake City, UT	8.4%
	Sacramento, CA	7.5%
	Madison, WI	7.3%
	Miami, FL	7.0%
	Nashville, TN	6.8%
	Columbus, OH	6.4%
	Tampa, FL	6.3%
	Virginia Beach, VA	5.5%
	Jacksonville, FL	4.1%
	Indianapolis, IN	3.6%
	Richmond, VA	1.3%
	Rochester, NY	0.7%
	Omaha, NE	-0.2%
	Ft. Lauderdale, FL	-0.5%
	Oklahoma City, OK	-1.3%
	Milwaukee, WI	-1.9%
	Cincinnati, OH	-12.7%

* Millennials aged 20-29 Years.

Source: U.S. Bureau of Labor Statistics April 2016, Statistics Canada May 2017, CBRE Econometric Advisors, Axiometrics, CMHC, Q1 2017; U.S. Census Bureau (City/County), 2016.

TABLE 12
TECH TALENT LABOR CONCENTRATION BY INDUSTRY
(2016)

Tech Talent Occupations as a % of All Occupations in Each Industry

Industry	Tech-Talent as % of Total Industry Occupations
Core High-Tech*	49.8%
Management of Companies and Enterprises	12.8%
Professional, Scientific, and Technical Services (Excluding High-Tech)	7.7%
Information (Excluding High-Tech)	14.0%
FIRE	5.0%
Total U.S. Employment	3.5%
Government	3.1%
Transportation, Warehousing, and Wholesale	2.2%
Manufacturing (Excluding High-Tech)	2.0%
Education	1.8%
Other	0.8%
Healthcare	0.7%

*Includes computer software and services and computer product manufacturing.
Source: U.S. Bureau of Labor Statistics (National), April 2017.

TECH TALENT HAS UNIQUE CONCENTRATIONS ACROSS MARKETS

TABLE 13
TECH TALENT BY TYPE: SOFTWARE DEVELOPERS AND PROGRAMMERS

Ranked by % of Tech Talent

Market	Software Developers & Programmers	% of Tech Talent	Market	Software Developers & Programmers	% of Tech Talent
Seattle, WA	70,740	52%	Cleveland, OH	10,330	32%
SF Bay Area, CA	147,580	45%	Phoenix, AZ	26,700	32%
Boston, MA	47,840	41%	Tampa, FL	14,220	31%
New York, NY	100,310	41%	Detroit, MI	24,500	31%
Madison, WI	9,490	41%	Miami, FL	7,540	31%
Portland, OR	20,410	40%	Indianapolis, IN	10,880	31%
Salt Lake City, UT	12,130	38%	Chicago, IL	44,390	31%
Sacramento, CA	14,680	37%	Dallas/Ft. Worth, TX	49,410	31%
Orange County, CA	25,360	37%	Charlotte, NC	15,250	31%
Austin, TX	25,150	37%	Pittsburgh, PA	12,760	30%
San Diego, CA	23,870	36%	Minneapolis, MN	28,630	30%
Newark, NJ	18,910	36%	Washington, D.C.	73,100	30%
Denver, CO	27,750	36%	Kansas City, MO	15,400	30%
Ft. Lauderdale, FL	7,770	35%	Long Island, NY	8,810	29%
Philadelphia, PA	26,910	35%	Rochester, NY	6,290	29%
Los Angeles, CA	43,480	34%	San Antonio, TX	8,680	28%
Omaha, NE	7,110	34%	Milwaukee, WI	8,660	28%
Raleigh-Durham, NC	20,600	34%	Oklahoma City, OK	5,330	28%
Vancouver, BC	22,000	34%	Cincinnati, OH	10,170	28%
Columbus, OH	16,080	33%	Houston, TX	27,020	28%
Richmond, VA	8,290	33%	Baltimore, MD	20,010	28%
Atlanta, GA	44,290	33%	St. Louis, MO	14,170	27%
Hartford, CT	8,050	33%	Nashville, TN	7,400	27%
Jacksonville, FL	6,170	32%	Toronto, ON	52,100	25%
Orlando, FL	11,450	32%	Virginia Beach, VA	6,750	24%

Note: Software developers include: computer programmers; software application developers, software systems software developers, and web developers.
Source: U.S. Bureau of Labor Statistics, April 2017.

