

CBRE RESEARCH

2019 SCORING CANADIAN TECH TALENT



Ranking Canadian cities on competitive advantages and appeal to tech workers and employers

CBRE



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Scoring Canadian Tech Talent is a comprehensive analysis of labour market conditions, cost and quality for highly-skilled tech workers. 20 Canadian cities were ranked according to their competitive advantages and appeal to tech-talent workers and tech employers. This study also provides insight into the quality of tech talent and how growth patterns are impacting cities and real estate markets across Canada.

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CANADIAN TECH OVERVIEW

The tech industry continues to be a driving force behind rising rental rates and falling vacancy. The appeal of the landscape has benefited homegrown companies while also attracting foreign companies

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Local market profiles including statistics, demographics and leasing indicators that highlight aspects of tech talent activity and attractiveness in cities across Canada.

/ Tech Talent Scorecard Ranking



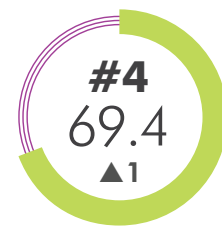
Toronto, ON



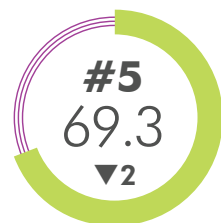
Ottawa, ON



Vancouver, BC



Waterloo
Region, ON



Montreal, QC



Calgary, AB



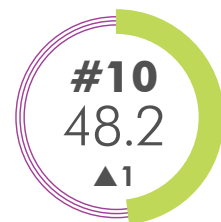
Victoria, BC



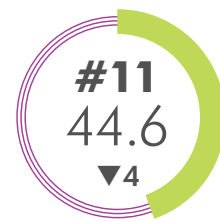
Quebec City, QC



Hamilton, ON



Edmonton, AB



Halifax, NS



Oshawa, ON



Guelph, ON



London, ON



Regina, SK



Winnipeg, MB



St. John's, NL



Windsor, ON



Saskatoon, SK



Moncton, NB

Source: Statistics Canada, Environics Analytics, Various Provincial Ministries and Higher Education Institutions, Conference Board of Canada, CMHC, CBRE Labor Analytics, CBRE Research, 2019.

/ Results at a Glance

	Tech Labour Pool Size	Tech Employment Growth	Tech Concentration	Quality of Labour	Educational Attainment	Tech & Tech- Related Degrees	Talent Quality to Cost	Total Gross Occupancy	Real Estate Cost
MARKET	TALENT AVAILABILITY			QUALITY OF LABOUR			COST COMPETITIVENESS		
Toronto, ON	1	3	2	3	2	2	3	14	19
Ottawa, ON	4	18	1	4	1	5	7	18	17
Vancouver, BC	3	6	6	2	4	3	2	13	20
Waterloo Region, ON	8	8	3	1	14	4	1	10	3
Montreal, QC	2	13	5	7	8	1	5	7	15
Calgary, AB	5	19	9	9	3	10	10	20	11
Victoria, BC	12	11	8	8	7	13	8	12	13
Quebec City, QC	7	16	4	16	9	15	16	2	9
Hamilton, ON	9	4	11	14	15	9	14	11	5
Edmonton, AB	6	9	18	5	10	7	4	19	18
Halifax, NS	11	14	12	12	6	6	12	5	10
Oshawa, ON	12	5	13	11	20	14	11	16	2
Guelph, ON	19	1	14	6	5	16	6	9	4
London, ON	12	7	17	10	17	12	9	3	7
Regina, SK	15	2	7	20	16	18	20	17	8
Winnipeg, MB	10	15	19	18	11	11	18	4	12
St. John's, NL	17	17	10	15	13	17	15	8	14
Windsor, ON	16	10	15	13	18	8	13	6	6
Saskatoon, SK	18	12	20	19	12	19	19	15	16
Moncton, NB	20	20	16	17	19	20	17	1	1



Source: Statistics Canada, Environics Analytics, Various Provincial Ministries and Higher Education Institutions, Conference Board of Canada, CMHC, CBRE Labor Analytics, CBRE Research, 2019.

Canadian Tech Overview

THE CANADIAN TECH MARKET IS AN UNPRECEDENTED GOOD NEWS STORY.

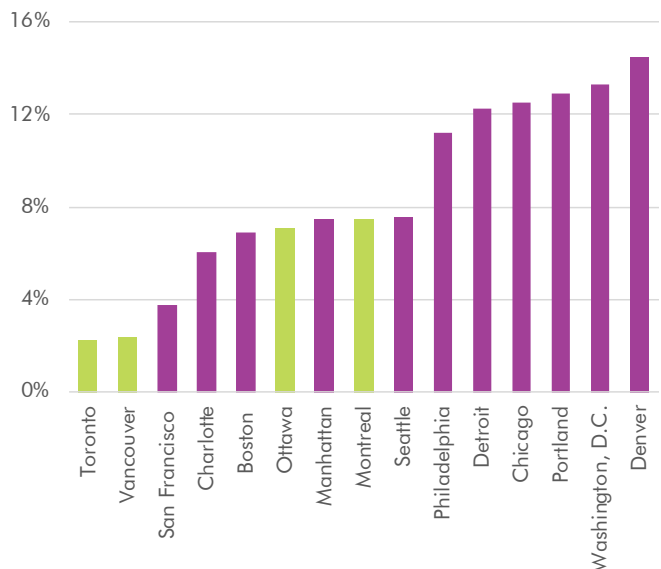
The country is attracting both tech talent and companies at record rates. Global and domestic companies are heading to major Canadian cities, while smaller markets are nurturing burgeoning tech sectors. The result? Record commercial and residential real estate demand and an office construction boom in several markets.

But with growth comes challenges. Toronto alone added an eye-popping 80,100 tech jobs from 2013 to 2018. While successful companies need access to talent that allows them to scale quickly if needed, tech workers also expect quality offices in central, amenity-filled locations.

That presents a problem for companies in cities with record low vacancy rates. Toronto claims the title of North America's tightest downtown office market, with a vacancy rate of just 2.4%. Other cities aren't much better – Vancouver follows as the second-tightest North American market with a downtown office vacancy rate of 2.6%, while Ottawa and Montreal are also experiencing rapidly shrinking office vacancy rates amid a surge of demand.

FIGURE 1: CANADIAN MARKETS TOP PERFORMERS

Downtown Office Vacancy Rate



Note: Includes markets above 1.5 MSF inventory.
Source: CBRE Research, Q3 2019.

TECH'S ASCENT IN CANADA & CANADIAN REAL ESTATE BOOM

CANADIAN SUCCESS STORIES

4+ recent and current Canadian tech 'unicorns', with a further 46 up-and-coming 'narwhals'.

RECORD GROWTH IN TECH TALENT

161,700 tech jobs added over last 5 years from 2013 to 2018.

TECH-LED GDP GROWTH

High-Tech sector GDP growth = 3.0x the pace of the overall economy over last 5 years.

Note: "High-Tech" consists of industries with the following NAICS codes: 5182, 5191, 5415. Source: Statistics Canada; Narwhal Project, 2019.

REAL ESTATE EXPANSION MODE

2.8 million sq. ft. of new build pre-leasing by tech firms in Toronto, Vancouver and Montreal.

RECORD FUNDAMENTALS IN TECH MARKETS

Toronto and Vancouver have the lowest downtown office vacancy rates in North America.

TECH TENANTS LEAD LEASING

The tech industry accounts for 17.1% of major office-leasing activity since the start of 2018.

Source: CBRE Research, Q3 2019.

CANADA AS A DESTINATION FOR GLOBAL TECH COMPANIES

While there is no shortage of homegrown Canadian tech success stories, perhaps the best indicator of the attractiveness of Canada's tech landscape has been the actions of top U.S. tech companies. These firms are intentionally choosing to expand in Canada over other U.S. cities.

Canada is a first choice for many major tech firms that are drawn to the following fundamental tech drivers:



DEEP POOLS OF TALENT

The unprecedented growth of the tech sector has resulted in intense competition for firms looking to attract talent. Canadian cities have deep pools of tech labour and alongside accommodative immigration policies, Canada is an abundant and accessible source of tech talent.



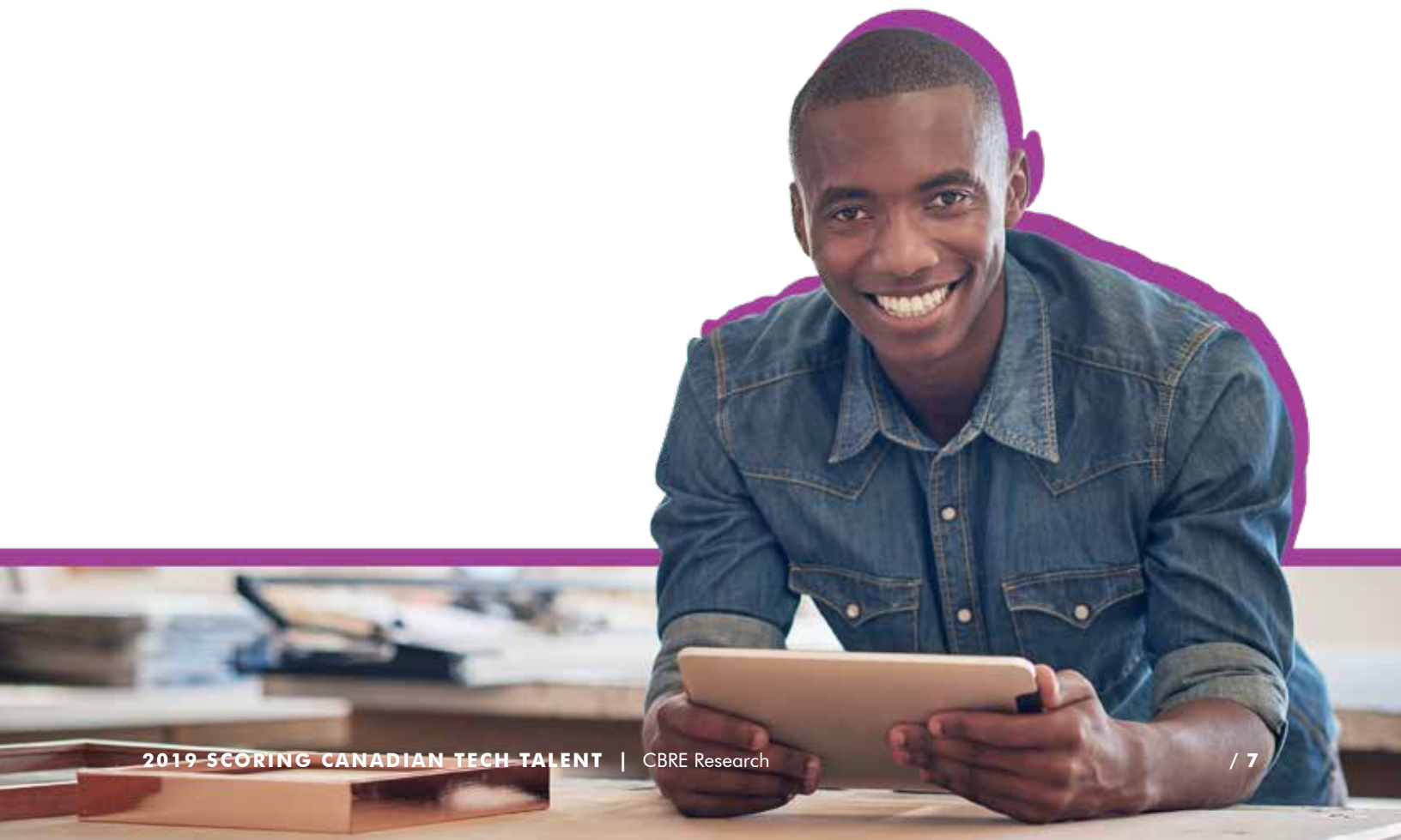
BEST-IN-CLASS TALENT

Canadians are driving innovation and are at the forefront of the tech sector. Top Canadian universities produce highly educated tech workers in specialized tech fields such as AI research and multimedia production.



