

CBRE RESEARCH

2020 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 employers, both tech and non-tech. 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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Tech Talent in Canada

Tech Talent comprises highly skilled technical workers who create and enable the software and devices that are integrated into nearly everything we do. Computers in the home and at work are commonplace, but new tools (i.e., wearable technology, Wi-Fi-enabled devices and sensors, and voice-activated home assistants) are becoming more universally adopted as expectations for fast deliveries and real-time information updates increase. Technology is the future and companies across all industries are expanding their innovation capabilities through Tech Talent to satisfy changing business needs and consumer demands, which is more important today than ever before.

Canada 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 899,200 Tech Talent workers in Canada account for 5.6% of the labour

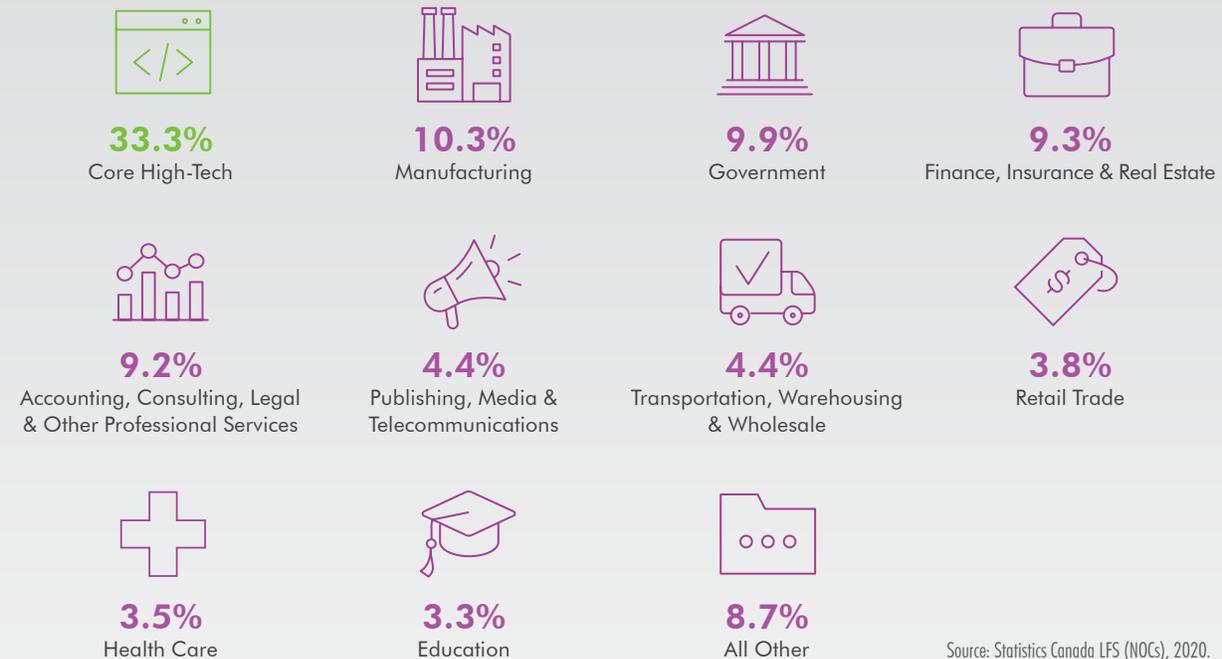
force. These workers are fueling innovation and adapting technology within non-traditional tech sectors, increasing productivity and strengthening the national economy.

Technology has become woven into every traditional component of a region's economy, and as such it's not just tech companies that are hiring Tech Talent. Although these positions are most concentrated within the high-tech industry, they are spread across all industry sectors. Through this lens, a software developer might work for a logistics company, a health care company, or a real estate brokerage firm. Currently, 33.3% of tech workers in Canada are employed in the core high-tech industry; the remaining can be found in non-tech focused industries including banks, government and manufacturing. Today, every company is a tech company when it comes to hiring and innovation.

FIGURE 1

Where are tech workers employed?

Canadian Tech Talent breakdown by Industry (2019)

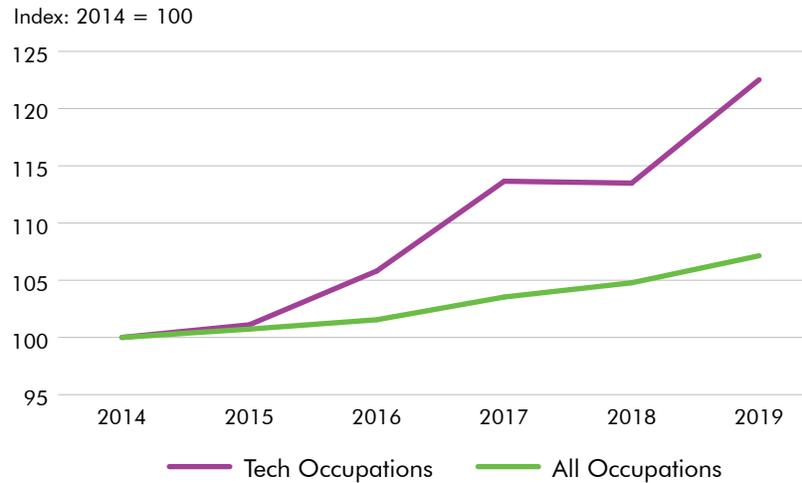


This relatively small labor force has an outsized impact on real estate markets and the economy. The number of Tech Talent workers has increased by 22.5% in the past five years, or 4.1% annually, adding 165,300 jobs to the Canadian economy at a pace more than three times the national average, 7.1% over five years or 1.4% annually.

FIGURE 2

Pace of Canadian Employment Growth (2014 - 2019)

All Occupations vs. Tech Occupations



Source: Statistics Canada LFS (NOCs), 2020.



Tech Firms in the Post-COVID Era

While Tech Talent workers are employed by tech and non-tech companies alike, the performance of tech companies in the wake of COVID-19 serves as a leading indicator for what may be seen in the wider market. Changes and shifts in strategies here might in turn be seen in non-tech industries.

Through the COVID-19 pandemic, tech companies have generally fared well. Early on, ecommerce and social platforms experienced a boom as shelter-in-place measures went into effect, forcing everyone to rely on the tech around them to work and live. Success also extended to more specialized players in the realms of cybersecurity, IT infrastructure, gaming, and work-from-home enablers, all of which saw an uptick in demand. On the other end of the spectrum, hardware and manufacturing-related tech companies had a more challenging start due to supply chain disruptions but have recovered as these issues resolved and consumers rallied around new product launches. Further, nearly all major tech stocks saw earnings increase year-over-year as of Q3 2020.

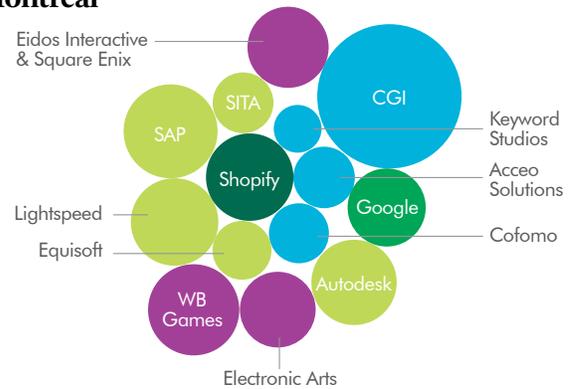
Within Canada, tech companies have made a splash with announcements related to subleasing space or permanent and/or indefinite work-from-home strategies. However, the reality is quite different for major tech occupiers. These well-capitalized firms have adopted long-term outlooks and are enacting opportunistic strategies to take advantage of the new landscape.