TABLE 14
TECH TALENT BY TYPE: COMPUTER, SUPPORT DATABASE & SYSTEMS

Ranked by % of Tech Talent

Market	Computer, Support Database & Systems	% of Tech Talent	Market	Computer, Support Database & Systems	% of Tech Talent
San Antonio, TX	18,190	60%	Philadelphia, PA	39,310	51%
St. Louis, MO	30,500	58%	Rochester, NY	10,870	51%
Cincinnati, OH	20,650	57%	Pittsburgh, PA	21,280	51%
Washington, D.C.	136,680	56%	Atlanta, GA	67,510	50%
Tampa, FL	25,340	56%	Denver, CO	38,050	49%
Miami, FL	13,490	56%	Long Island, NY	14,590	49%
Jacksonville, FL	10,450	55%	Raleigh-Durham, NC	29,630	49%
Baltimore, MD	39,560	54%	Oklahoma City, OK	9,180	48%
Indianapolis, IN	18,990	54%	Hartford, CT	11,660	47%
Chicago, IL	77,120	54%	Detroit, MI	36,960	47%
Phoenix, AZ	44,720	54%	Los Angeles, CA	58,990	47%
Omaha, NE	11,170	54%	Madison, WI	10,860	47%
Charlotte, NC	26,650	53%	Austin, TX	31,910	46%
Nashville, TN	14,570	53%	Newark, NJ	24,070	46%
Milwaukee, WI	16,450	53%	New York, NY	109,870	45%
Columbus, OH	25,700	53%	Sacramento, CA	17,150	43%
Ft. Lauderdale, FL	11,910	53%	Salt Lake City, UT	13,440	42%
Richmond, VA	13,200	53%	Portland, OR	21,320	42%
Kansas City, MO	27,390	53%	Orange County, CA	27,230	40%
Minneapolis, MN	50,330	53%	Toronto, ON	83,600	39%
Dallas/Ft. Worth, TX	84,750	53%	Boston, MA	43,900	38%
Orlando, FL	18,330	52%	San Diego, CA	23,620	36%
Houston, TX	50,530	52%	Seattle, WA	46,240	34%
Virginia Beach, VA	14,260	52%	SF Bay Area, CA	107,560	33%
Cleveland, OH	16,480	51%	Vancouver, BC	19,900	31%

Note: Computer Support, Database & Systems include: computer and information research scientists, computer systems analysts, information security analysts, database administrators, network and computer systems administrators, computer network architects, computer user support specialists, computer network support specialists, and all other computer occupations.

Source: U.S. Bureau of Labor Statistics, April 2017.

TABLE 15
TECH TALENT BY TYPE: COMPUTER & INFORMATION SYSTEMS MANAGERS

Ranked by % of Tech Talent

Market	Computer & Information Systems Managers	% of Tech Talent	Market	Computer & Information Systems Managers	% of Tech Talent
Toronto, ON	26,000	12%	Seattle, WA	9,860	7%
Hartford, CT	2,990	12%	Philadelphia, PA	5,530	7%
Nashville, TN	3,040	11%	Los Angeles, CA	8,910	7%
Newark, NJ	5,340	10%	Richmond, VA	1,720	7%
Vancouver, BC	6,500	10%	Madison, WI	1,600	7%
New York, NY	24,120	10%	Pittsburgh, PA	2,870	7%
Boston, MA	11,200	10%	Phoenix, AZ	5,570	7%
Charlotte, NC	4,800	10%	Detroit, MI	5,080	6%
Minneapolis, MN	8,530	9%	Omaha, NE	1,310	6%
Oklahoma City, OK	1,680	9%	San Diego, CA	4,160	6%
Salt Lake City, UT	2,810	9%	Ft. Lauderdale, FL	1,390	6%
Cincinnati, OH	3,190	9%	St. Louis, MO	3,240	6%
Long Island, NY	2,560	9%	Baltimore, MD	4,380	6%
Milwaukee, WI	2,590	8%	Houston, TX	5,790	6%
Cleveland, OH	2,640	8%	Rochester, NY	1,270	6%
Portland, OR	4,160	8%	Orlando, FL	2,060	6%
Chicago, IL	11,410	8%	Sacramento, CA	2,290	6%
Atlanta, GA	10,620	8%	Miami, FL	1,370	6%
Raleigh-Durham, NC	4,730	8%	Denver, CO	4,290	6%
SF Bay Area, CA	25,440	8%	Jacksonville, FL	1,030	5%
Columbus, OH	3,720	8%	Dallas/Ft. Worth, TX	8,220	5%
Washington, D.C.	17,620	7%	Tampa, FL	2,210	5%
Indianapolis, IN	2,530	7%	Virginia Beach, VA	1,280	5%
Orange County, CA	4,920	7%	Austin, TX	3,030	4%
Kansas City, MO	3,730	7%	San Antonio, TX	1,150	4%

Source: U.S. Bureau of Labor Statistics, April 2017.