COST COMPETITIVE

Operating a typical tech firm in Canada represents substantial cost savings for a U.S.-based tech firm. These companies can tap into high quality talent at a less prohibitive cost when accounting for the discounted Canadian dollar.



/ Game Change: Tech Office Leasing in the New Reality



It Isn't Easy Being Unique

Even if there was more office space available, tech start-ups face unique challenges when leasing office space. Built on innovative ideas and injections of venture capital, these companies can struggle to prove their long-term viability to landlords who have their choice of solid corporate covenants when evaluating prospective tenants.

Those that are successful often need to expand rapidly, which is not a natural fit for a traditional 10-year lease. And rapid expansion can be next to impossible when there is a lack of available office space.

Despite these hurdles, tech companies continue to bet on Canada and find creative real estate solutions to support them. Some of the largest players in the sector, including Microsoft, Google and Shopify, have all announced new office plans in Toronto over the past year alone.

Creative Solutions Make Scaling Possible

For companies with their heart set on a more traditional office lease, there is hope. Motoinsight, one of Toronto's dynamic start-ups, faced an uphill battle to find an additional 15,000 sq. ft. to accommodate their rapidly expanding workforce and reinforced their vibrant culture. There were only six available locations that fit their needs when they began their search.

Being armed with market intelligence enabled Motoinsight to make quick decisions. Having advisors able to articulate the company's business plan and financial backing was essential in securing a location that fit their budget, timeline and layout requirements.





Beyond Traditional Leases

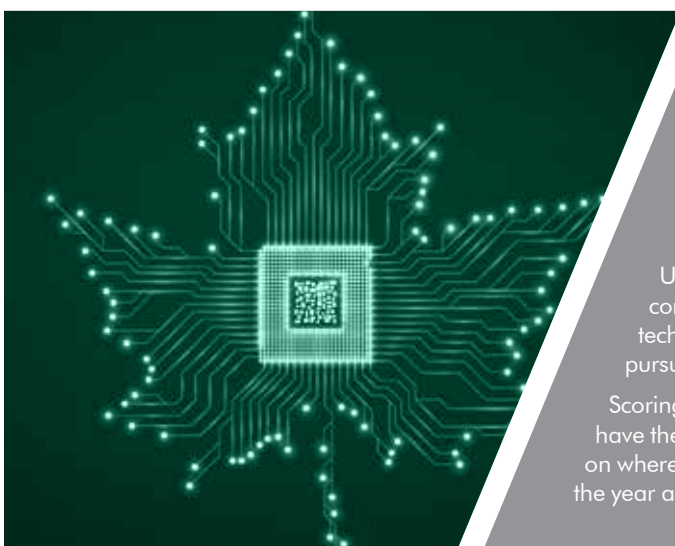
Flexible real estate is also becoming a go-to solution for everyone from start-ups to enterprise companies looking to add agility to their office space. Having a portion of a company's office devoted to coworking or relying on external coworking operators to house employees can provide growing businesses flexibility in a tight market.

This fall, Google signed a multi-year deal with IWG's Spaces for 24,000 sq. ft. across two floors of Royal Bank Plaza in downtown Toronto. The move signified a shift towards an enterprise model of flexible real estate operators, where companies will occupy entire floors of flexible operations for years at a time.

Big Opportunity Outside Big Cities

Other companies are turning to more affordable markets for their expansion efforts. Canadian-founded flexible real estate company iQ Office Suites secured a rare 17-year lease in Ottawa's parliamentary district this year, while Carfax Canada recently closed on 48,555 sq. ft. over two floors in London, part of the city's rapidly growing tech scene.

In fact, the largest Canadian venture capital deal this year was the \$515 million recapitalization of St. John's-based Verafin, a leader in the financial crime management software industry.



Up to the Challenge

Canada has both momentum and challenges, but the tech sector is up to the task. Tech companies hoping to succeed in a competitive market need to possess a clear vision for their space and be willing to move with confidence.

Understanding how built form will impact or reflect company culture is also key. With this approach established, tech tenants will need to channel their innovative spirit to pursue creative real estate strategies with conviction.

Scoring Canadian Tech Talent reveals which Canadian cities have the hottest tech talent markets and will also shed light on where companies may face the most competition in the year ahead.



/ Which are the top-ranked tech talent markets?

CBRE Research has analyzed 20 of Canada's leading cities to create a scorecard which ranks their tech talent offering. The scorecard uses 13 metrics to measure each market's depth, vitality and attractiveness to tech employers and potential employees, including availability of talent, quality of labour and gross operating costs.

To generate an overall score, each metric has been weighted by relative importance to companies seeking tech talent. For example, tech talent concentration metrics have the highest weight as they signify greater importance of tech to the local economy. Additionally, tech labour costs have been weighted more heavily than office rents because companies spend more on wages than on real estate.

Overall, the top Canadian tech talent markets in 2019 were Toronto, Ottawa, Vancouver, Waterloo Region and Montreal. These locations possess the strongest combination of attributes that the technology sector requires to flourish including, most importantly, a high concentration of tech employment. Comparing the 2019 market rankings with the previous year, a few markets shifted positions. While the markets that placed in the top five remained unchanged, their order did not. Boosted by improvements across nearly all 13 metrics, Vancouver and Waterloo Region each gained a spot, ranking third and fourth and displacing Montreal to fifth, who received a near-identical score to the prior year.

Impressive results in Alberta's capital saw Edmonton improve its score by over 10 points, the largest score improvement of any market, clinching the 10th spot. Further south, and still without plans for a pipeline in the near term, Calgary's tech market held firm, maintaining its position in sixth place.

Just as the types of employers vary by market, so too do the cities that offer different drawing cards to tech companies and employers. Not to be outshone by their larger neighbouring cities, the markets that saw the largest ranking increases year-over-year were Victoria and Oshawa, which rose by three and two spots, respectively.

The inclusion of 20 markets in this study aims to paint a comprehensive picture of Canada's tech ecosystem.



Talent Availability

Tech talent job creation has outpaced overall growth for qualified professionals in recent years, leading to rising labour costs and a shortage of available labour. The competition to attract and retain talent has intensified and understanding the level of competition by market helps drive labour strategy.

When evaluating a city's role in the Canadian tech landscape, it is essential to consider the size of the labour pool. Traditionally, it has been easier for tech occupiers in large cities to fulfill their talent requirements. The tech labour pool in Canada totals 832,900 workers across the country with Toronto ranking as the largest individual market by a considerable margin, home to over a quarter of the Canadian tech workforce. The four largest markets in Canada account for nearly 60% of the total tech labour pool with Montreal, Vancouver and Ottawa rounding out the group.

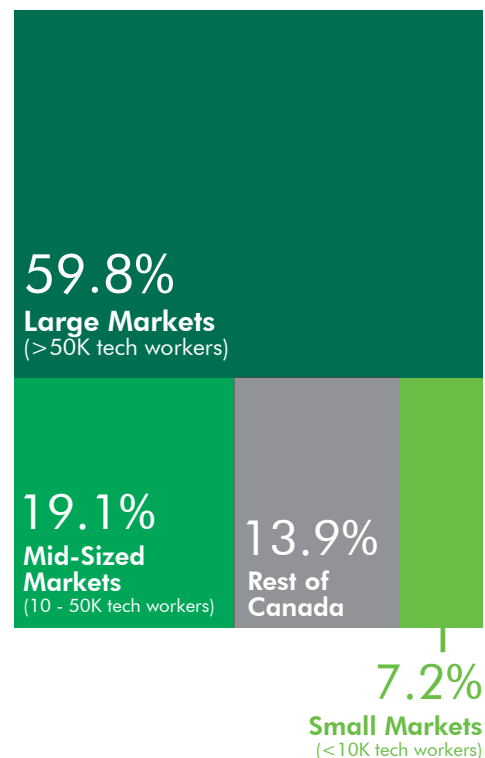
Major gateway markets dominate overall tech talent because of their size. These markets all have tech talent labour pools of more than 50,000 tech workers and are categorized as "large" markets. "Mid-sized" markets offer depth of talent between 10,000 – 50,000 workers and any market below 10,000 workers has been categorized as "small." Each type of market has their own advantages: while large markets tend to have a deeper pool of talent, mid and small-sized markets typically offer operating cost savings, lower levels of competition and a high quality of life. This year, the two largest ranking improvements as well as the largest venture capital deal were seen in small markets.

FIGURE 2: TECH TALENT LABOUR POOLS

	Market	Tech Talent Total	5-Yr Growth (by volume)	5-Yr Growth (%)
Large Markets (> 50K tech workers)	Toronto, ON	228,500	80,100	54.0%
	Montreal, QC	130,200	16,600	14.6%
	Vancouver, BC	74,700	22,300	42.6%
	Ottawa, ON	64,500	-3,600	-5.3%
Mid-Sized Markets (10 - 50K tech workers)	Calgary, AB	38,500	-2,800	-6.8%
	Edmonton, AB	28,400	5,800	25.7%
	Quebec City, QC	27,700	1,100	4.1%
	Waterloo Region, ON	20,400	5,800	39.7%
	Hamilton, ON	18,200	6,300	52.9%
	Winnipeg, MB	15,600	700	4.7%
	Halifax, NS	10,500	900	9.4%
Small Markets (< 10K tech workers)	Oshawa, ON	9,600	3,300	52.4%
	London, ON	9,600	2,800	41.2%
	Victoria, BC	9,600	1,300	15.7%
	Regina, SK	7,900	3,200	68.1%
	Windsor, ON	6,500	1,100	20.4%
	St. John's, NL	5,400	200	3.8%
	Saskatoon, SK	4,500	600	15.4%
	Guelph, ON	3,700	1,800	94.7%
	Moncton, NB	3,100	-300	-8.8%
	Canada	832,900	161,700	24.1%

Source: Statistics Canada LFS (NOCs), April 2019.

FIGURE 3: LABOUR POOL SIZE BREAKDOWN



Source: Statistics Canada LFS (NOCs), April 2019.

/ TALENT AVAILABILITY

To evaluate up-and-coming markets and determine their growth momentum, we considered “large”, “mid” and “small” categories separately. Among the large markets, Toronto led the pack in terms of tech labour momentum. Hamilton and Guelph saw the fastest pace of growth among the mid and small markets, respectively.

The clustering of tech firms within a market is also a major factor for consideration. A high density of tech firms oftentimes leads to a network effect, where an established high-tech industry provides greater institutional knowledge for others to draw upon. The formation of clusters also acts as an employment multiplier by attracting highly skilled workers that are drawn by a diversity of opportunities and exposure to various disciplines and potential careers. These

tech clusters also provide companies access to tech-experienced middle and upper level management, which can help start-ups accelerate their development.