- Cybersecurity
- Ecommerce
- IT Services/Consulting
- Multidisciplinary
- Online Platform
- Software Developer
- Software Provider
- Video Game Developer

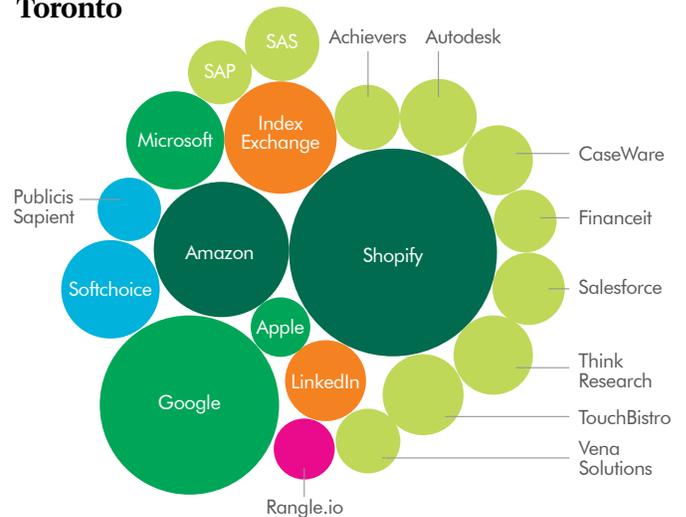
FIGURE 3:

Largest Downtown Tech Occupiers

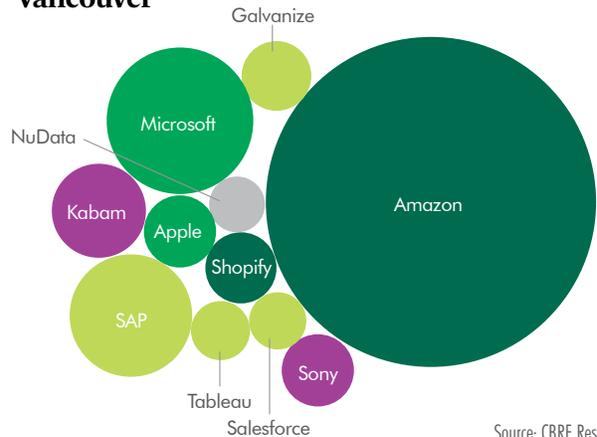
Montreal



Toronto



Vancouver



Source: CBRE Research, 2020.

Only 12 months ago, a growing company's most significant impediment might likely have been a lack of office space to grow into. Challenging for any company, but more so for those in the tech industry growing at an exponential pace. Exceptionally strong demand for office space coupled with Canada's conservative development pipeline saw downtown vacancy rates steadily contract over recent years. Today, Vancouver and Toronto continue to boast the lowest downtown vacancy rates in North America by wide margins.

These conditions often forced growing tech companies to take space wherever and however available. Among major tech occupiers in downtown Vancouver, Toronto and Montreal, 49% have two or more locations in a given market. This is true for nearly 90% of occupiers with footprints greater than 100,000 sq. ft. With large block availabilities at all-time lows, firms that wished to consolidate and operate under one roof typically had to pre-lease space in new builds due for completion several years away.

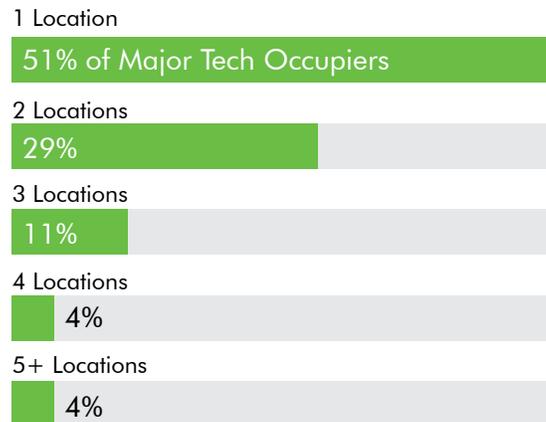
Demand for office space in Canadian cities, both large and small, has been borne of one factor: strong Tech Talent. Locating your offices in Canada comes with many benefits, including a stable political environment, a welcoming culture, and cities that top global livability indexes, however to tech companies these are almost incidental when compared to the critical role of Tech Talent.

These same companies now view the current landscape as an opportunity to penetrate and establish themselves in markets where they'll benefit from Tech Talent over the years ahead. This extends to talent-rich mid-sized markets, such as Waterloo Region or Edmonton, which could see disproportionate benefits from firms electing to establish office campuses that may even be larger in size there than what they'll occupy in markets like Toronto, Vancouver and Montreal. Unperturbed by discussions surrounding the role of the office, these firms are making pragmatic decisions with long-term mindsets.

FIGURE 4

Major Tech Occupiers by Count of Leased Downtown Locations

in either Vancouver, Toronto or Montreal



Source: CBRE Research, 2020.

FIGURE 5

Major Tech Occupiers Current Downtown Office Portfolio Strategy

in Vancouver, Toronto and Montreal



Source: CBRE Research, 2020.



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 2020 were Toronto, Ottawa, Vancouver, Waterloo Region and Montreal. These locations possess the strongest combination of attributes that the technology sector requires to flourish including, and most importantly, a high concentration of tech employment. Comparing the

2020 market rankings with the previous year, while there were some points gained and lost, few markets shifted positions, with the top seven ranked markets remaining unchanged.

Impressive results in Halifax saw its score improve by 8 points and move up three positions to clinch the 8th spot, the largest score improvement of any market. The Toronto-Waterloo Innovation Corridor also expanded its reach with improvements noted in nearby markets of London and Guelph, respectively up 3 and 1 positions.

The highly competitive and supply-constrained landscape for Tech Talent has accelerated the expansion of Tech Talent pools beyond major hubs and into smaller markets. These previously under-supplied regions are gaining demand for Tech Talent from local firms, including startups as well as established companies. The inclusion of 20 markets in this study aims to paint a comprehensive picture of Canada's tech ecosystem.



FIGURE 6

Tech Talent Scorecard Ranking



Note: Arrow direction and accompanying value corresponds with score point change from previous year.

Source: Statistics Canada, Environics Analytics, Various Provincial Governments, Conference Board of Canada, Canadian Mortgage and Housing Corporation, CBRE Labor Analytics, CBRE Research, 2020.

FIGURE 7

Scorecard at a Glance



Ranking among peers



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

What Talent Availability Exists Across Canadian Markets?

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 899,200 workers across the country with Toronto ranking as the largest individual market by a considerable margin and home to over a quarter of the Canadian tech workforce. The four largest

markets together account for over 60% of Canada’s tech labour 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.

FIGURE 8

Tech Talent Labour Pools

	Market	Tech Talent Total	5-Yr Growth (by volume)	5-Yr Growth (% change)
Large Markets (> 50,000 Tech Workers)	Toronto, ON	250,000	66,900	36.5%
	Montreal, QC	141,600	22,900	19.3%
	Vancouver, BC	84,900	27,500	47.9%
	Ottawa, ON	76,200	1,100	1.5%
Mid-Sized Markets (10,000-50,000 Tech Workers)	Calgary, AB	42,500	6,200	17.1%
	Quebec City, QC	35,800	7,700	27.4%
	Edmonton, AB	25,200	3,700	17.2%
	Waterloo Region, ON	22,400	7,600	51.4%
	Hamilton, ON	17,500	4,600	35.7%
	Winnipeg, MB	15,400	-300	-1.9%
	Halifax, NS	13,200	1,400	11.9%
Small Markets (< 10,000 Tech Workers)	Victoria, BC	10,500	1,300	14.1%
	Oshawa, ON	9,700	2,600	36.6%
	London, ON	9,300	1,300	16.3%
	Windsor, ON	6,100	800	15.1%
	Regina, SK	6,000	-700	-10.4%
	St. John's, NL	5,900	-1,300	-18.1%
	Saskatoon, SK	5,300	900	20.5%
	Guelph, ON	4,800	1,900	65.5%
Moncton, NB	2,900	100	3.6%	
	Canada	899,200	165,300	22.5%

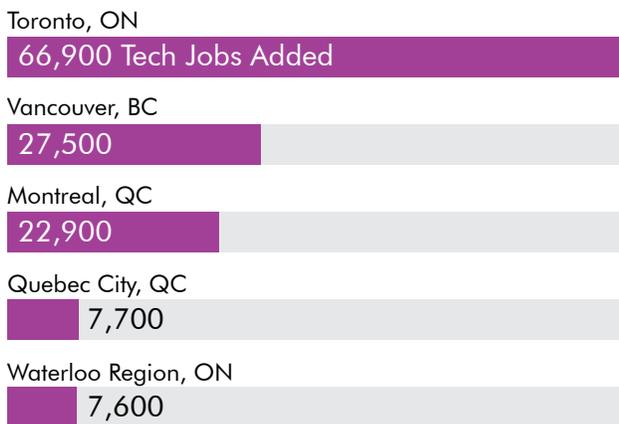
Source: Statistics Canada LFS (NOCs), 2020.