TABLE 16
TECH TALENT BY TYPE: TECHNOLOGY ENGINEERING-RELATED

Ranked by % of Tech Talent

Market	Technology Engineering Related	% of Tech Talent	Market	Technology Engineering Related	% of Tech Talent
Vancouver, BC	16,700	26%	Atlanta, GA	11,390	9%
Toronto, ON	50,800	24%	Cleveland, OH	2,670	8%
San Diego, CA	14,690	22%	Nashville, TN	2,260	8%
Virginia Beach, VA	5,370	19%	St. Louis, MO	4,280	8%
Orange County, CA	10,710	16%	San Antonio, TX	2,490	8%
Detroit, MI	11,970	15%	Newark, NJ	4,280	8%
Oklahoma City, OK	2,780	15%	Minneapolis, MN	7,730	8%
Houston, TX	14,210	15%	Tampa, FL	3,570	8%
SF Bay Area, CA	47,490	14%	Hartford, CT	1,920	8%
Rochester, NY	3,080	14%	Philadelphia, PA	5,950	8%
Sacramento, CA	5,310	13%	Indianapolis, IN	2,610	7%
Long Island, NY	3,910	13%	Phoenix, AZ	6,150	7%
Austin, TX	8,720	13%	Miami, FL	1,780	7%
Pittsburgh, PA	5,220	12%	Seattle, WA	10,070	7%
Los Angeles, CA	15,350	12%	Jacksonville, FL	1,370	7%
Baltimore, MD	8,760	12%	Chicago, IL	10,270	7%
Dallas/Ft. Worth, TX	18,770	12%	Richmond, VA	1,730	7%
Boston, MA	12,620	11%	Cincinnati, OH	2,440	7%
Salt Lake City, UT	3,370	11%	Washington, D.C.	15,960	7%
Kansas City, MO	5,250	10%	Charlotte, NC	3,130	6%
Milwaukee, WI	3,110	10%	Madison, WI	1,400	6%
Orlando, FL	3,480	10%	Ft. Lauderdale, FL	1,300	6%
Portland, OR	4,990	10%	Omaha, NE	1,190	6%
Raleigh-Durham, NC	5,940	10%	Columbus, OH	2,730	6%
Denver, CO	7,220	9%	New York, NY	11,880	5%

Note: Technology Engineering-Related includes: computer programmers; computer hardware engineers, electrical engineers, electronics engineers except computer, electrical and electronics drafters, electrical and electronics engineering technicians, and electro-mechanical technicians.
Source: U.S. Bureau of Labor Statistics, April 2017.

WHAT ARE THE HIGHEST- AND LOWEST-COST MARKETS TO OPERATE IN?

TABLE 17
TECH TALENT WAGES BY MARKET (2016)

U.S Average = 100%

Market	Average Tech Talent Wage	Wage Relative to U.S. Average	Talent Wage 5 yr. Growth	Market	Average Tech Talent Wage	Wage Relative to U.S. Average	Talent Wage 5 yr. Growth
SF Bay Area, CA	\$123,158	133%	14%	Portland, OR	\$90,040	97%	13%
Seattle, WA	\$113,906	123%	21%	San Antonio, TX	\$88,109	95%	16%
New York, NY	\$108,878	118%	16%	St. Louis, MO	\$87,174	94%	13%
Washington, D.C.	\$108,330	117%	9%	Phoenix, AZ	\$86,231	93%	10%
Newark, NJ	\$107,612	116%	11%	Virginia Beach, VA	\$84,514	91%	11%
Boston, MA	\$103,979	113%	9%	Detroit, MI	\$83,482	90%	9%
Denver, CO	\$100,383	109%	20%	Cincinnati, OH	\$83,390	90%	12%
San Diego, CA	\$100,258	108%	13%	Kansas City, MO	\$83,024	90%	9%
Orange County, CA	\$99,256	107%	11%	Salt Lake City, UT	\$82,803	90%	13%
Baltimore, MD	\$98,824	107%	12%	Toronto, ON*	\$82,385	89%	15%
Hartford, CT	\$96,225	104%	15%	Orlando, FL	\$82,313	89%	13%
Los Angeles, CA	\$95,617	103%	7%	Jacksonville, FL	\$80,585	87%	19%
Houston, TX	\$95,229	103%	15%	Pittsburgh, PA	\$80,432	87%	12%
Raleigh-Durham, NC	\$94,400	102%	15%	Omaha, NE	\$80,155	87%	10%
Philadelphia, PA	\$93,551	101%	10%	Ft. Lauderdale, FL	\$79,484	86%	15%
Dallas/Ft. Worth, TX	\$93,339	101%	9%	Nashville, TN	\$79,421	86%	13%
Charlotte, NC	\$93,105	101%	8%	Vancouver, BC*	\$79,402	86%	13%
Long Island, NY	\$92,546	100%	9%	Milwaukee, WI	\$79,368	86%	8%
Columbus, OH	\$92,510	100%	20%	Tampa, FL	\$78,434	85%	6%
Atlanta, GA	\$92,380	100%	16%	Cleveland, OH	\$78,378	85%	12%
Sacramento, CA	\$91,892	99%	8%	Madison, WI	\$77,773	84%	9%
Minneapolis, MN	\$91,686	99%	12%	Indianapolis, IN	\$77,672	84%	8%
Austin, TX	\$91,443	99%	8%	Rochester, NY	\$77,649	84%	9%
Chicago, IL	\$91,200	99%	12%	Miami, FL	\$75,700	82%	2%
Richmond, VA	\$90,470	98%	13%	Oklahoma City, OK	\$74,424	81%	13%