Tech labour concentration is an influential factor in ranking how “tech” a market is and what its growth potential might be. Canada’s major markets are well represented in this respect. Ottawa has a 9.9% concentration of tech workers, nearly doubling the Canadian average of 5.3% and trailing behind San Francisco’s North American-leading 10.0%. Waterloo Region and Quebec City also punch above their weight in this respect. While only comprising a combined 5.8% of the Canadian tech landscape, these two cities have tech concentrations that are comparable to those of Toronto and Montreal, respectively.

FIGURE 4: TECH EMPLOYMENT GROWTH, FIVE-YEAR MOMENTUM (2013-2018)

Large Tech Talent Labour Pools
(>50K tech workers)



Mid-Sized Tech Talent Labour Pools
(10-50K tech workers)

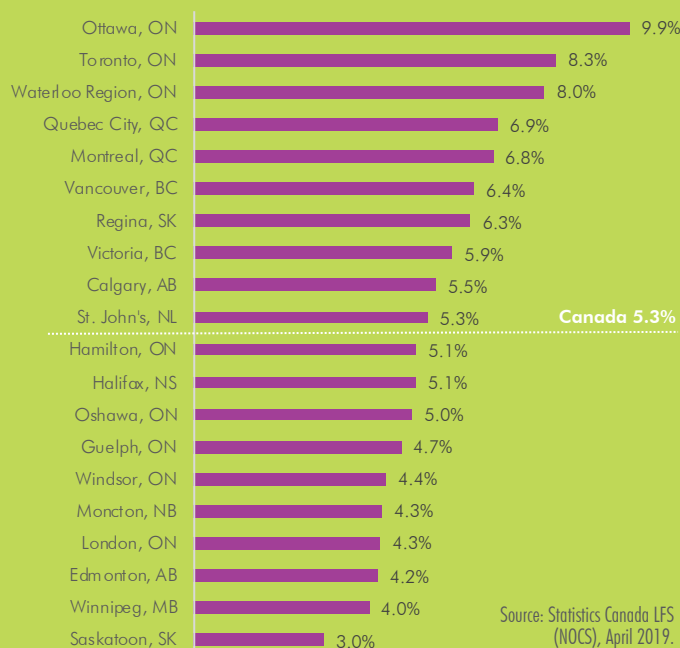


Small Tech Talent Labour Pools
(<10K tech workers)



Source: Statistics Canada LFS (NOCs) April 2019, CBRE Research, 2019.

FIGURE 5: TECH TALENT AS % OF TOTAL EMPLOYMENT (2018)



Source: Statistics Canada LFS (NOCs), April 2019.



Quality of Labour

Labour is by far the largest expense for most firms, especially so for those seeking tech talent. When such high levels of investment are needed to grow a tech firm's human capital, the quality of that tech talent becomes a crucial factor.

Education forms the foundation for the quality of tech labour and is best analyzed through degrees completed and issued from higher educational institutions. Notably, the top five ranked Canadian tech talent cities are also those that produce the highest number of tech graduates. Montreal has three of the top 10 university computer science programs as ranked by Maclean's and produces

the highest volume of tech graduates followed by Toronto, Vancouver, Waterloo Region and Ottawa. Outside of these top five ranked cities, a notable number of tech degrees are also earned in Halifax and Edmonton, where each produce over 1,000 tech degrees annually.

In terms of overall educational attainment, Ottawa leads in Canada at 41.1% followed by Toronto and Calgary, both with levels above 35.0%. The mid- and small-sized markets excel in this regard with Guelph, Halifax, Victoria, Quebec City and Winnipeg all having educational attainment levels above the national average.

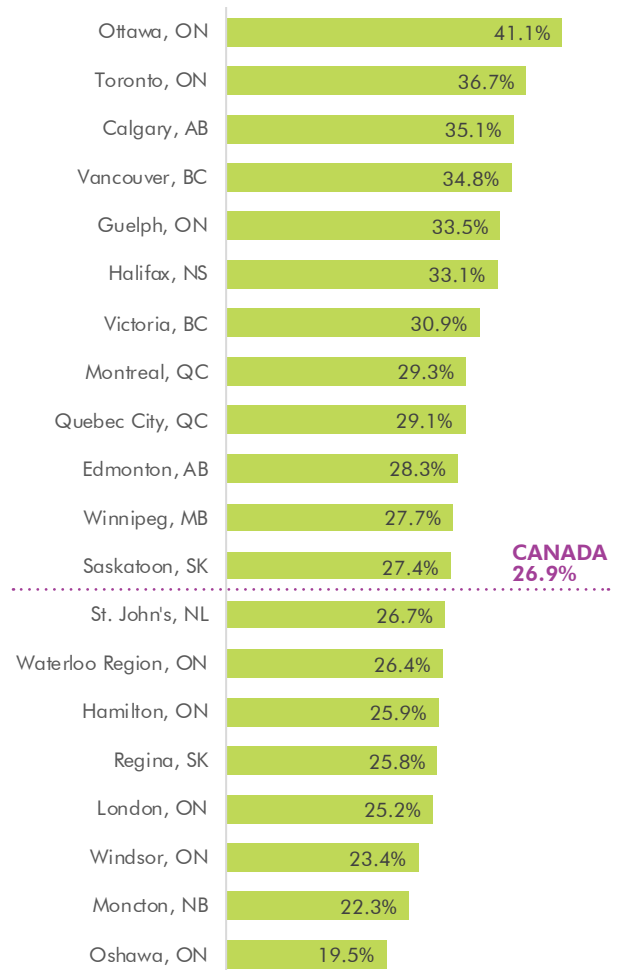
FIGURE 6: TOP 10 CITIES FOR TECH DEGREE COMPLETIONS

Market	Tech Degree Completions (2017)	Top University for Computer Science	Maclean's Rank
Montreal, QC	4,319	University of Montreal	4
Toronto, ON	4,104	University of Toronto	1
Vancouver, BC	2,516	University of British Columbia	2
Waterloo Region, ON	2,396	University of Waterloo	3
Ottawa, ON	1,667	Carleton University	10
Halifax, NS	1,090	Dalhousie University*	-
Edmonton, AB	1,031	University of Alberta	6
Windsor, ON	844	University of Windsor*	-
Hamilton, ON	804	McMaster University	7
Calgary, AB	768	University of Calgary	14

*Not featured in Maclean's 2020 ranking, however both have robust computer science programs, including AI-focused courses.

Source: Various Provincial Ministries and Higher Education Institutions, Maclean's "2020 University Rankings" for computer science programs, CBRE Research, 2019.

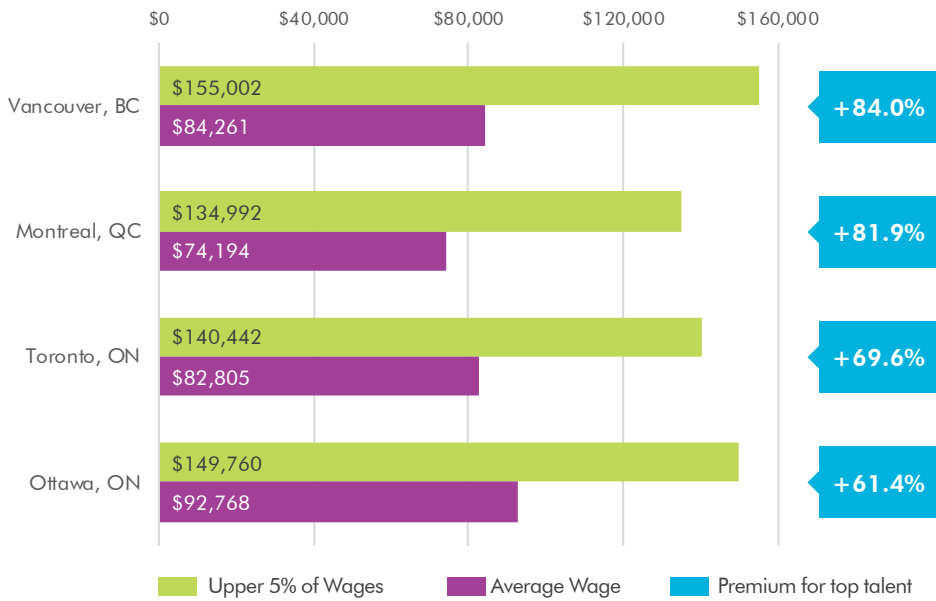
FIGURE 7: EDUCATIONAL ATTAINMENT (2018)
25-64 Years Old, Bachelor's Degree or Higher



Source: Environics Analytics, 2018.

To get top talent you have to pay for it. Take a software developer’s salary for example: to pay for the best and the brightest in the field incurs a wage premium where those in the upper 5% bracket earn over 80% above the average industry salary in Vancouver and Montreal. Software developers earn the highest average wages in Calgary and Ottawa at over \$90,000 per year. However, the Waterloo Region, Vancouver and Toronto rank the highest in terms of the quality of tech talent within each market.

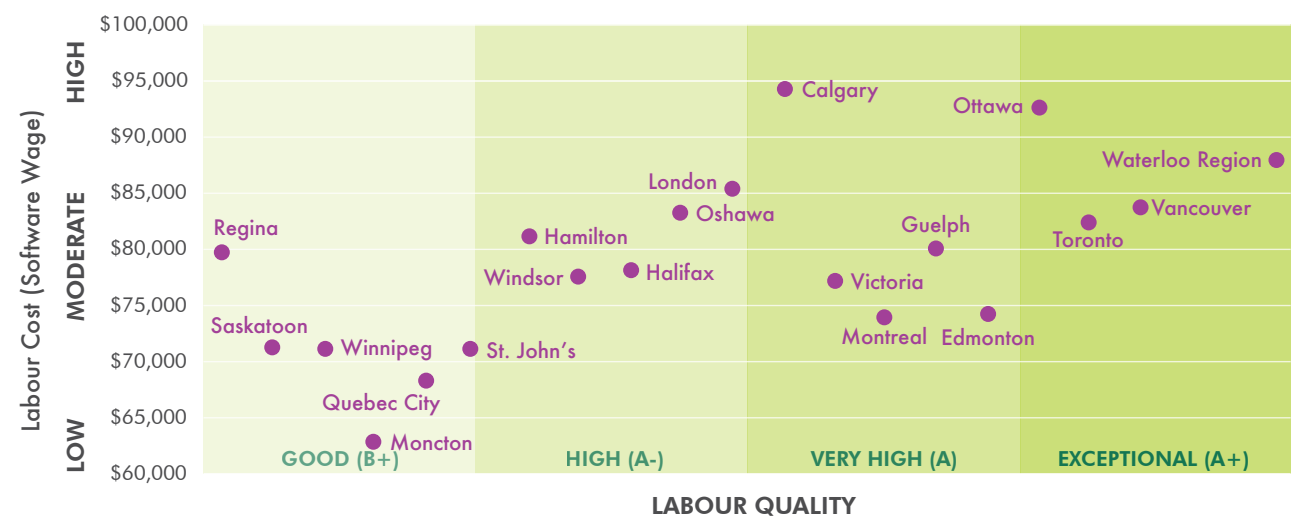
FIGURE 8: WAGE PREMIUM FOR TOP SOFTWARE DEVELOPER TALENT
Premium between Average and Upper 5% of Wages



Source: Statistics Canada LFS (NOCs), April 2019.