FIGURE 9 - A

Top 5 Fastest Growing Markets, by Volume of Tech Jobs Added (2014-2019)



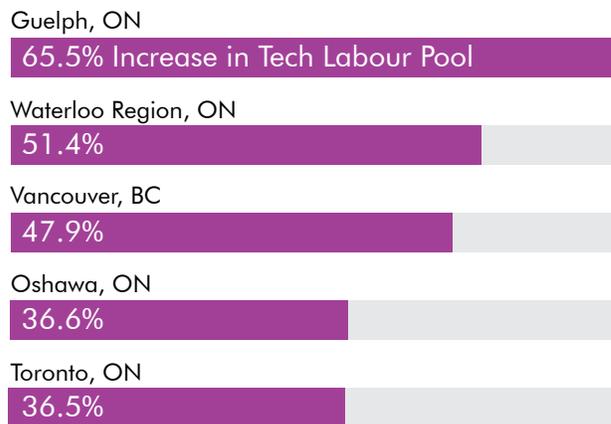
Source: Statistics Canada LFS (NOCs), CBRE Research, 2020.

Nationally, Tech Talent has increased a staggering 22.5% over the last five years. However, this growth has been uneven with most of the jobs being added in Toronto, Vancouver and Montreal. While Toronto accounts for a quarter of Canadian Tech Talent, its tech job gains accounted for nearly half of the tech jobs added nationally over the period. Put another way, the 66,900 tech jobs Toronto added over 2014 to 2019 represent enough tech workers to fill a typical, 1 million sq. ft. new office tower 10 times over. And, this doesn't even include the administrative and managerial staff that would be needed to support them.

Still, Toronto was not home to the fastest-growing tech market on a relative basis. While its Tech Talent increased 36.5% over the period, growth was more precipitous in

FIGURE 9 - B

Top 5 Fastest Growing Markets, on a Percentage Basis (2014-2019)



Source: Statistics Canada LFS (NOCs), CBRE Research, 2020.

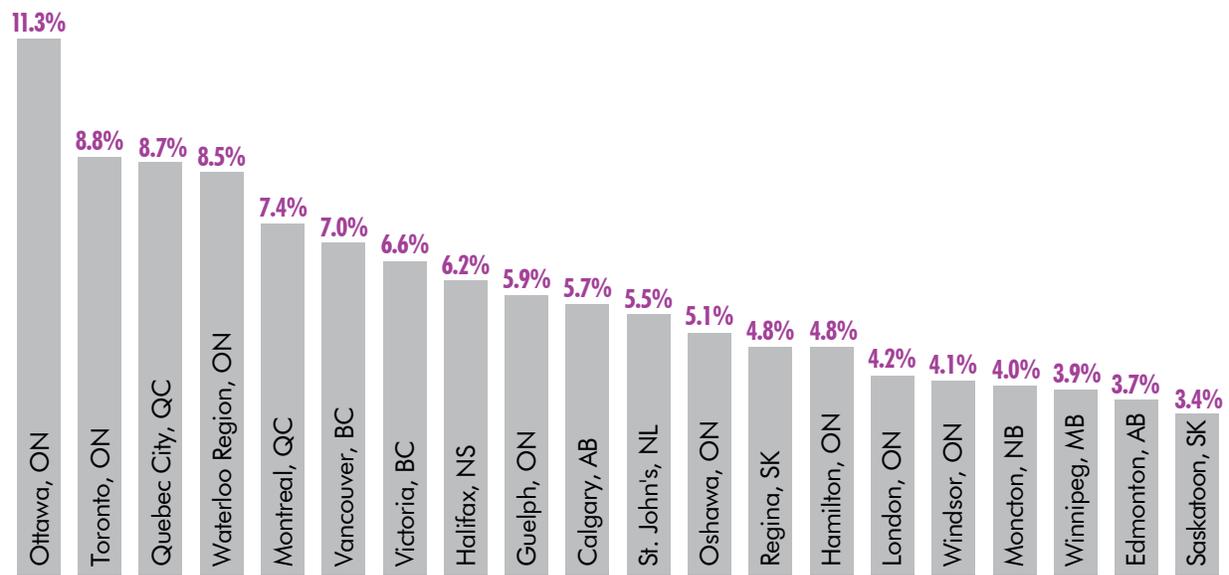
Waterloo Region and Vancouver. Seeing growth from domestic and foreign tech firms alike, these markets saw tech jobs increase 51.4% and 47.9%, respectively, over the last five years.

High growth was even seen within Canada's smaller-sized markets. While smaller in scale, Guelph, Oshawa and Hamilton punched above their weights and added between 1,900 and 4,600 tech jobs each over 2014 to 2019. Located within the Toronto-Waterloo Innovation Corridor, these cities benefited from the proximity of their larger markets which saw Guelph clinch the top spot as Canada's fastest-growing tech market over the period.

The clustering of tech firms within a market is a major factor in occupier site selection. 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 startups 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. With its suburban Kanata tech park, Ottawa has an impressive 11.3% concentration of tech workers, double the Canadian average of 5.6% and the highest level amongst all North American cities. Waterloo Region and Quebec City also punch above their weight here. While only comprising a combined 6.5% of the Canadian tech landscape, these two cities have tech concentrations that are comparable to those of Toronto and Montreal, respectively.

FIGURE 10
Tech Talent as % of Total Employment (2019)



Source: Statistics Canada LFS (NOCS), 2020.



How Should Quality Of Labour Be Considered?

Labour is by far the largest expense for most firms, especially so for those pursuing top Tech Talent. When such high levels of investment are needed to sustain a tech firm’s human capital and growth, 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 conferred by higher-education 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-level 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, Windsor and Edmonton, where each see over 1,000 tech degrees awarded annually.

However, to get top talent you have to pay for it. Take a Vancouver software developer’s salary for example: to afford the best and the brightest in the field incurs a wage premium and those in the upper 5% bracket earn

approximately 50% above the local industry average salary in Vancouver. This premium only increases for Waterloo, Toronto, Montreal and Ottawa.

Plotting a quality assessment for software developers against the average salary illustrates a value-for-money comparison, with trade-offs seen across all markets. Software developers may earn the highest average wages in Waterloo Region, Ottawa and Vancouver at well over \$90,000 per year, however, these rates appear sensible given that markets also offer high concentrations of top-quality Tech Talent. From a value perspective, Edmonton and Toronto rank very well, with high quality talent at slightly discounted rates. Also scoring well on this quality vs. cost scale are Calgary, Victoria and Guelph, who each have a very high quality of tech labour.

Thankfully for Canada’s tech landscape, our accommodative immigration policies have meant that good, high and very high concentrations of quality Tech Talent are available across the country. This is true even in the moderate and lower-cost markets, providing employers with a breadth of options.

FIGURE 11

Top 10 Cities For Degree Completions

Market	Tech Degree Completions*	Top Institution for Computer Science	Maclean's Rank
Montreal, QC	4,863	University of Montreal	4
Toronto, ON	4,333	University of Toronto	1
Vancouver, BC	2,807	University of British Columbia	2
Waterloo Region, ON	2,707	University of Waterloo	3
Ottawa, ON	1,619	Carleton University	10
Halifax, NS	1,228	Dalhousie University**	-
Windsor, ON	1,175	University of Windsor**	-
Edmonton, AB	1,160	University of Alberta	6
Calgary, AB	775	University of Calgary	14
Hamilton, ON	744	McMaster University	7

*Tech degree completions are for 2018.