*in CAD; Source: U.S. Bureau of Labor Statistics (Metro Area), April 2017.

TABLE 18
AVERAGE U.S. TECH COMPANY OCCUPATION POOLS

500 Employees

Occupation Pools	Employees	% of Total Labor
Tech Talent Employees*	250	50%
Support Non-Tech Employees (excluding Management)	213	42%
Management	37	8%

Source: U.S. Bureau of Labor Statistics (National), April 2017.

* Tech Talent includes the following occupation categories: software developers and programmers; computer support, database and systems; technology and engineering related; and computer information system managers.

TABLE 19
ESTIMATED ONE-YEAR WAGE AND RENT OBLIGATIONS FOR SAMPLE
U.S.-BASED TECH FIRM BY MARKET

Sample Tech Firm Estimates: 500 Employees, 75,000 Sq. Ft.

Market	Rent Cost (Avg Rent x 75,000 SF)	Tech Talent Wages (Avg. Wage x 250 People)	Support Non-Tech Wages (Avg. Wage x 213 People)	Management Wages (Avg. Wage x 37 People)	Total Estimated Cost
SF Bay Area, CA	\$4,606,500	\$30,789,506	\$14,961,546	\$7,058,433	\$57,415,984
New York, NY	\$5,709,750	\$27,219,566	\$12,445,590	\$6,857,580	\$52,232,486
Washington, D.C.	\$2,793,000	\$27,082,593	\$14,373,118	\$6,106,387	\$50,355,097
Seattle, WA	\$2,393,211	\$28,476,566	\$12,661,133	\$5,774,220	\$49,305,131
Boston, MA	\$2,693,250	\$25,994,778	\$14,576,459	\$5,723,900	\$48,988,387
Newark, NJ	\$1,930,500	\$26,903,042	\$11,510,307	\$6,567,500	\$46,911,349
Denver, CO	\$1,973,250	\$25,095,733	\$12,608,320	\$6,095,010	\$45,772,313
San Diego, CA	\$2,514,311	\$25,064,461	\$11,266,141	\$6,016,940	\$44,861,853
Orange County, CA	\$2,403,000	\$24,813,877	\$12,041,812	\$5,284,710	\$44,543,399
Houston, TX	\$2,218,500	\$23,807,211	\$12,544,424	\$5,823,800	\$44,393,935
Los Angeles, CA	\$2,738,431	\$23,904,222	\$11,949,056	\$5,799,380	\$44,391,090
Austin, TX	\$2,541,750	\$22,860,779	\$12,617,375	\$5,703,180	\$43,723,085
Baltimore, MD	\$1,685,250	\$24,705,908	\$11,862,947	\$5,279,530	\$43,533,635
Philadelphia, PA	\$1,995,000	\$23,387,633	\$12,092,674	\$5,966,990	\$43,442,297
Long Island, NY	\$2,006,250	\$23,136,619	\$12,142,161	\$5,966,990	\$43,252,020
Dallas/Ft. Worth, TX	\$1,796,250	\$23,334,635	\$12,248,403	\$5,801,793	\$43,181,082
Hartford, CT	\$1,487,250	\$24,056,316	\$11,948,182	\$5,376,840	\$42,868,588
Minneapolis, MN	\$1,993,500	\$22,921,399	\$12,036,357	\$5,254,000	\$42,205,256
Chicago, IL	\$2,226,000	\$22,800,090	\$11,820,630	\$5,181,850	\$42,028,571
Raleigh-Durham, NC	\$1,854,750	\$23,600,083	\$11,368,141	\$5,142,053	\$41,965,027