YOU GET WHAT YOU PAY FOR:
Premium for top tech talent nears
80%
in leading tech markets.

FIGURE 9: TECH TALENT QUALITY VS. COST ANALYSIS



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, 2018.
Source: Statistics Canada LFS (NOCs) April 2019, U.S. News & World Report, CBRE Labor Analytics, CBRE Research, 2019.

/ Cost to Operate

Across all markets, the greatest cost for tech companies is employee wages. These highly skilled and educated workers command a premium that can reach more than double the average non-tech salary.

Office rents, while rising well above historical market averages in gateway markets due to increased tech demand, account for a much smaller share of a firm's expenses. In Canada, small capitalization tech firms reported real estate costs on average at 4.8% of their total annual expenses according to a recent study by CBRE Research. Tech firms instead place a higher value on space finding in specific desirable submarkets or nodes where talent is ample and there is the presence of a tech ecosystem.

Combining wage and real estate costs provides insight into what a tech company might pay to operate in a specific city. To illustrate this comparison, Canadian averages were analyzed to determine the occupational makeup of a typical 500-person tech company requiring 75,000 sq. ft. of office space. Overall, Calgary, Edmonton and Ottawa topped the list with the highest estimated combined rent and wage annual costs at more than \$40.0 million. Most affordable of all are Moncton, Quebec City and London. However, when grouping the markets based on the talent pool size, Montreal is the most affordable large labour pool market in which to operate.

From the North American perspective, the skilled pool of Canadian tech workers paid in discounted Canadian dollars is a significant draw for companies contemplating where to set up shop or expand operations. With several cities presenting excellent or very high quality labour at a less prohibitive cost, Canadian cities often come out ahead in this respect. In particular, Toronto, Vancouver, Montreal and Ottawa provide the best value in North America when it comes to cost and quality. All are within several percentage points of coming in at half the cost of operating in the San Francisco Bay Area.

Bearing in mind the underlying fundamentals of tech talent markets and average tech employee salaries, it appears that both occupiers and investors can pursue a range of profitable and affordable real estate strategies in cities across Canada.



FIGURE 10: ESTIMATED ONE-YEAR COSTS BY MARKET: WAGE & RENT OBLIGATION FOR TYPICAL TECH FIRM

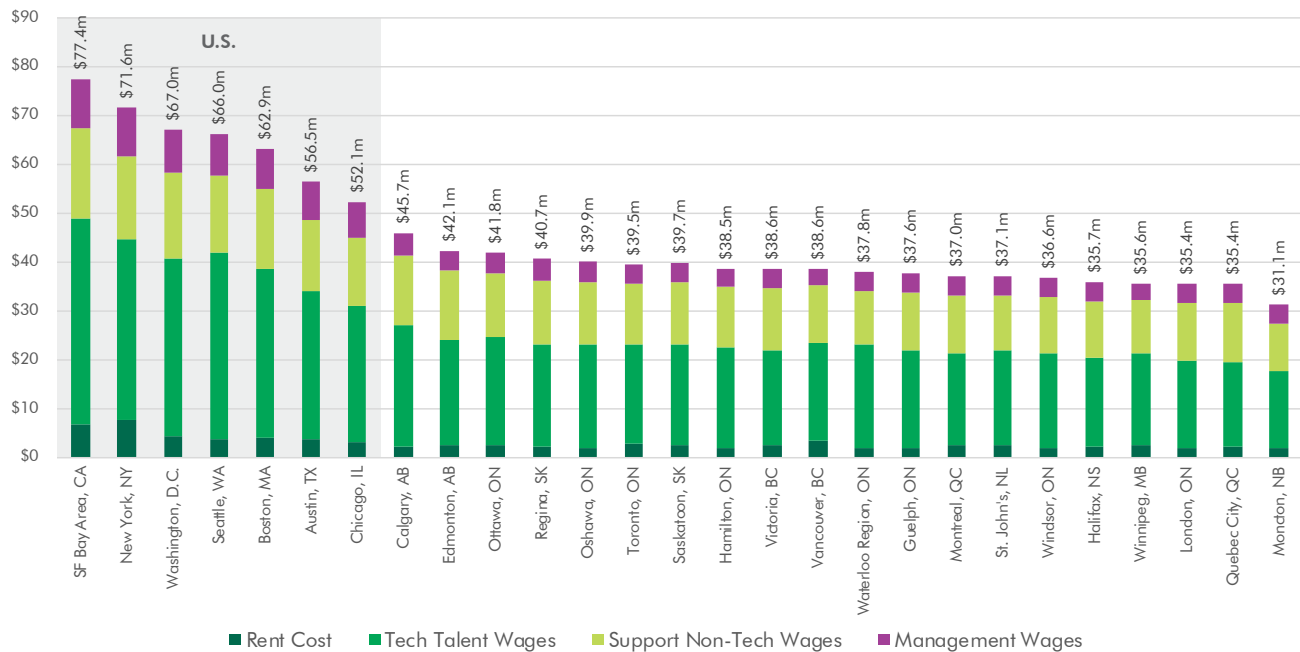
Sample Tech Firm Estimates: 500 Employees, 75,000 Sq. Ft.

	Market	Rent Cost (Avg. Gross Rent x 75,000 Sq. Ft.)	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 Gross Occupancy Cost
Large Markets (> 50K tech workers)	Ottawa, ON	\$2,487,000	\$21,936,220	\$13,293,587	\$4,124,286	\$41,841,093
	Toronto, ON	\$2,714,250	\$20,457,039	\$12,186,166	\$4,144,296	\$39,501,751
	Vancouver, BC	\$3,312,750	\$20,026,397	\$11,720,130	\$3,525,538	\$38,584,814
	Montreal, QC	\$2,424,000	\$18,908,414	\$11,754,588	\$3,919,573	\$37,006,575
Mid-Sized Markets (10- 50K tech workers)	Calgary, AB	\$2,275,500	\$24,637,600	\$14,408,899	\$4,398,264	\$45,720,263
	Edmonton, AB	\$2,556,750	\$21,538,400	\$13,991,425	\$3,974,214	\$42,060,789
	Hamilton, ON	\$1,785,000	\$20,612,800	\$12,433,444	\$3,651,752	\$38,482,996
	Waterloo Region, ON	\$1,758,750	\$21,418,800	\$10,698,413	\$3,973,445	\$37,849,408
	Halifax, NS	\$2,162,250	\$18,163,600	\$11,446,249	\$3,974,214	\$35,746,314
	Winnipeg, MB	\$2,292,750	\$18,886,400	\$10,863,858	\$3,568,635	\$35,611,643
	Quebec City, QC	\$2,047,036	\$17,487,600	\$11,864,908	\$3,974,214	\$35,373,759
Small Markets (< 10K tech workers)	Regina, SK	\$1,987,500	\$21,179,600	\$12,993,830	\$4,527,557	\$40,688,487
	Oshawa, ON	\$1,751,250	\$21,221,200	\$12,682,259	\$4,242,035	\$39,896,744
	Saskatoon, SK	\$2,458,500	\$20,638,800	\$12,603,077	\$3,974,214	\$39,674,591
	Victoria, BC	\$2,306,250	\$19,593,600	\$12,678,527	\$3,974,214	\$38,552,592
	Guelph, ON	\$1,762,500	\$20,087,600	\$11,820,478	\$3,974,214	\$37,644,792
	St. John's, NL	\$2,390,250	\$19,567,600	\$11,131,282	\$3,974,214	\$37,063,346
	Windsor, ON	\$1,826,250	\$19,442,800	\$11,332,747	\$3,974,214	\$36,576,011
	London, ON	\$1,897,500	\$17,888,000	\$11,641,102	\$3,974,214	\$35,400,816
	Moncton, NB	\$1,740,750	\$15,813,200	\$9,593,821	\$3,974,214	\$31,121,986

Source: Statistics Canada LFS (NOCs), April 2019; CBRE Research, Q3 2019.

FIGURE 11: NORTH AMERICAN COMPARISON, WAGE & RENT OBLIGATION FOR TYPICAL TECH FIRM

Estimated One-Year Costs (CAD x \$1M)



Source: U.S. Bureau of Labor Statistics, Statistics Canada, CBRE Research, 2019.

VENTURE CAPITAL FUNDING

Venture capital (VC) is a crucial element for the development of homegrown tech firms. The funding allows companies to scale before becoming self-sufficient while supporting tech infrastructure and R&D. The availability of VC also funding boosts the potential for a city's tech market to support the creation of a cluster. In Canada, the volume of VC funding

has continued to rise each year and surged in the year-to-date 2019 to \$4.7 billion, already far surpassing last year's total of \$3.7 billion. Toronto and Montreal account for the lion's share of the VC funding both in terms of volumes and the number of deals done.

FIGURE 12: VENTURE CAPITAL INVESTMENT ACTIVITY, CANADA

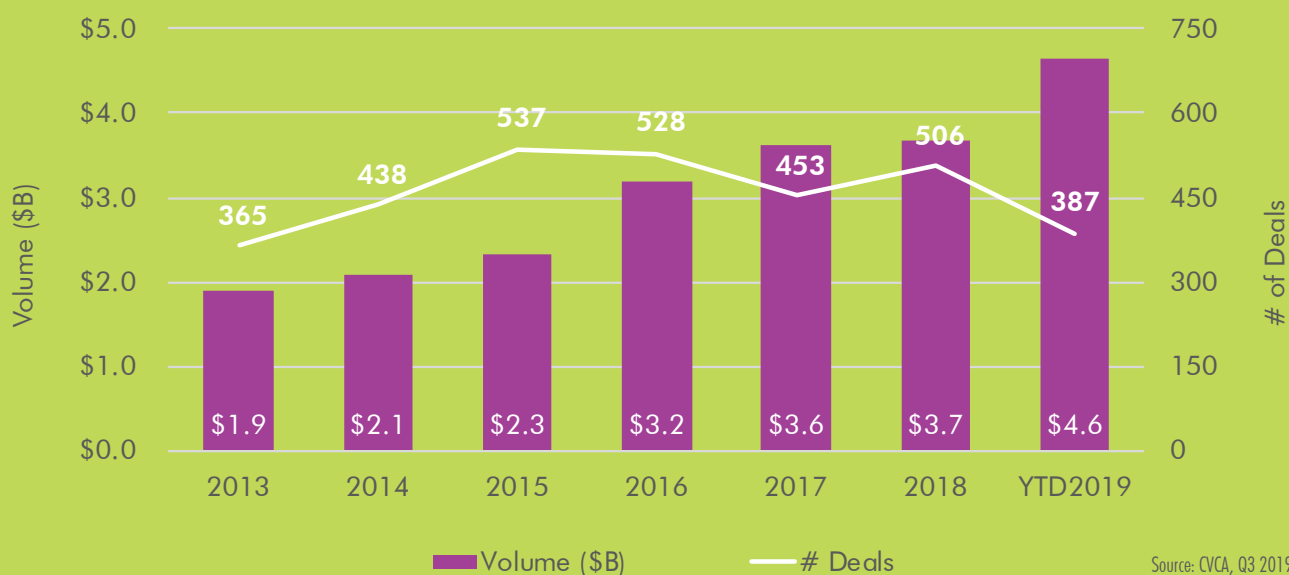
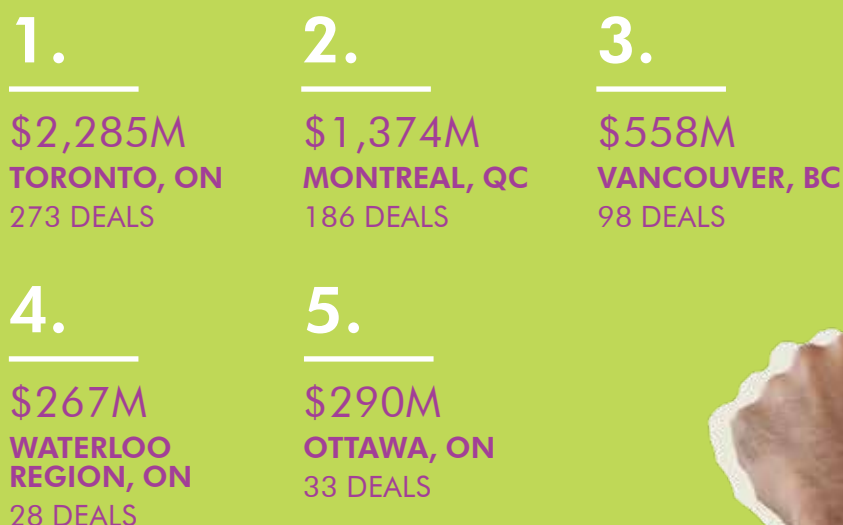