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

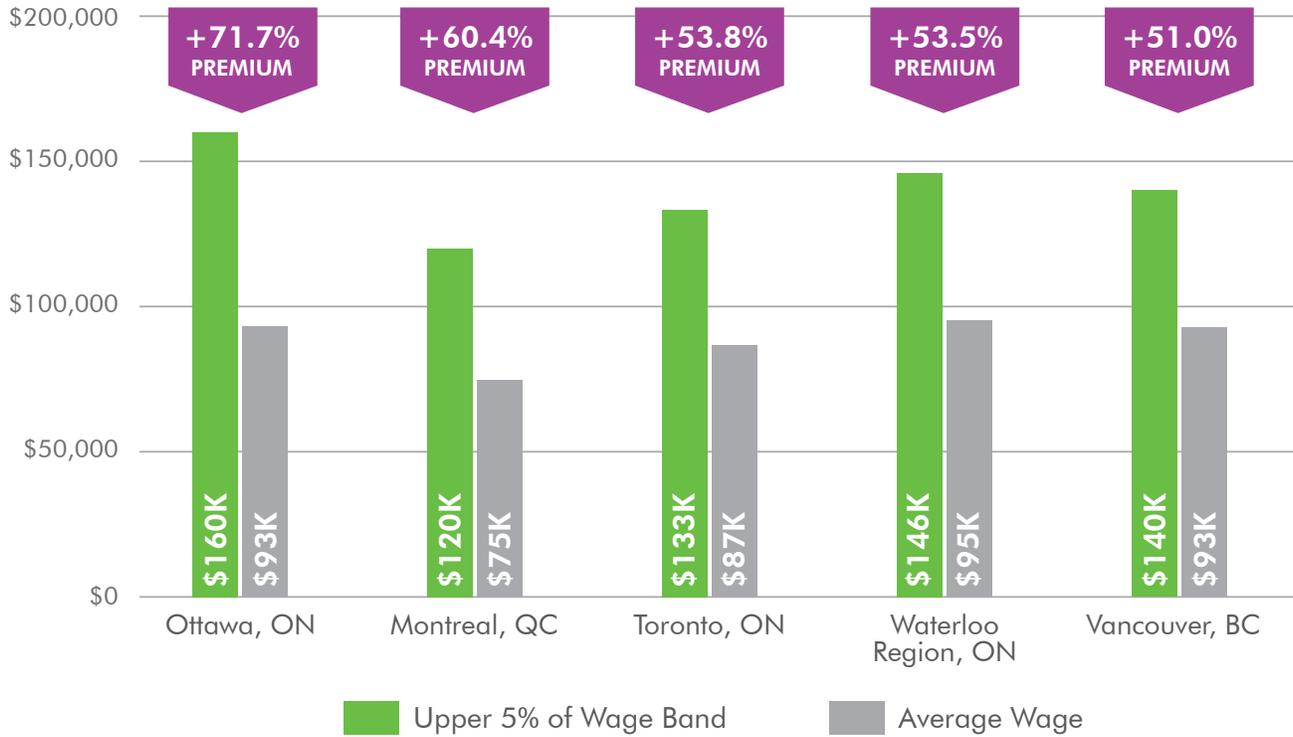
Source: Various Provincial Governments, Maclean’s, CBRE Research, 2020.



FIGURE 12

Top Talent Wage Premium

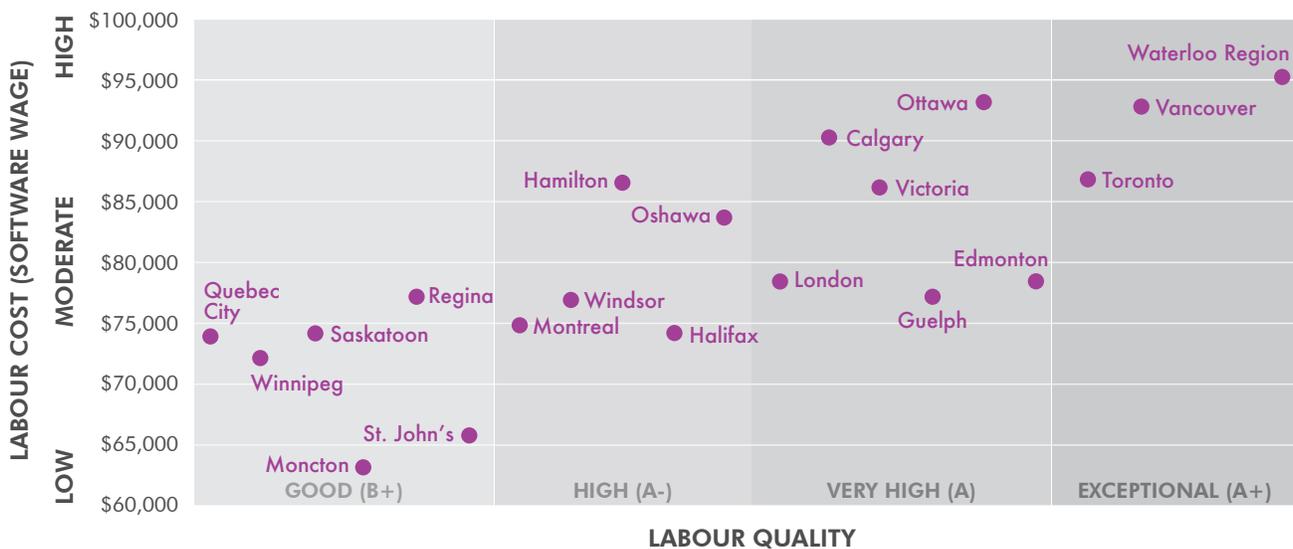
Average Software Developer Wage



Source: Statistics Canada LFS (NOCs), 2020.

FIGURE 13

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, 2020.

For further information relating to labour quality, please contact CBRE Labor Analytics: Mark Seeley (mark.seeley@cbre.com).

Source: Statistics Canada LFS (NOCs), U.S. News & World Report, CBRE Labor Analytics, CBRE Research, 2020.

What Does It Cost To Operate In Canadian Tech Markets?

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

Office rents, while rising well above historical market averages in gateway markets due to sustained tech demand, account for a much smaller share of a firm's expenses. In Canada, tech firms reported real estate costs on average at 4.4% of their total annual expenses according to a recent study by CBRE Research. Tech firms instead place a higher value on finding space in select 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 given market. 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, Ottawa and Edmonton top the list with the highest estimated combined rent and wage annual costs at more than \$42.0 million

per year. Most affordable of all are Moncton, Guelph and Halifax. And when grouping markets based on their 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 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 Edmonton 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 14

North American Comparison, Wage & Rent Obligation for a Typical Tech Firm

ESTIMATED ONE-YEAR COST (CAD X \$1M)



Source: U.S. Bureau of Labour Statistics, Statistics Canada LFS (NOCs), CBRE Research, 2020.