Charlotte, NC	\$1,841,250	\$23,276,138	\$11,050,209	\$5,295,070	\$41,462,667
Atlanta, GA	\$1,828,500	\$23,095,030	\$11,288,020	\$5,173,340	\$41,384,891
Columbus, OH	\$1,442,250	\$23,127,524	\$10,843,517	\$5,477,850	\$40,891,140
Richmond, VA	\$1,466,205	\$22,617,456	\$11,195,630	\$5,374,250	\$40,653,541
Sacramento, CA	\$1,611,000	\$22,973,093	\$11,020,689	\$4,947,640	\$40,552,422
San Antonio, TX	\$1,632,000	\$22,027,208	\$11,080,945	\$5,776,440	\$40,516,593
Portland, OR	\$2,015,250	\$22,509,900	\$11,006,638	\$4,899,540	\$40,431,329
Phoenix, AZ	\$1,863,750	\$21,557,673	\$10,291,074	\$5,249,190	\$38,961,687
Detroit, MI	\$1,380,000	\$20,870,533	\$11,522,909	\$5,014,142	\$38,787,585
St. Louis, MO	\$1,399,500	\$21,793,568	\$10,348,439	\$5,131,160	\$38,672,667
Virginia Beach, VA	\$1,407,750	\$21,128,435	\$10,649,339	\$5,201,090	\$38,386,614
Cincinnati, OH	\$1,431,750	\$20,847,602	\$10,989,513	\$4,736,740	\$38,005,606
Ft. Lauderdale, FL	\$2,379,000	\$19,871,113	\$10,181,506	\$5,189,990	\$37,621,609
Pittsburgh, PA	\$1,634,250	\$20,107,965	\$10,918,471	\$4,857,730	\$37,518,416
Milwaukee, WI	\$1,371,000	\$19,842,064	\$11,594,772	\$4,597,990	\$37,405,827
Kansas City, MO	\$1,381,500	\$20,755,951	\$10,477,658	\$4,749,690	\$37,364,799
Orlando, FL	\$1,572,750	\$20,578,211	\$9,658,866	\$5,220,700	\$37,030,528
Cleveland, OH	\$1,353,750	\$19,594,454	\$11,258,375	\$4,794,830	\$37,001,408
Miami, FL	\$2,733,000	\$18,924,926	\$10,266,416	\$4,974,650	\$36,898,991
Madison, WI	\$1,455,000	\$19,443,166	\$11,513,153	\$4,342,690	\$36,754,009
Salt Lake City, UT	\$1,780,500	\$20,700,658	\$10,040,307	\$4,002,290	\$36,523,756
Tampa, FL	\$1,700,250	\$19,608,621	\$9,780,633	\$5,381,280	\$36,470,784
Omaha, NE	\$1,464,000	\$20,038,872	\$10,230,822	\$4,548,040	\$36,281,734
Rochester, NY	\$1,462,500	\$19,412,227	\$10,472,455	\$4,893,250	\$36,240,432
Indianapolis, IN	\$1,407,000	\$19,418,121	\$10,992,643	\$4,247,600	\$36,065,364
Nashville, TN	\$1,869,750	\$19,855,301	\$10,344,981	\$3,991,190	\$36,061,222
Jacksonville, FL	\$1,430,250	\$20,146,232	\$9,517,984	\$4,576,530	\$35,670,996
Oklahoma City, OK	\$1,296,000	\$18,606,115	\$9,964,585	\$3,819,140	\$33,685,840
Toronto, ON*	\$1,913,318	\$11,802,660	\$9,308,604	\$2,903,021	\$25,927,603
Vancouver, BC*	\$1,720,866	\$11,375,309	\$8,566,251	\$2,658,922	\$24,321,348

*in USD; Source: U.S. Bureau of Labor Statistics, April 2017, Canada Statistics April 2017, CBRE Research (Metro Area), Q1 2017.

HOW DOES TECH TALENT IMPACT COMMERCIAL REAL ESTATE?