FIGURE 13: TOP 5 CANADIAN CITIES FOR VENTURE CAPITAL FUNDING BY DEAL COUNT
18-Months (2018 - H1 2019)

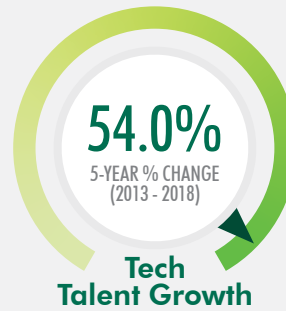
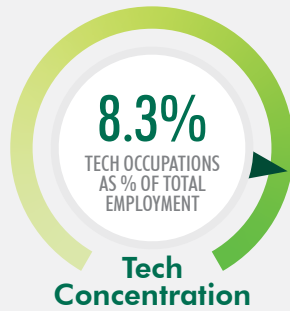




APPENDIX

1 Toronto, ON

SCORE
88.1



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Tech Labour
Pool Size

Tech
Concentration

Educational
Attainment

PRIMARY TECH INDUSTRIES



Artificial
Intelligence



FinTech



Software as a
Service (SaaS)

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	228,500	54.0%	\$81,828	9.7%
Software Developers/Programmers	67,000	79.6%	\$82,805	6.1%
Computer Support, Database & Systems	93,100	77.3%	\$74,526	7.7%
Computer & Info. Systems Managers	23,600	44.8%	\$112,008	20.7%
Technology Engineering-Related	44,800	5.9%	\$79,643	11.7%

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	4,104	42.3%	36.7%
Computer Science	1,169	44.7%	
Math/Statistics	839	88.1%	Bachelor's Degree or Higher
Other Tech Engineering	2,096	28.6%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$802,400**

Avg Condo Rent: **\$2,235 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,363 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

138%

Canadian Average = 100

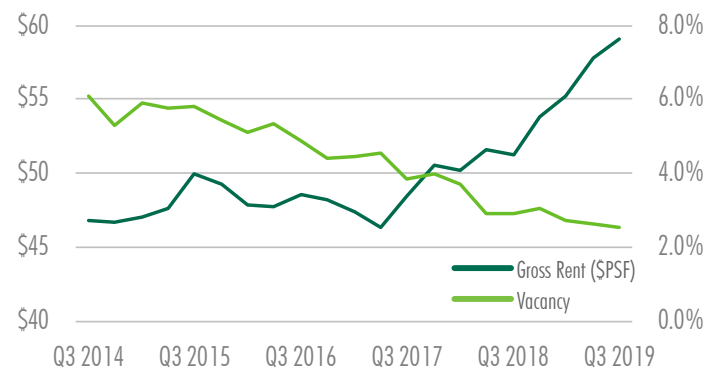
Source: Numbeo, 2019.

VC FUNDING

\$2,285M (273 deals) Total VC funding and number of deals
(2018 - H1 2019)

Source: CVCA, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Microsoft	1050 Meadowvale Blvd	160,700
Finastra	5995 Avebury Rd	81,700
Achievers	99 Atlantic Ave	60,000
Soti Inc.	6975 Creditview Rd	45,300
Tier1 Financial Solutions	2300 Yonge St	28,600

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

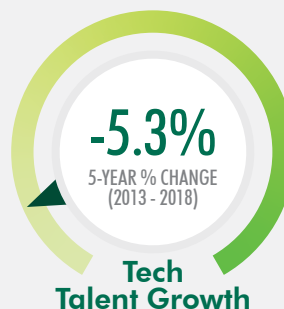
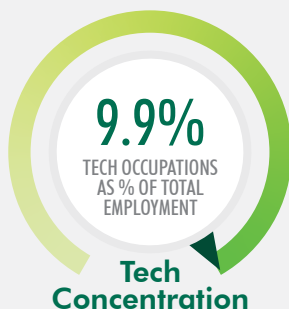
76%
MALE

26%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

2 Ottawa, ON

SCORE
73.1



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Tech Concentration | Educational Attainment | Tech Labour Pool Size

PRIMARY TECH INDUSTRIES

Software as a Service (SaaS) | Cybersecurity | Autonomous Vehicles

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	64,500	-5.3%	\$87,745	6.5%
Software Developers/Programmers	15,600	-40.0%	\$92,768	11.6%
Computer Support, Database & Systems	25,800	23.4%	\$78,728	3.7%
Computer & Info. Systems Managers	7,300	1.4%	\$111,467	13.1%
Technology Engineering-Related	15,800	12.9%	\$86,549	5.1%

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	1,667	68.6%	41.1%
Computer Science	515	66.1%	
Math/Statistics	129	72.0%	
Other Tech Engineering	1,023	69.4%	Bachelor's Degree or Higher

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$431,600**

Avg Condo Rent: **\$1,601 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,174 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

103%

Canadian Average = 100

Source: Numbeo, 2019.

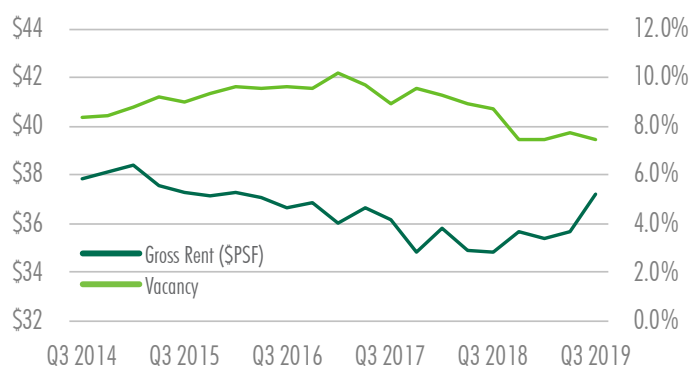
VC FUNDING

\$290M (33 deals)

Total VC funding and number of deals (2018 - H1 2019)

Source: CVCA, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Kinaxis	700 Silver Seven Rd	165,000
Saba Software	495 March Rd	57,000
Skyworks Solutions, Inc.	1135 Innovation Dr	50,000
Trend Micro Canada	40 Hines Rd	20,000
Fuze	303 Moodie Dr	15,500

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

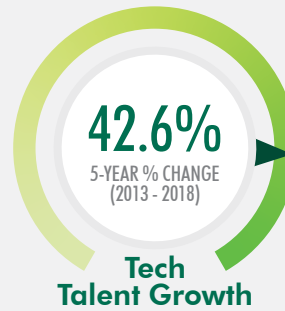
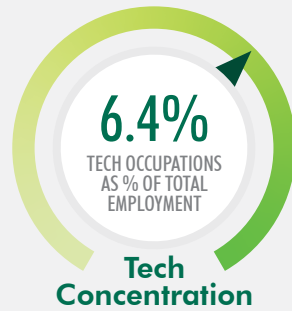
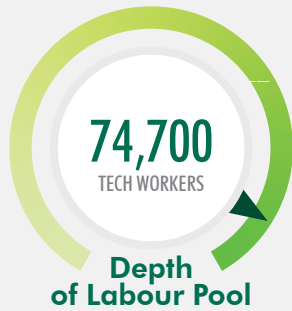
78%
MALE

22%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

3 Vancouver, BC

SCORE
71.4



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Quality of Labour

Tech Quality to Cost

Tech Labour Pool Size

PRIMARY TECH INDUSTRIES



Software app/dev



Digital Media/Gaming

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	74,700	42.6%	\$80,106	9.7%
Software Developers/Programmers	25,200	40.8%	\$84,261	10.3%
Computer Support, Database & Systems	25,600	69.5%	\$74,734	17.4%
Computer & Info. Systems Managers	4,900	-9.3%	\$95,285	6.2%
Technology Engineering-Related	19,000	35.7%	\$77,917	7.7%

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	2,516	29.6%	34.8%
Computer Science	1,088	55.0%	
Math/Statistics	269	1.1%	
Other Tech Engineering	1,159	19.0%	Bachelor's Degree or Higher

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$993,300**

Avg Condo Rent: **\$1,855 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,385 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

129%

Canadian Average = 100

Source: Numbeo, 2019.

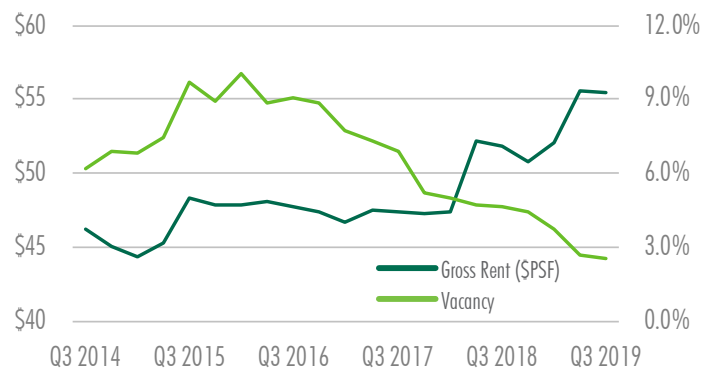
VC FUNDING

\$558M (98 deals)

Total VC funding and number of deals (2018 - H1 2019)

Source: CVCA, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Kabam	753 Seymour St	105,000
Microsoft Canada	155 Water St	69,400
Greenlight Innovation Corp.	8339 Eastlake Dr	48,000
Apple	400 W Georgia St	44,600
Creation Technologies	3905 N Fraser Way	41,100

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

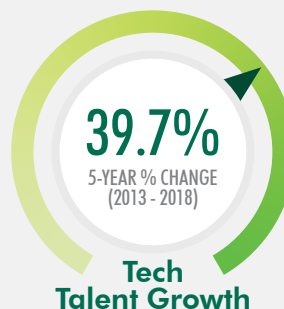
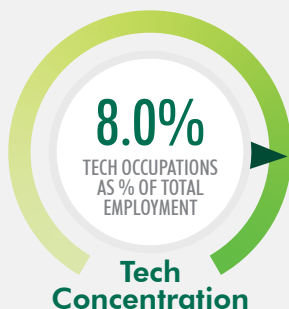
82%
MALE

18%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

4 Waterloo Region, ON

SCORE
69.4



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Quality of Labour

Tech Quality to Cost

Real Estate Cost

PRIMARY TECH INDUSTRIES



Software app/dev



Robotics



Cybersecurity

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	20,400	39.7%	\$85,675	24.2%
Software Developers/Programmers	8,800	120.0%	\$88,379	17.6%
Computer Support, Database & Systems	4,500	12.5%	\$67,933	6.8%
Computer & Info. Systems Managers	2,800	180.0%	\$107,390	N/A
Technology Engineering-Related	4,300	-23.2%	\$84,344	30.7%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	2,396	13.6%	26.4%
Computer Science	718	45.3%	
Math/Statistics	669	30.4%	
Other Tech Engineering	1,009	-8.5%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$528,990**

Avg Condo Rent: **\$1,542 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,138 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

100%

Canadian Average = 100

Source: Numbeo, 2019.