FIGURE 15

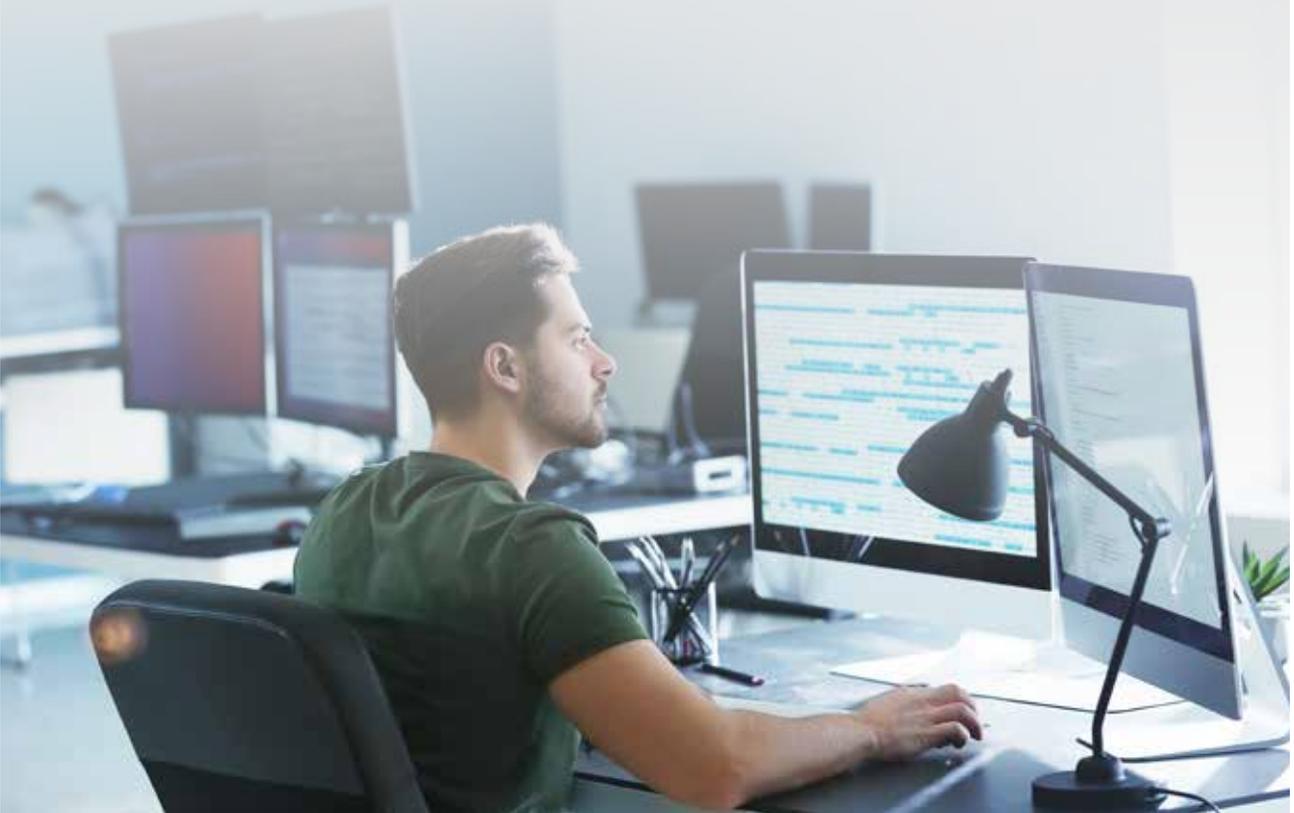
Estimated One-Year Costs by Market: Wage & Rent Obligation for Typical Tech Firm

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

Market	REAL ESTATE		EMPLOYEE WAGES		TOTAL COST	
	Rent Cost (Avg. Gross Rent x 75,000 SF)	Tech Talent Wages (Avg. Wage x 250 People)	Support Non-Tech Wages (Avg. Wage x 211 People)	Management Wages (Avg. Wage x 39 People)	Total Gross Occupancy Cost	
Large Markets (> 50,000 Tech Workers)	Ottawa, ON	\$2,544,000	\$22,776,000	\$14,233,866	\$4,377,235	\$43,931,101
	Toronto, ON	\$2,641,500	\$21,247,200	\$12,868,598	\$4,075,469	\$40,832,766
	Vancouver, BC	\$3,484,500	\$20,482,800	\$12,014,400	\$3,772,080	\$39,753,780
	Montreal, QC	\$2,578,500	\$20,144,800	\$12,190,110	\$4,468,901	\$39,382,311
Mid-Sized Markets (10,000-50,000 Tech Workers)	Calgary, AB	\$2,231,250	\$23,805,600	\$15,083,111	\$4,240,142	\$45,360,104
	Edmonton, AB	\$2,502,750	\$21,928,400	\$14,308,866	\$4,240,142	\$42,980,158
	Hamilton, ON	\$1,763,250	\$21,080,800	\$12,562,155	\$4,919,928	\$40,326,133
	Waterloo Region, ON	\$1,855,500	\$21,871,200	\$12,074,370	\$4,376,424	\$40,177,494
	Winnipeg, MB	\$2,274,750	\$20,092,800	\$11,193,236	\$4,456,733	\$38,017,519
	Quebec City, QC	\$1,911,000	\$18,870,800	\$11,527,772	\$4,240,142	\$36,549,715
	Halifax, NS	\$2,214,750	\$18,392,400	\$11,281,694	\$4,240,142	\$36,128,987
	Victoria, BC	\$2,430,000	\$21,002,800	\$12,880,904	\$4,240,142	\$40,553,847
Small Markets (< 10,000 Tech Workers)	Oshawa, ON	\$1,908,750	\$21,002,800	\$13,306,663	\$4,240,142	\$40,458,355
	Saskatoon, SK	\$2,312,250	\$20,924,800	\$12,407,360	\$4,240,142	\$39,884,552
	Regina, SK	\$2,025,000	\$21,153,600	\$12,313,088	\$4,240,142	\$39,731,830
	London, ON	\$1,889,250	\$19,708,000	\$11,717,630	\$4,240,142	\$37,555,022
	St. John's, NL	\$2,172,750	\$18,912,400	\$11,801,483	\$4,240,142	\$37,126,776
	Windsor, ON	\$1,311,750	\$19,240,000	\$11,378,537	\$4,240,142	\$36,170,430
	Guelph, ON	\$1,951,500	\$19,687,200	\$9,887,966	\$4,240,142	\$35,766,809
	Moncton, NB	\$1,710,750	\$17,019,600	\$10,123,649	\$4,240,142	\$33,094,141

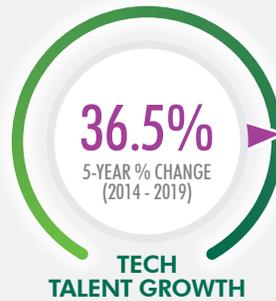
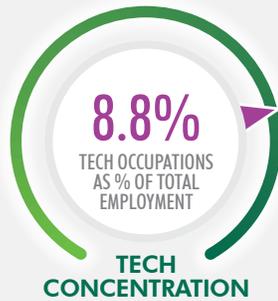
Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

Appendix



1 Toronto, ON

SCORE
87.6



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

Tech Labour Pool Size

Educational Attainment

Tech Concentration

PRIMARY TECH INDUSTRIES



Artificial Intelligence



FinTech



Software as a Service (SaaS)

TECH FIRM AVERAGE ANNUAL OPERATING COSTS



TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	250,000	36.5%	\$84,989	11.2%
Software Developers/Programmers	72,900	54.4%	\$86,715	10.0%
Computer Support, Database & Systems	106,800	58.9%	\$80,392	13.4%
Computer & Info. Systems Managers	26,600	60.2%	\$104,499	14.0%
Technology Engineering-Related	43,700	-16.1%	\$81,453	6.6%

Source: Statistics Canada LFS (NOCs), 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$890,400	\$2,307 (PER UNIT/MO.)	\$1,459 (PER UNIT/MO.)	124%

CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

EDUCATION

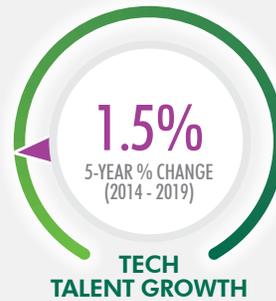
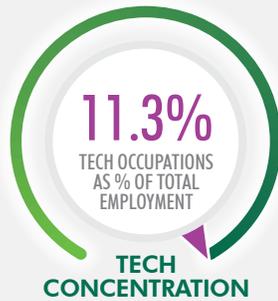
Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	4,333	48.1%	42.5%
Computer Science	1,206	56.6%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	1,026	110.7%	
Other Tech Engineering	2,101	26.0%	

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

Source: Environics Analytics, 2019.