TABLE 20
OFFICE ASKING RENT BY MARKET (Q1 2017)

Market	Annual Gross Direct Asking Rent	Office Rent 5 Year Growth	Market	Annual Gross Direct Asking Rent	Office Rent 5 Year Growth
New York, NY	\$76.13	37%	Atlanta, GA	\$24.38	24%
SF Bay Area, CA	\$61.42	64%	Dallas/Ft. Worth, TX	\$23.95	33%
Vancouver, BC*	\$40.04	25%	Salt Lake City, UT	\$23.74	23%
Washington, D.C.	\$37.24	5%	Tampa, FL	\$22.67	15%
Los Angeles, CA	\$36.51	28%	Baltimore, MD	\$22.47	12%
Miami, FL	\$36.44	21%	Pittsburgh, PA	\$21.79	10%
Boston, MA	\$35.91	30%	San Antonio, TX	\$21.76	4%
Austin, TX	\$33.89	33%	Sacramento, CA	\$21.48	5%
Toronto, ON*	\$33.70	0%	Orlando, FL	\$20.97	4%
San Diego, CA	\$33.52	30%	Hartford, CT	\$19.83	1%
Orange County, CA	\$32.04	38%	Richmond, VA	\$19.55	8%
Seattle, WA	\$31.91	26%	Omaha, NE	\$19.52	11%
Ft. Lauderdale, FL	\$31.72	21%	Rochester, NY	\$19.50	2%
Chicago, IL	\$29.68	12%	Madison, WI	\$19.40	11%
Houston, TX	\$29.58	27%	Columbus, OH	\$19.23	10%
Portland, OR	\$26.87	31%	Cincinnati, OH	\$19.09	-1%
Long Island, NY	\$26.75	1%	Jacksonville, FL	\$19.07	11%
Philadelphia, PA	\$26.60	8%	Virginia Beach, VA	\$18.77	-12%
Minneapolis, MN	\$26.58	18%	Indianapolis, IN	\$18.76	9%
Denver, CO	\$26.31	33%	St. Louis, MO	\$18.66	2%
Newark, NJ	\$25.74	3%	Kansas City, MO	\$18.42	9%
Nashville, TN	\$24.93	38%	Detroit, MI	\$18.40	5%
Phoenix, AZ	\$24.85	20%	Milwaukee, WI	\$18.28	6%
Raleigh-Durham, NC	\$24.73	28%	Cleveland, OH	\$18.05	7%
Charlotte, NC	\$24.55	25%	Oklahoma City, OK	\$17.28	14%

*in CAD; Source: CBRE Research (Office Market), Q1 2017.

TABLE 21
OFFICE VACANCY RATE BY MARKET (Q1 2017)

Market	Vacancy Rate	5 Years Ago (Q1 2012)	Market	Vacancy Rate	5 Years Ago (Q1 2012)
SF Bay Area, CA	7.7%	11.6%	Baltimore, MD	14.0%	16.8%
New York, NY	7.7%	7.6%	Raleigh-Durham, NC	14.0%	18.0%
Madison, WI	8.0%	12.5%	Philadelphia, PA	14.1%	18.4%
Nashville, TN	8.1%	12.6%	St. Louis, MO	14.2%	17.6%
Charlotte, NC	8.1%	20.1%	Denver, CO	14.2%	15.4%
Toronto, ON	9.0%	7.9%	Los Angeles, CA	14.3%	17.8%
Orange County, CA	9.3%	15.1%	Sacramento, CA	14.5%	23.7%
Austin, TX	9.5%	16.4%	San Antonio, TX	14.6%	17.5%
Vancouver, BC	10.1%	7.6%	Rochester, NY	14.8%	19.5%
Long Island, NY	10.4%	14.8%	Chicago, IL	15.0%	17.3%
Orlando, FL	10.4%	19.2%	Oklahoma City, OK	15.1%	12.8%
Miami, FL	10.9%	19.2%	Virginia Beach, VA	15.6%	17.6%
Portland, OR	11.2%	15.2%	Jacksonville, FL	15.9%	23.3%
Omaha, NE	11.2%	15.2%	Hartford, CT	16.0%	18.6%
Tampa, FL	11.2%	20.4%	Indianapolis, IN	16.4%	19.2%
San Diego, CA	11.5%	16.8%	Washington, D.C.	16.5%	13.4%
Salt Lake City, UT	11.6%	15.5%	Newark, NJ	16.6%	15.8%
Seattle, WA	11.7%	17.2%	Minneapolis, MN	16.7%	18.7%
Richmond, VA	11.8%	16.5%	Detroit, MI	16.7%	26.9%
Pittsburgh, PA	11.9%	10.2%	Houston, TX	16.8%	14.5%
Columbus, OH	12.3%	18.2%	Atlanta, GA	16.9%	23.3%
Kansas City, MO	12.8%	17.6%	Phoenix, AZ	17.3%	26.0%
Ft. Lauderdale, FL	12.9%	19.2%	Cleveland, OH	18.4%	21.2%
Milwaukee, WI	13.0%	16.7%	Cincinnati, OH	18.8%	23.1%
Boston, MA	13.7%	15.5%	Dallas/Ft. Worth, TX	19.1%	19.9%

Source: CBRE Research (Office Market), Q1 2017.