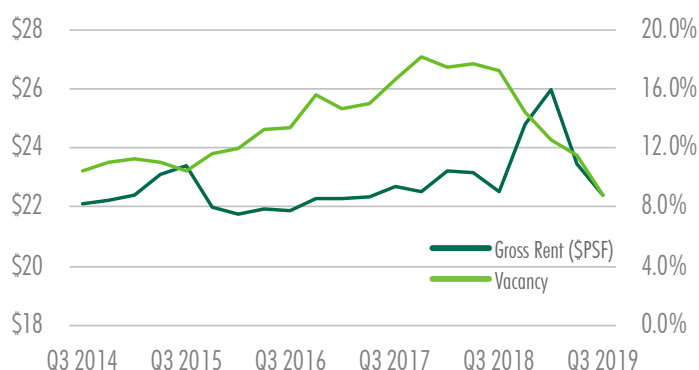
VC FUNDING

\$267M (28 deals)

Total VC funding and number of deals
(2018 - H1 2019)

Source: CVCA, 2019.

METRO OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Magnet Forensics Inc.	2220 University Ave E	82,800
Molex Canada Ltd	2220 University Ave E	41,200
Geotab	137 Glasgow St	30,000
Neverfrost Inc.	283 Duke Street W	8,000

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

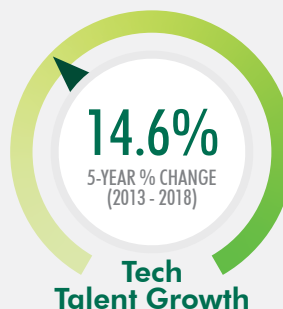
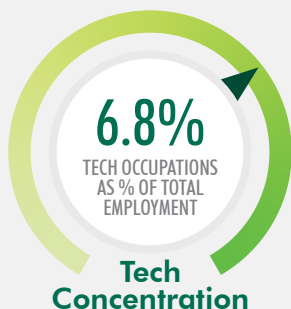
80%
MALE

20%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

5 Montreal, QC

SCORE
69.3



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Tech & Tech-Related Degrees | Tech Labour Pool Size | Tech Concentration

PRIMARY TECH INDUSTRIES

Software app/dev | Digital Media/Gaming | Artificial Intelligence

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	130,200	14.6%	\$75,634	11.4%
Software Developers/Programmers	34,100	40.9%	\$74,194	15.8%
Computer Support, Database & Systems	47,300	7.7%	\$73,507	18.9%
Computer & Info. Systems Managers	10,100	16.1%	\$105,934	10.1%
Technology Engineering-Related	38,700	5.2%	\$71,594	1.0%

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	4,319	25.8%	29.3%
Computer Science	1,058	17.0%	
Math/Statistics	301	11.9%	
Other Tech Engineering	2,960	31.0%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Enviroics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$369,500**

Avg Condo Rent: **\$1,235 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$796 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

97%

Canadian Average = 100

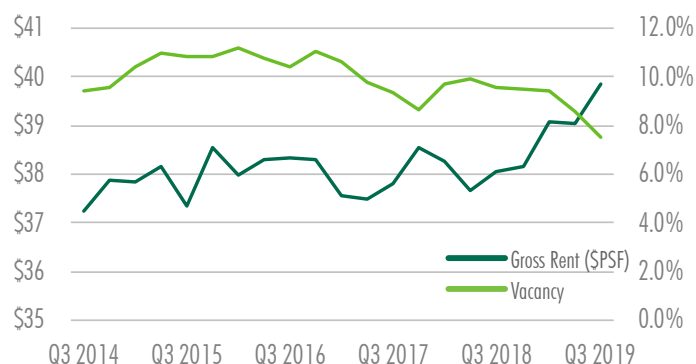
Source: Numbeo, 2019.

VC FUNDING

\$1,374M (186 deals) Total VC funding and number of deals (2018 - H1 2019)

Source: CVCA, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Google Canada Corp.	425 Viger Ave W	100,000
Gsoft	1750 Richardson St	94,000
Cinesite	250 Sainte-Antoine St W	81,000
Unity Technologies	1750 Richardson St	51,000
Alithya Technology	1100 Robert-Bourassa Blvd	45,000

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

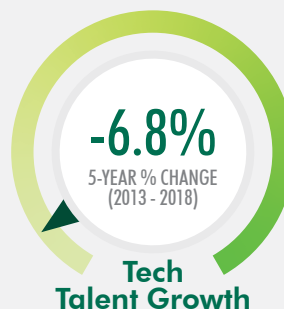
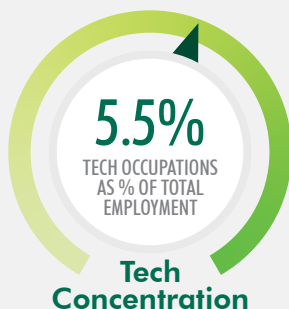
79%
MALE

21%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

6 Calgary, AB

SCORE
53.9



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Educational
Attainment

Tech Labour
Pool Size

Tech
Concentration

PRIMARY TECH INDUSTRIES



Software
app/dev



Clean
Tech

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	38,500	-6.8%	\$98,550	14.4%
Software Developers/Programmers	8,500	-19.0%	\$94,682	12.7%
Computer Support, Database & Systems	14,400	1.4%	\$90,522	11.2%
Computer & Info. Systems Managers	3,000	-21.1%	\$118,872	22.2%
Technology Engineering-Related	12,600	-1.6%	\$105,414	17.3%

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	768	25.7%	35.1%
Computer Science	265	53.2%	
Math/Statistics	77	14.9%	
Other Tech Engineering	426	14.8%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Enviroics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$420,500**

Avg Condo Rent: **\$1,444 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,149 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

104%

Canadian Average = 100

Source: Numbeo, 2019.

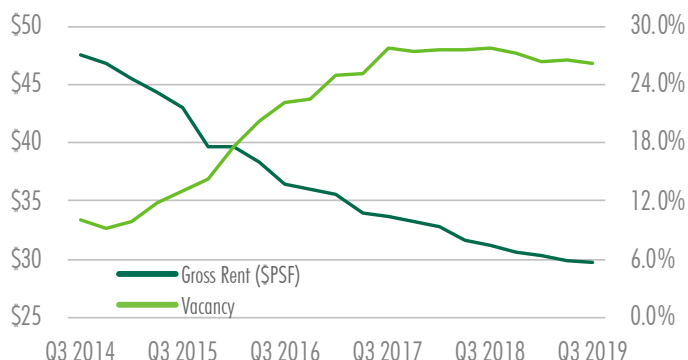
VC FUNDING

\$83M (31 deals)

Total VC funding and number of deals
(2018 - H1 2019)

Source: CVCA, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Absorb Software Inc.	619 Centre St S	70,000
Finger Food Advanced Technology Group	225 6 Ave SW	26,000
Orpyx Medical Technologies Inc.	1240 20 Ave SE	15,600

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

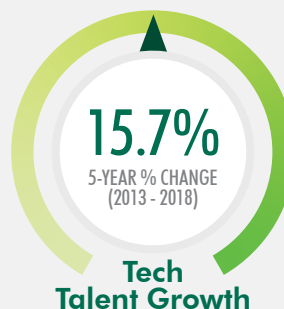
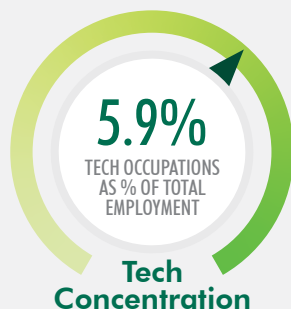
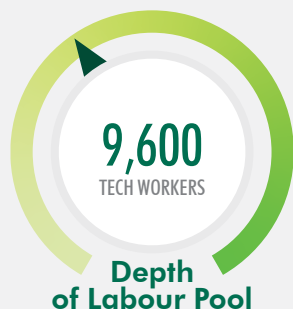
79%
MALE

21%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

7 Victoria, BC

SCORE
53.7



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Educational
Attainment

Tech
Concentration

Quality of
Labour

PRIMARY TECH INDUSTRIES



Software
app/dev



Ocean
Sciences



Advanced
Manufacturing

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	9,600	15.7%	\$78,374	10.2%
Software Developers/Programmers	3,400	54.5%	\$77,563	10.4%
Computer Support, Database & Systems	3,500	2.9%	\$75,816	8.4%
Computer & Info. Systems Managers	800	-11.1%	N/A	N/A
Technology Engineering-Related	1,900	5.6%	\$79,810	19.1%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	503	43.7%	30.9%
Computer Science	162	51.4%	Bachelor's Degree or Higher
Math/Statistics	52	40.5%	
Other Tech Engineering	289	40.3%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: EnviroNics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$693,000**

Avg Condo Rent: **\$1,518 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,170 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

112%

Canadian Average = 100

Source: Numbeo, 2019.

METRO OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$30.75

Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Redbrick	1515 Douglas St	21,600
Checkfront	765/777 Broughton St	19,300
DXC Technology	4464 Markham St	16,100
Benevity, Inc.	777 Broughton St	12,500

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

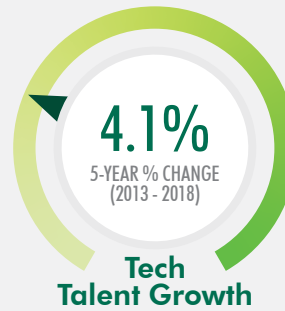
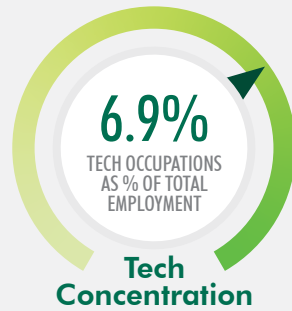
85%
MALE

15%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

8 Quebec City, QC

SCORE
50.2



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Gross
Occupancy

Tech
Concentration

Tech Labour
Pool Size

PRIMARY TECH INDUSTRIES



Life
Sciences



Optics/
Phonics



Computer
solutions

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	27,700	4.1%	\$69,950	6.2%
Software Developers/Programmers	7,900	33.9%	\$68,640	8.8%
Computer Support, Database & Systems	12,000	2.6%	\$68,328	-0.3%
Computer & Info. Systems Managers	1,300	62.5%	N/A	N/A
Technology Engineering-Related	6,500	-20.7%	\$70,096	10.0%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	464	44.1%	29.1%
Computer Science	171	39.0%	
Math/Statistics	45	0.0%	
Other Tech Engineering	248	57.0%	Bachelor's Degree or Higher

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$280,220**

Avg Condo Rent: **\$1,068 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$813 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

Living Cost Index

84%

Canadian Average = 100

Source: Numbeo, 2019.