2 Ottawa, ON

SCORE
76.4



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

- Tech Concentration
- Educational Attainment
- Tech Labour Pool Size

PRIMARY TECH INDUSTRIES

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

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

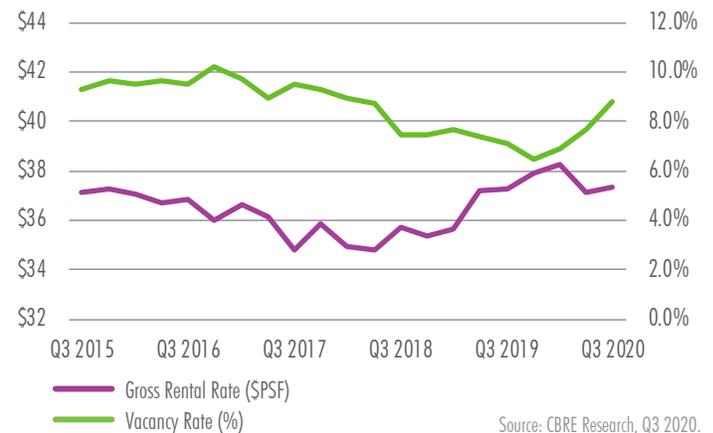


TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	76,200	1.5%	\$91,104	10.9%
Software Developers/Programmers	21,200	-17.5%	\$93,205	11.6%
Computer Support, Database & Systems	28,400	8.8%	\$81,557	8.0%
Computer & Info. Systems Managers	8,900	23.6%	\$112,237	6.9%
Technology Engineering-Related	17,700	9.9%	\$93,288	15.7%

Source: Statistics Canada LFS (NOCs), 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$517,800	\$1,729 (PER UNIT/MO.)	\$1,281 (PER UNIT/MO.)	107%
			CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

EDUCATION

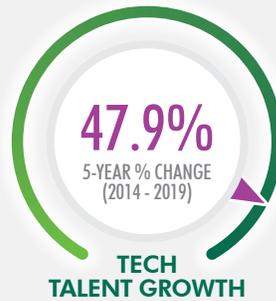
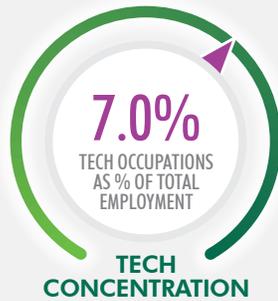
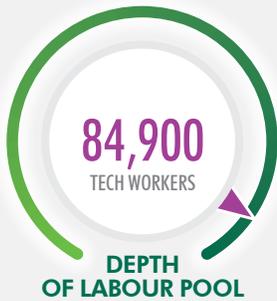
Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	1,619	33.9%	41.6%
Computer Science	414	46.8%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	78	-27.1%	
Other Tech Engineering	1,122	36.8%	

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

Source: Environics Analytics, 2019.

3 Vancouver, BC

SCORE
72.8



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

Quality of Labour

Tech Labour Pool Size

Tech & Tech-Related Degrees

PRIMARY TECH INDUSTRIES



Software app/dev



Digital Media/Gaming

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#10
RANK BY COST

\$36.3M TALENT + **\$3.5M** RENT = **\$39.8M** TOTAL

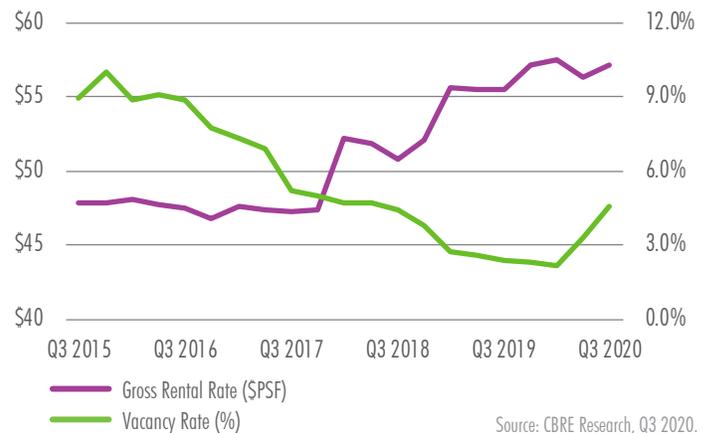
Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	84,900	47.9%	\$81,931	13.8%
Software Developers/Programmers	29,500	57.8%	\$92,726	26.4%
Computer Support, Database & Systems	29,100	86.5%	\$70,949	12.1%
Computer & Info. Systems Managers	5,800	13.7%	\$96,720	5.9%
Technology Engineering-Related	20,500	13.9%	\$77,792	7.1%

Source: Statistics Canada LFS (NOCs), 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$1,038,700	\$1,893 (PER UNIT/MO.)	\$1,469 (PER UNIT/MO.)	123%

CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

EDUCATION

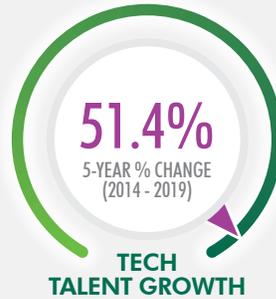
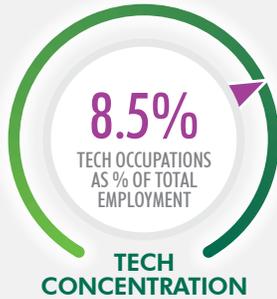
Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	2,807	37.6%	39.4%
Computer Science	1,178	52.2%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	333	16.0%	
Other Tech Engineering	1,296	32.4%	

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

Source: Environics Analytics, 2019.

4 Waterloo Region, ON

SCORE
69.9



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

Quality of Labour

Tech Quality to Cost

Real Estate Cost

PRIMARY TECH INDUSTRIES



Software app/dev



Digital Media/Gaming



Artificial Intelligence

TECH FIRM AVERAGE ANNUAL OPERATING COSTS



TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	22,400	51.4%	\$87,485	15.7%
Software Developers/Programmers	8,000	73.9%	\$95,139	11.6%
Computer Support, Database & Systems	7,600	105.4%	\$79,602	24.5%
Computer & Info. Systems Managers	2,300	130.0%	\$112,216	N/A
Technology Engineering-Related	4,500	-18.2%	\$74,422	2.3%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$634,409	\$1,441 (PER UNIT/MO.)	\$1,163 (PER UNIT/MO.)	100% CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

EDUCATION

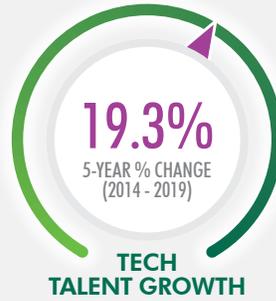
Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	2,707	20.8%	30.3%
Computer Science	873	54.0%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	710	22.2%	
Other Tech Engineering	1,124	2.8%	

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

Source: Environics Analytics, 2019.

5 Montreal, QC

SCORE
67.3



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

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

PRIMARY TECH INDUSTRIES

- Software app/dev
- Robotics
- Cybersecurity

TECH FIRM AVERAGE ANNUAL OPERATING COSTS



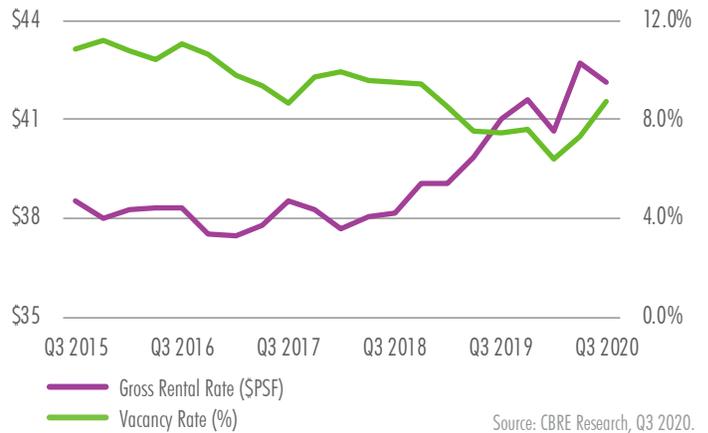
TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	141,600	19.3%	\$80,579	13.6%
Software Developers/Programmers	40,000	30.7%	\$74,797	7.3%
Computer Support, Database & Systems	43,200	1.6%	\$77,480	13.6%
Computer & Info. Systems Managers	10,000	72.4%	\$114,587	30.1%
Technology Engineering-Related	48,400	21.6%	\$81,058	12.0%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$408,200	\$1,304 (PER UNIT/MO.)	\$841 (PER UNIT/MO.)	96%
			CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

EDUCATION

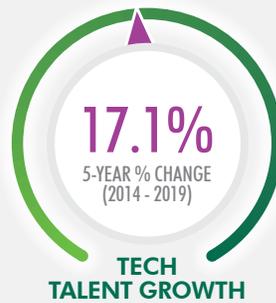
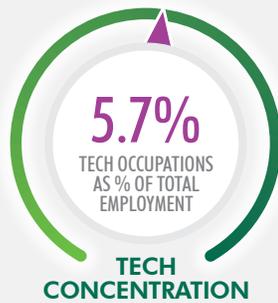
Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	4,863	33.7%	33.6%
Computer Science	1,245	47.9%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	339	13.8%	
Other Tech Engineering	3,279	31.3%	

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

Source: Environics Analytics, 2019.