TABLE 22
APARTMENT ASKING RENT BY MARKET (Q1 2017)

Market	Apartment Rent	Apt Rent 5 Year Growth	Market	Apartment Rent	Apt Rent 5 Year Growth
New York, NY	\$4,418	17%	Madison, WI	\$1,137	17%
SF Bay Area, CA	\$2,790	38%	Nashville, TN	\$1,123	33%
Long Island, NY	\$2,218	17%	Tampa, FL	\$1,113	23%
Los Angeles, CA	\$2,214	24%	Atlanta, GA	\$1,108	29%
Boston, MA	\$2,154	20%	Dallas/Ft. Worth, TX	\$1,094	26%
Orange County, CA	\$1,986	19%	Pittsburgh, PA	\$1,075	-3%
San Diego, CA	\$1,895	25%	Rochester, NY	\$1,056	22%
Newark, NJ	\$1,732	12%	Houston, TX	\$1,051	14%
Washington, D.C.	\$1,696	7%	Salt Lake City, UT	\$1,044	28%
Seattle, WA	\$1,694	37%	Raleigh-Durham, NC	\$1,039	20%
Miami, FL	\$1,664	22%	Charlotte, NC	\$1,032	24%
Ft. Lauderdale, FL	\$1,548	26%	Virginia Beach, VA	\$1,027	5%
Chicago, IL	\$1,512	21%	Richmond, VA	\$1,007	11%
Denver, CO	\$1,395	39%	Detroit, MI	\$958	18%
Sacramento, CA	\$1,373	39%	Phoenix, AZ	\$956	26%
Portland, OR	\$1,370	39%	Jacksonville, FL	\$956	16%
Vancouver, BC*	\$1,313	17%	Kansas City, MO	\$940	14%
Hartford, CT	\$1,284	11%	San Antonio, TX	\$927	11%
Philadelphia, PA	\$1,278	8%	St. Louis, MO	\$916	20%
Minneapolis, MN	\$1,262	19%	Cincinnati, OH	\$902	16%
Baltimore, MD	\$1,255	10%	Cleveland, OH	\$894	11%
Toronto, ON*	\$1,233	12%	Omaha, NE	\$883	26%
Austin, TX	\$1,201	23%	Columbus, OH	\$874	19%
Orlando, FL	\$1,164	28%	Indianapolis, IN	\$820	15%
Milwaukee, WI	\$1,145	15%	Oklahoma City, OK	\$704	5%

*in CAD; Source: CBRE Econometric Advisors (City), Axiometrics, CMHC, Q1 2017.
Note: New York represents Manhattan only.

TABLE 23
COST OF LIVING RELATIVE TO U.S. AVERAGE

U.S. Average = 100%

Market	Cost of Living	Market	Cost of Living	Market	Cost of Living
Bay Area, CA	151%	Salt Lake City, UT	106%	Chicago, IL	98%
Orange County, CA	145%	Sacramento, CA	106%	Milwaukee, WI	98%
San Diego, CA	126%	Hartford, CT	106%	Virginia Beach, VA	98%
New York, NY	125%	Dallas/Ft. Worth, TX	105%	Vancouver, BC	97%
Long Island, NY	125%	Phoenix, AZ	105%	Oklahoma City, OK	97%
Seattle, WA	123%	Orlando, FL	103%	Kansas City, MO	96%
Los Angeles, CA	123%	Nashville, TN	102%	Columbus, OH	95%
Washington, D.C.	122%	San Antonio, TX	102%	St. Louis, MO	94%
Newark, NJ	122%	Atlanta, GA	101%	Pittsburgh, PA	93%
Boston, MA	119%	Minneapolis, MN	101%	Omaha, NE	93%
Miami, FL	113%	Madison, WI	101%	Indianapolis, IN	92%
Austin, TX	112%	Jacksonville, FL	101%	Detroit, MI	92%
Fort Lauderdale, FL	111%	Tampa, FL	100%	Cincinnati, OH	91%
Denver, CO	109%	Raleigh-Durham, NC	99%	Toronto, ON	91%
Portland, OR	108%	Philadelphia, PA	99%	Cleveland, OH	90%
Houston, TX	108%	Charlotte, NC	99%	Rochester, NY	89%
Baltimore, MD	107%	Richmond, VA	99%		

Source: Moody's Analytics, Numbeo, Q1 2017.