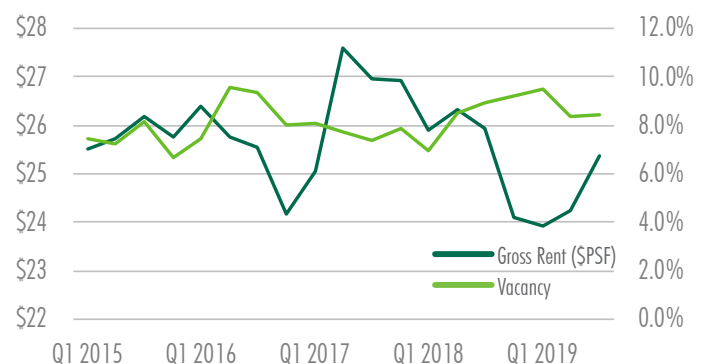
VC FUNDING

\$68M (15 deals)

Total VC funding and number of deals
(2018 - H1 2019)

Source: CVCA, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
IngeniArts Technologies Inc.	1065 Lescarbot St	16,100
UEAT	1130 Charest Blvd W	15,000
Qohash	420 Charest Blvd E	4,500

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

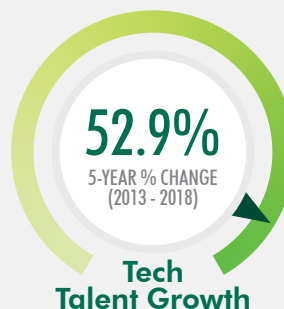
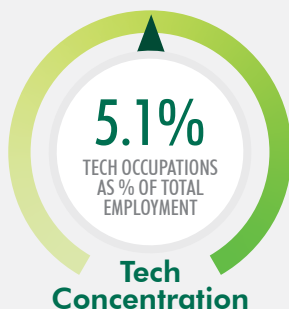
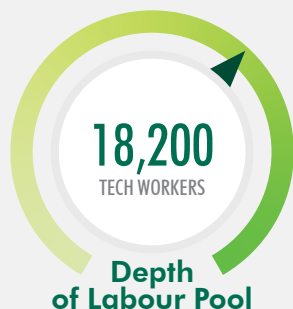
80%
MALE

20%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

9 Hamilton, ON

SCORE
48.7



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Tech Employment
Growth

Real Estate
Cost

Tech Labour
Pool Size

PRIMARY TECH INDUSTRIES



Life
Sciences



Autonomous
Vehicles



Digital Media/
Gaming

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	18,200	52.9%	\$82,451	5.3%
Software Developers/Programmers	3,700	27.6%	\$81,182	1.6%
Computer Support, Database & Systems	7,400	100.0%	\$75,150	3.1%
Computer & Info. Systems Managers	2,700	145.5%	\$98,696	N/A
Technology Engineering-Related	4,400	4.8%	\$85,800	14.0%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	804	8.8%	25.9%
Computer Science	172	60.7%	
Math/Statistics	94	-16.1%	
Other Tech Engineering	538	3.5%	Bachelor's Degree or Higher

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: EnviroNics Analytics, 2018.

METRO OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$23.80 ▲

Vacancy Rate

14.1% ▼

Source: CBRE Research, Q3 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$613,900**

Avg Condo Rent: **\$1,408 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,077 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

94%

Canadian Average = 100

Source: Numbeo, 2019.

TECH TALENT DIVERSITY

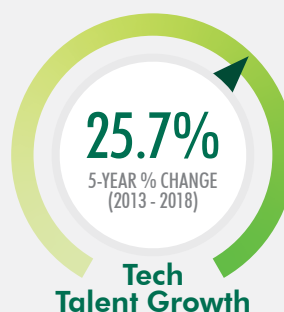
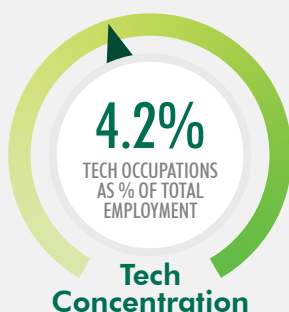
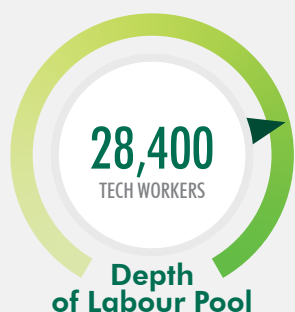
75%
MALE

25%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

10 Edmonton, AB

SCORE
48.2



Source: Statistics Canada LFS (NOCs), April 2019; CBRE Labor Analytics, CBRE Research, 2019.

TOP PERFORMING DRIVERS

Tech Quality to Cost

Quality of Labour

Tech Labour Pool Size

PRIMARY TECH INDUSTRIES



Artificial Intelligence



Software app/dev

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	28,400	25.7%	\$86,154	10.2%
Software Developers/Programmers	7,200	89.5%	\$74,443	6.5%
Computer Support, Database & Systems	9,500	13.1%	\$77,667	12.9%
Computer & Info. Systems Managers	1,300	8.3%	N/A	N/A
Technology Engineering-Related	10,400	13.0%	\$97,344	10.8%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	1,031	19.5%	28.3%
Computer Science	316	124.1%	
Math/Statistics	159	78.7%	Bachelor's Degree or Higher
Other Tech Engineering	556	-12.2%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Enviroics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$321,300**

Avg Condo Rent: **\$1,321 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,131 (per unit/mo.)**

Source: CREA, August 2019; CMHC, Oct 2018.

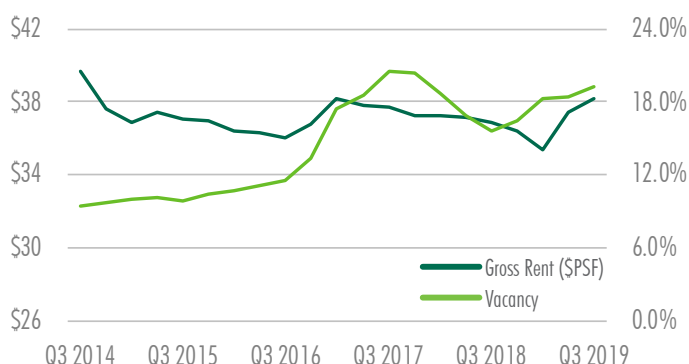
Living Cost Index

103%

Canadian Average = 100

Source: Numbeo, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2019.

TOP TECH OFFICE DEALS (2019)

Tenant	Address	Sq. Ft.
Jobber	10130 103 St NW	37,700
Dell EMC	6020 104 St NW	28,600
Alberta Machine Intelligence Institute (Amii)	10065 Jasper Ave	22,400
Resolver Inc.	1005 102A Ave NW	9,800
Showbie Inc.	10117 Jasper Ave	7,900

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

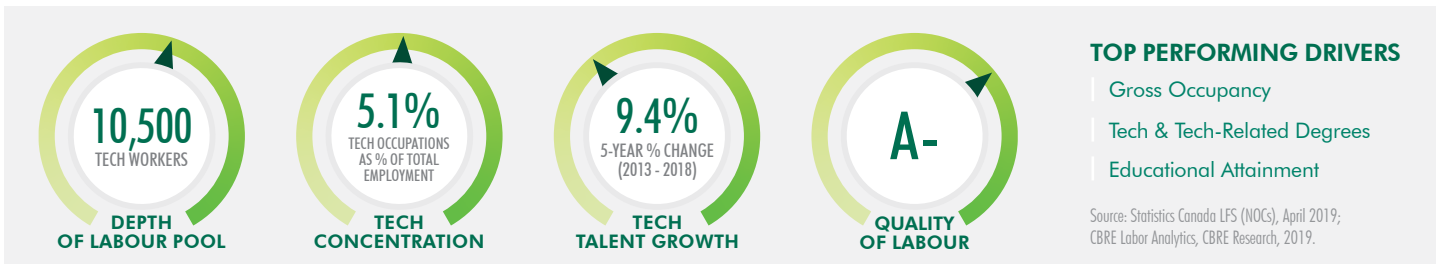
76%
MALE

24%
FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

11 Halifax, NS

SCORE
44.6



EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	10,500	9.4%	\$72,654	11.2%
Software Developers/Programmers	2,400	-11.1%	\$78,374	25.3%
Computer Support, Database & Systems	4,200	44.8%	\$64,771	7.8%
Computer & Info. Systems Managers	800	-20.0%	N/A	N/A
Technology Engineering-Related	3,100	3.3%	\$75,400	8.4%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$30.89 ▲

Vacancy Rate

18.7% ▼

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

81% MALE **19%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	1,090	19.3%	33.1%
Computer Science	N/A	N/A	
Math/Statistics	345	38.0%	Bachelor's Degree or Higher
Other Tech Engineering	745	12.2%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$315,423**

Avg Condo Rent: **\$1,328 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,066 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

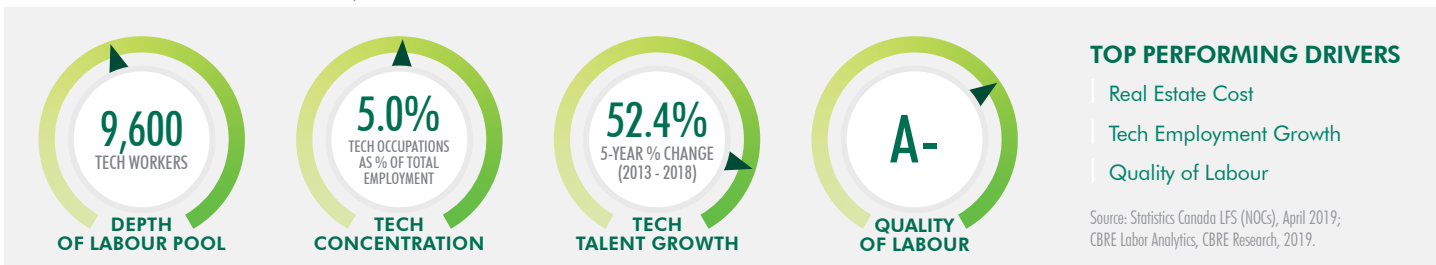
102%

Canadian Average = 100

Source: Numbeo, 2019.

12 Oshawa, ON

SCORE
42.8



EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	9,600	52.4%	\$84,885	2.8%
Software Developers/Programmers	2,200	N/A	\$83,678	N/A
Computer Support, Database & Systems	3,500	75.0%	\$73,445	-5.4%
Computer & Info. Systems Managers	1,500	N/A	\$114,650	N/A
Technology Engineering-Related	2,400	20.0%	\$84,053	1.0%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

METRO OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$23.35 ▼

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

81% MALE **19%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	489	66.9%	19.5%
Computer Science	175	49.6%	
Math/Statistics	0	-100.0%	Bachelor's Degree or Higher
Other Tech Engineering	314	90.3%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$515,818**

Avg Purpose-Built Apt Rent: **\$1,220 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

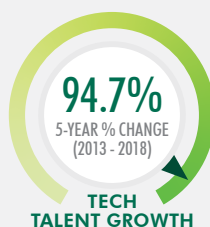
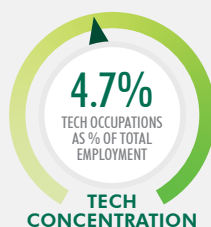
99%

Canadian Average = 100

Source: Numbeo, 2019.