6 Calgary, AB

SCORE
59.5



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

Educational Attainment

Tech Labour Pool Size

Tech & Tech-Related Degrees

PRIMARY TECH INDUSTRIES

Software app/dev

Cleantech

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#1 RANK BY COST

\$43.1M TALENT + **\$2.2M** RENT = **\$45.3M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	42,500	17.1%	\$95,222	11.3%
Software Developers/Programmers	10,300	-4.6%	\$90,334	1.3%
Computer Support, Database & Systems	17,200	49.6%	\$95,722	29.6%
Computer & Info. Systems Managers	1,100	-47.6%	N/A	N/A
Technology Engineering-Related	13,900	16.8%	\$95,264	5.9%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

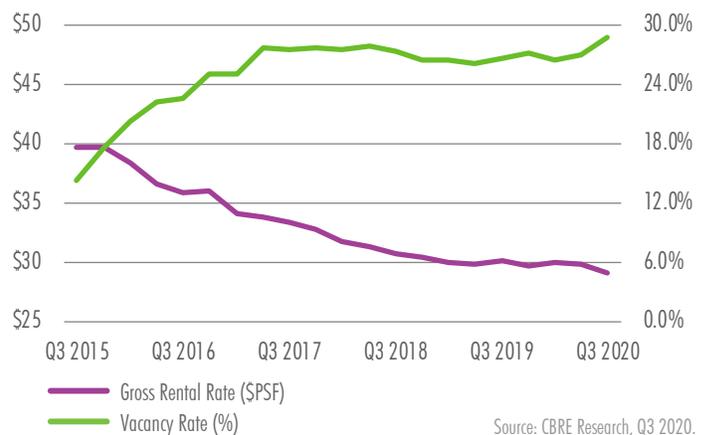
HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$414,100	\$1,425 (PER UNIT/MO.)	\$1,181 (PER UNIT/MO.)	102%

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2020.

EDUCATION

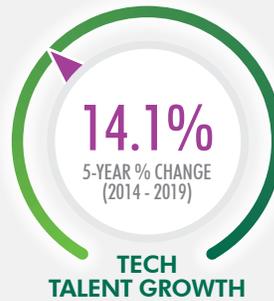
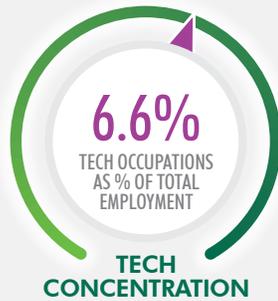
Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	775	15.3%	39.9%
Computer Science	283	54.6%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	67	-6.9%	
Other Tech Engineering	425	1.9%	

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

Source: Environics Analytics, 2019.

7 Victoria, BC

SCORE
53.9



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

- Tech Concentration
- Educational Attainment
- Tech Quality to Cost

PRIMARY TECH INDUSTRIES

- Software app/dev
- Advanced Manufacturing
- Ocean Science

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#5 RANK BY COST

\$38.1M TALENT + **\$2.4M** RENT = **\$40.5M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$32.85** ▲ | Vacancy Rate | **6.0%** ▲

Source: CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	10,500	14.1%	\$84,011	19.6%
Software Developers/Programmers	2,300	-11.5%	\$86,195	26.3%
Computer Support, Database & Systems	5,600	33.3%	\$78,499	15.2%
Computer & Info. Systems Managers	1,100	N/A	N/A	N/A
Technology Engineering-Related	1,500	N/A	\$81,910	N/A

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	569	58.1%	35.2%
Computer Science	168	48.7%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	43	22.9%	
Other Tech Engineering	358	68.9%	

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

Source: Environics Analytics, 2019.

HOUSING & RELATIVE COSTS

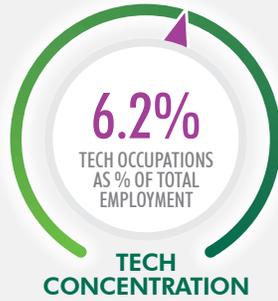
Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$719,300	\$1,641 (PER UNIT/MO.)	\$1,221 (PER UNIT/MO.)	114%
			CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

8 Halifax, NS

SCORE
52.6



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

Gross Occupancy

Educational Attainment

Tech & Tech-Related Degrees

PRIMARY TECH INDUSTRIES



TECH FIRM AVERAGE ANNUAL OPERATING COSTS



Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	13,200	11.9%	\$73,570	5.3%
Software Developers/Programmers	3,900	34.5%	\$74,360	12.6%
Computer Support, Database & Systems	6,000	39.5%	\$70,075	10.1%
Computer & Info. Systems Managers	700	-22.2%	N/A	N/A
Technology Engineering-Related	2,600	-31.6%	\$72,592	0.1%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

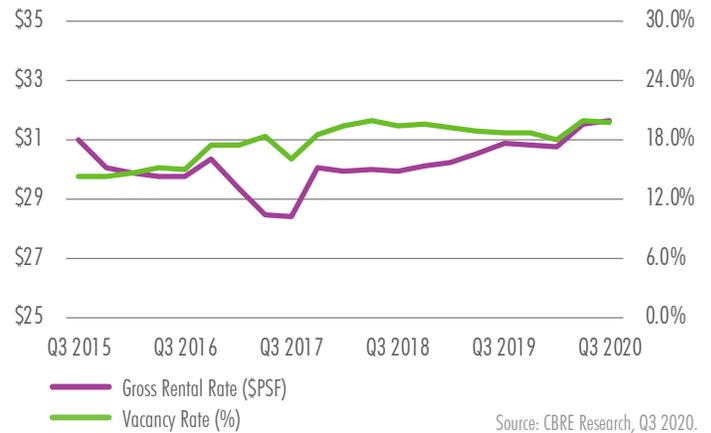
HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$371,792	\$1,510 (PER UNIT/MO.)	\$1,113 (PER UNIT/MO.)	105%

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



Source: CBRE Research, Q3 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	1,228	24.2%	36.6%
Computer Science	N/A	N/A	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	393	50.0%	
Other Tech Engineering	835	14.9%	

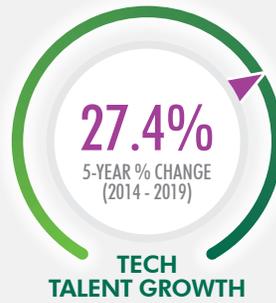
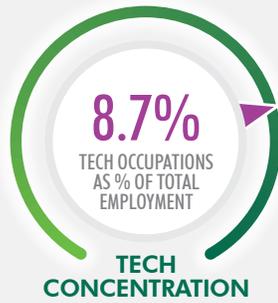
Source: Various Provincial Ministries and Higher Education Institutions, 2019.

Source: Environics Analytics, 2019.