TABLE 24
TECH WAGE TO APARTMENT RENT RATIO

Market	Annualized Apartment Rent	2016 Average Annual Tech Wage	Rent-to-Tech Wage Ratio
New York, NY	\$53,015	\$108,878	30.8%
Long Island, NY	\$26,620	\$92,546	28.8%
Los Angeles, CA	\$26,564	\$95,617	27.8%
SF Bay Area, CA	\$33,483	\$123,158	27.2%
Miami, FL	\$19,964	\$75,700	26.4%
Boston, MA	\$25,845	\$103,979	24.9%
Orange County, CA	\$23,834	\$99,256	24.0%
Ft. Lauderdale, FL	\$18,570	\$79,484	23.4%
San Diego, CA	\$22,735	\$100,258	22.7%
Chicago, IL	\$18,139	\$91,200	19.9%
Vancouver, BC*	\$15,756	\$79,402	19.8%
Newark, NJ	\$20,785	\$107,612	19.3%
Washington, D.C.	\$20,350	\$108,330	18.7%
Portland, OR	\$16,441	\$90,040	18.3%
Toronto, ON*	\$14,796	\$82,385	18.0%
Sacramento, CA	\$16,473	\$91,892	17.9%
Seattle, WA	\$20,328	\$113,906	17.8%
Madison, WI	\$13,647	\$77,773	17.5%
Milwaukee, WI	\$13,746	\$79,368	17.3%
Tampa, FL	\$13,354	\$78,434	17.0%
Orlando, FL	\$13,971	\$82,313	17.0%
Nashville, TN	\$13,474	\$79,421	17.0%
Denver, CO	\$16,741	\$100,383	16.7%
Minneapolis, MN	\$15,146	\$91,686	16.5%
Philadelphia, PA	\$15,338	\$93,551	16.4%
Rochester, NY	\$12,675	\$77,649	16.3%
Pittsburgh, PA	\$12,898	\$80,432	16.0%
Hartford, CT	\$15,411	\$96,225	16.0%
Austin, TX	\$14,408	\$91,443	15.8%
Baltimore, MD	\$15,054	\$98,824	15.2%
Salt Lake City, UT	\$12,528	\$82,803	15.1%
Virginia Beach, VA	\$12,319	\$84,514	14.6%
Atlanta, GA	\$13,301	\$92,380	14.4%
Jacksonville, FL	\$11,469	\$80,585	14.2%
Dallas/Ft. Worth, TX	\$13,127	\$93,339	14.1%
Detroit, MI	\$11,490	\$83,482	13.8%
Cleveland, OH	\$10,726	\$78,378	13.7%
Kansas City, MO	\$11,285	\$83,024	13.6%
Richmond, VA	\$12,089	\$90,470	13.4%
Phoenix, AZ	\$11,478	\$86,231	13.3%
Charlotte, NC	\$12,386	\$93,105	13.3%
Houston, TX	\$12,613	\$95,229	13.2%
Omaha, NE	\$10,600	\$80,155	13.2%
Raleigh-Durham, NC	\$12,464	\$94,400	13.2%
Cincinnati, OH	\$10,825	\$83,390	13.0%
Indianapolis, IN	\$9,836	\$77,672	12.7%
San Antonio, TX	\$11,121	\$88,109	12.6%
St. Louis, MO	\$10,989	\$87,174	12.6%
Oklahoma City, OK	\$8,452	\$74,424	11.4%
Columbus, OH	\$10,491	\$92,510	11.3%

*in CAD; Source: U.S. Bureau of Labor Statistics April 2016, Statistics Canada May 2017, CBRE Econometric Advisors, Axiometrics, CMHC, Q1 2017.

CONTACTS



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FOR MORE INFORMATION ABOUT OCCUPIER SERVICES, PLEASE CONTACT:

WHITLEY COLLINS

Global President

Occupier Advisory & Transaction Services

+1 310 363 4842

whitley.collins@cbre.com

TODD HUSAK

Managing Director

Technology and Media Practice

+1 650 494 5182

todd.husak@cbre.com

FOR MORE INFORMATION ABOUT LABOR ANALYTICS, PLEASE CONTACT:

MARK SEELEY

Senior Vice President

+1 602 735 5230

mark.seeley@cbre.com

FOR MORE INFORMATION REGARDING CBRE RESEARCH, PLEASE CONTACT:

SPENCER G. LEVY

Americas Head of Research

Senior Economic Advisor

+1 617 912 5236

spencer.levy@cbre.com

Follow Spencer on Twitter: [@SpencerGLEvy](#)

FOR MORE INFORMATION REGARDING SCORING TECH TALENT, PLEASE CONTACT:

COLIN YASUKOCHI

Director, Research and Analysis

+1 415 772 0190

colin.yasukochi@cbre.com

LEXI RUSSELL

Senior Research Analyst

+1 415 772 0272

lexi.russell@cbre.com