13 Guelph, ON

SCORE
41.8



TOP PERFORMING DRIVERS

- Tech Employment Growth
- Real Estate Cost
- Educational Attainment

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	3,700	94.7%	\$80,350	13.1%
Software Developers/Programmers	N/A	N/A	N/A	N/A
Computer Support, Database & Systems	N/A	N/A	N/A	N/A
Computer & Info. Systems Managers	N/A	N/A	N/A	N/A
Technology Engineering-Related	N/A	N/A	N/A	N/A

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	333	122.0%	33.5%
Computer Science	113	189.7%	Bachelor's Degree or Higher
Math/Statistics	24	-36.8%	
Other Tech Engineering	196	168.5%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

METRO OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$23.50 ▲

Vacancy Rate

3.8% ▲

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

81% MALE **19%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$552,400**

Avg Purpose-Built Apt Rent: **\$1,109 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

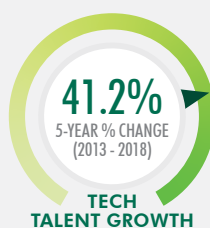
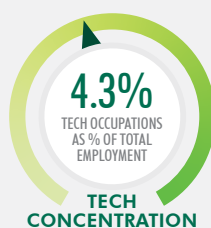
95%

Canadian Average = 100

Source: Numbeo, 2019.

14 London, On

SCORE
36.2



TOP PERFORMING DRIVERS

- Gross Occupancy
- Real Estate Cost
- Tech Employment Growth

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	9,600	41.2%	\$71,552	6.4%
Software Developers/Programmers	2,100	23.5%	\$85,696	37.4%
Computer Support, Database & Systems	3,500	66.7%	\$60,278	2.5%
Computer & Info. Systems Managers	200	-71.4%	N/A	N/A
Technology Engineering-Related	3,800	65.2%	\$73,632	13.7%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	531	31.4%	25.2%
Computer Science	107	78.3%	Bachelor's Degree or Higher
Math/Statistics	48	-42.2%	
Other Tech Engineering	376	44.1%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$25.31 ▼

Vacancy Rate

19.2% ▼

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

75% MALE **25%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$413,484**

Avg Condo Rent: **\$1,178 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$995 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

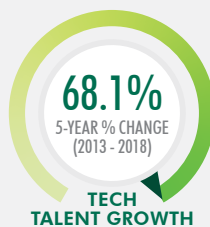
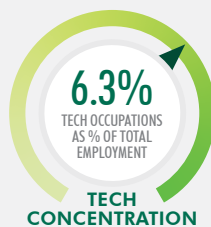
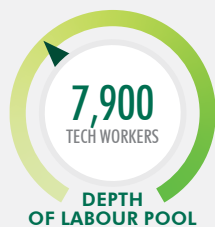
88%

Canadian Average = 100

Source: Numbeo, 2019.

15 Regina, SK

SCORE
35.7



TOP PERFORMING DRIVERS

- Tech Employment Growth
- Tech Concentration
- Real Estate Cost

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	7,900	68.1%	\$84,718	8.8%
Software Developers/Programmers	1,700	54.5%	\$79,872	15.9%
Computer Support, Database & Systems	3,700	131.3%	\$83,179	9.6%
Computer & Info. Systems Managers	600	0.0%	\$122,366	26.3%
Technology Engineering-Related	1,900	35.7%	\$79,435	0.1%

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	126	20.0%	25.8%
Computer Science	53	8.2%	Bachelor's Degree or Higher
Math/Statistics	19	18.8%	
Other Tech Engineering	54	35.0%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

METRO OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$26.50

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

72% MALE **28%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$267,900**

Avg Condo Rent: **\$1,434 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,041 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

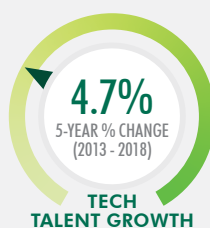
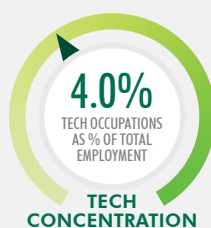
100%

Canadian Average = 100

Source: Numbeo, 2019.

16 Winnipeg, MB

SCORE
33.4



TOP PERFORMING DRIVERS

- Gross Occupancy
- Tech Labour Pool Size
- Tech & Tech-Related Degrees

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	15,600	4.7%	\$75,546	16.9%
Software Developers/Programmers	2,900	-14.7%	\$71,323	20.5%
Computer Support, Database & Systems	7,300	23.7%	\$72,883	6.0%
Computer & Info. Systems Managers	600	-14.3%	\$96,450	22.9%
Technology Engineering-Related	4,800	-2.0%	\$79,747	29.9%

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	550	51.9%	27.7%
Computer Science	168	64.7%	Bachelor's Degree or Higher
Math/Statistics	83	18.6%	
Other Tech Engineering	299	57.4%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$31.92

Vacancy Rate

11.8%

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

78% MALE **22%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$282,198**

Avg Condo Rent: **\$1,257 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,030 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

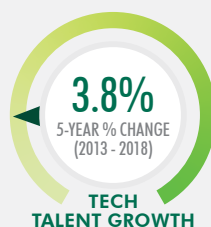
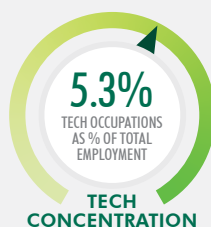
89%

Canadian Average = 100

Source: Numbeo, 2019.

17 St.John's, NL

SCORE
31.2



TOP PERFORMING DRIVERS

- Gross Occupancy
- Tech Concentration
- Educational Attainment

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	5,400	3.8%	\$78,270	-0.7%
Software Developers/Programmers	1,000	25.0%	\$71,448	4.3%
Computer Support, Database & Systems	1,700	41.7%	\$70,283	-3.5%
Computer & Info. Systems Managers	400	-20.0%	N/A	N/A
Technology Engineering-Related	2,300	-14.8%	\$84,656	4.7%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	154	-19.8%	26.7%
Computer Science	30	15.4%	Bachelor's Degree or Higher
Math/Statistics	22	-21.4%	
Other Tech Engineering	102	-26.1%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$31.87 ▼

Vacancy Rate

20.2% ▼

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

76% MALE **24%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$282,775**

Avg Purpose-Built Apt Rent: **\$877** (per unit/mo.)

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

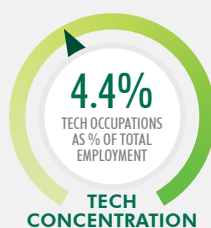
95%

Canadian Average = 100

Source: Numbeo, 2019.

18 Windsor, ON

SCORE
27.8



TOP PERFORMING DRIVERS

- Gross Occupancy
- Real Estate Cost
- Tech & Tech-Related Degrees

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	6,500	20.4%	\$77,771	13.7%
Software Developers/Programmers	N/A	N/A	N/A	N/A
Computer Support, Database & Systems	2,300	27.8%	\$67,558	48.9%
Computer & Info. Systems Managers	N/A	N/A	N/A	N/A
Technology Engineering-Related	3,300	26.9%	\$83,242	10.0%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	844	96.3%	23.4%
Computer Science	174	138.4%	Bachelor's Degree or Higher
Math/Statistics	12	-33.3%	
Other Tech Engineering	658	94.1%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

METRO OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$24.35 ▲

Vacancy Rate

14.8% ▼

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

71% MALE **29%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$333,131**

Avg Purpose-Built Apt Rent: **\$818** (per unit/mo.)

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

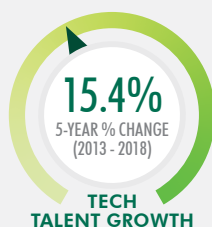
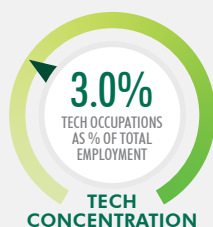
86%

Canadian Average = 100

Source: Numbeo, 2019.

19 Saskatoon, SK

SCORE
16.1



TOP PERFORMING DRIVERS

- Tech Employment Growth
- Educational Attainment
- Gross Occupancy

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	4,500	15.4%	\$82,555	14.5%
Software Developers/Programmers	1,100	57.1%	\$71,510	11.7%
Computer Support, Database & Systems	1,300	44.4%	\$73,258	15.0%
Computer & Info. Systems Managers	200	100.0%	N/A	N/A
Technology Engineering-Related	1,900	-13.6%	\$91,229	18.0%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	121	N/A	27.4%
Computer Science	89	N/A	Bachelor's Degree or Higher
Math/Statistics	20	N/A	
Other Tech Engineering	12	N/A	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$32.78 ▼

Vacancy Rate

13.7% ▼

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

82% MALE **18%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$290,800**

Avg Condo Rent: **\$1,251 (per unit/mo.)**

Avg Purpose-Built Apt Rent: **\$1,024 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

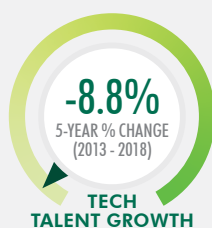
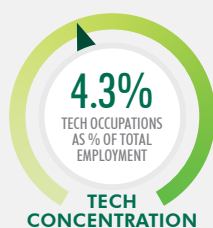
93%

Canadian Average = 100

Source: Numbeo, 2019.

20 Moncton, NB

SCORE
13.3



TOP PERFORMING DRIVERS

- Gross Occupancy
- Real Estate Cost
- Tech Concentration

Source: Statistics Canada LFS (NOCs), April 2019;
CBRE Labor Analytics, CBRE Research, 2019.

EMPLOYMENT BREAKDOWN

	Employment	Growth 2013-2018	Average Wage	Growth 2013-2018
Total Tech Occupations	3,100	-8.8%	\$63,253	9.0%
Software Developers/Programmers	800	33.3%	N/A	N/A
Computer Support, Database & Systems	1,800	12.5%	\$56,576	8.4%
Computer & Info. Systems Managers	N/A	N/A	N/A	N/A
Technology Engineering-Related	N/A	N/A	N/A	N/A

N/A due to suppression

Source: Statistics Canada LFS (NOCs), April 2019.

EDUCATION

Degrees	2017	Growth 2012-2017	Educational Attainment
Total Tech Degrees	84	2.4%	22.3%
Computer Science	0	0.0%	Bachelor's Degree or Higher
Math/Statistics	16	6.7%	
Other Tech Engineering	68	1.5%	

Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2018.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF)

\$23.21 ▲

Vacancy Rate

8.4% ▼

Source: CBRE Research, Q3 2019.

TECH TALENT DIVERSITY

74% MALE **26%** FEMALE

Source: Statistics Canada LFS (NOCs), April 2019.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$191,500**

Avg Purpose-Built Apt Rent: **\$794 (per unit/mo.)**

Source: CREA, August 2019 ; CMHC, Oct 2018.

Living Cost Index

90%

Canadian Average = 100

Source: Numbeo, 2019.



/ Contacts

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