9 Quebec City, QC

SCORE

48.4



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

- Tech Concentration
- Gross Occupancy
- Real Estate Cost

PRIMARY TECH INDUSTRIES

- Life Sciences
- Optics/Phonics
- Computer solutions

TECH FIRM AVERAGE ANNUAL OPERATING COSTS



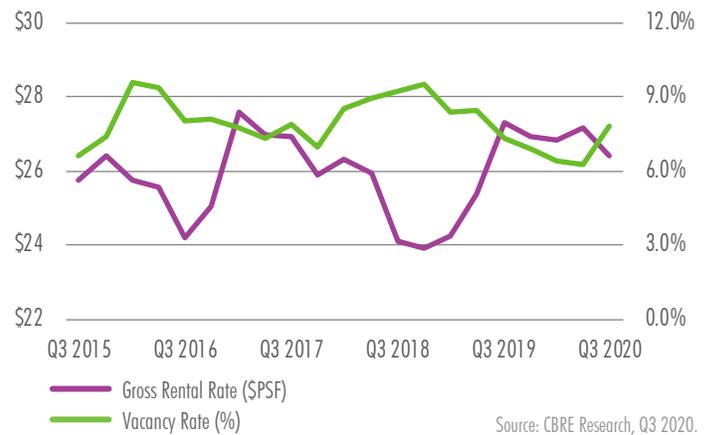
TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	35,800	27.4%	\$75,483	18.7%
Software Developers/Programmers	7,000	7.7%	\$73,819	35.8%
Computer Support, Database & Systems	17,500	35.7%	\$77,896	11.0%
Computer & Info. Systems Managers	800	-11.1%	N/A	N/A
Technology Engineering-Related	10,500	34.6%	\$69,285	19.3%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS



HOUSING & RELATIVE COSTS

Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$256,900	\$1,085 (PER UNIT/MO.)	\$837 (PER UNIT/MO.)	84%

CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

EDUCATION

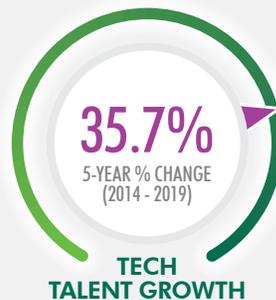
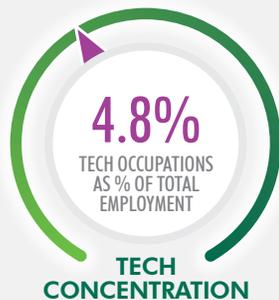
Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	423	18.5%	31.7% BACHELOR'S DEGREE OR HIGHER
Computer Science	155	7.6%	
Math/Statistics	31	-18.4%	
Other Tech Engineering	237	35.4%	

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

Source: Environics Analytics, 2019.

10 Hamilton, ON

SCORE
45.4



Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TOP SCORE DRIVERS

Real Estate Cost

Quality of Labour

Tech Employment Growth

PRIMARY TECH INDUSTRIES



Life Sciences



Autonomous Vehicles



Digital Media/Gaming

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#6 RANK BY COST

\$38.6M TALENT + **\$1.8M** RENT = **\$40.4M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (\$PSF) | **\$24.24** ▲ | Vacancy Rate | **19.1%** ▲

Source: CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	17,500	35.7%	\$84,323	10.1%
Software Developers/Programmers	3,200	23.1%	\$86,611	8.0%
Computer Support, Database & Systems	7,300	114.7%	\$68,536	2.0%
Computer & Info. Systems Managers	2,800	133.3%	\$126,152	N/A
Technology Engineering-Related	4,200	-26.3%	\$82,243	13.8%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	744	6.6%	29.8%
Computer Science	135	15.4%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	89	-9.2%	
Other Tech Engineering	520	7.7%	

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

Source: Environics Analytics, 2019.

HOUSING & RELATIVE COSTS

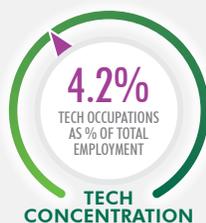
Benchmark Home Price	Avg Condo Rent	Avg Purpose-Built Apt Rent	Living Cost Index
\$702,600	\$1,717 (PER UNIT/MO.)	\$1,133 (PER UNIT/MO.)	97%
			CANADIAN AVERAGE = 100

Source: CREA, August 2020; CMHC, October 2019.

Source: Numbeo, 2020.

11 London, ON

SCORE
40.7



TOP SCORE DRIVERS

- Gross Occupancy
- Real Estate Cost
- Tech Quality to Cost

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#14 RANK BY COST | **\$35.7M** TALENT + **\$1.9M** RENT = **\$37.6M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	9,300	16.3%	\$78,832	16.2%
Software Developers/Programmers	2,800	86.7%	\$78,395	31.2%
Computer Support, Database & Systems	3,500	12.9%	\$74,110	9.5%
Computer & Info. Systems Managers	600	0.0%	N/A	N/A
Technology Engineering-Related	2,400	-14.3%	\$74,464	13.4%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	593	25.9%	29.0%
Computer Science	142	65.1%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	52	-36.6%	
Other Tech Engineering	399	31.7%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$25.11** ▼
Vacancy Rate | **17.8%** ▼

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$501,584**
Avg Condo Rent: **\$1,269** (PER UNIT/MO.)
Avg Purpose-Built Apt Rent: **\$1,024** (PER UNIT/MO.)
Living Cost Index: **93%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

12 Guelph, ON

SCORE
40.6



TOP SCORE DRIVERS

- Tech Employment Growth
- Gross Occupancy
- Tech Quality to Cost

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#19 RANK BY COST | **\$33.8M** TALENT + **\$2.0M** RENT = **\$35.8M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	4,800	65.5%	\$78,749	5.6%
Software Developers/Programmers	1,700	N/A	\$77,376	N/A
Computer Support, Database & Systems	1,800	N/A	\$76,482	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), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	383	74.9%	36.2%
Computer Science	126	137.7%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	15	-63.4%	
Other Tech Engineering	242	93.6%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$27.00** ▲
Vacancy Rate | **0.7%** ▼

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$628,600**
Avg Purpose-Built Apt Rent: **\$1,228** (PER UNIT/MO.)
Living Cost Index: **103%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

13 Edmonton, AB

SCORE
39.9



TOP SCORE DRIVERS

- Tech Quality to Cost
- Quality of Labour
- Tech Labour Pool Size

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#3 RANK BY COST

\$40.5M TALENT + **\$2.5M** RENT = **\$43.0M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	25,200	17.2%	\$87,714	5.8%
Software Developers/Programmers	4,800	-14.3%	\$78,458	1.5%
Computer Support, Database & Systems	10,700	48.6%	\$84,822	11.0%
Computer & Info. Systems Managers	1,200	-33.3%	N/A	N/A
Technology Engineering-Related	8,500	23.2%	\$89,898	0.7%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	1,160	22.4%	30.4%
Computer Science	332	53.7%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	161	32.0%	
Other Tech Engineering	667	9.3%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) **\$36.39** ▼

Vacancy Rate **19.0%** ▼

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$322,700**

Avg Purpose-Built Apt Rent: **\$1,144** (PER UNIT/MO.)

Living Cost Index: **99%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

14 Oshawa, ON

SCORE
39.3



TOP SCORE DRIVERS

- Real Estate Cost
- Tech Employment Growth
- Quality of Labour

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#6 RANK BY COST

\$38.5M TALENT + **\$1.9M** RENT = **\$40.4M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	9,700	36.6%	\$84,011	6.2%
Software Developers/Programmers	N/A	N/A	N/A	N/A
Computer Support, Database & Systems	4,700	38.2%	\$83,990	22.4%
Computer & Info. Systems Managers	N/A	N/A	N/A	N/A
Technology Engineering-Related	3,100	34.8%	\$75,317	-13.0%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	456	34.5%	23.1%
Computer Science	165	13.0%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	0	-100.0%	
Other Tech Engineering	291	59.9%	

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

Source: Environics Analytics, 2019.

METRO OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) **\$25.45** ▲

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$612,833**

Avg Purpose-Built Apt Rent: **\$1,234** (PER UNIT/MO.)

Living Cost Index: **104%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

15 Winnipeg, MB

SCORE
28.6



TOP SCORE DRIVERS

- Gross Occupancy
- Educational Attainment
- Tech Labour Pool Size

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#13 RANK BY COST | **\$35.7M** TALENT + **\$2.3M** RENT = **\$38.0M** TOTAL
Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	15,400	-1.9%	\$80,371	13.3%
Software Developers/Programmers	3,700	8.8%	\$72,134	4.0%
Computer Support, Database & Systems	5,900	3.5%	\$77,626	17.8%
Computer & Info. Systems Managers	1,300	-7.1%	\$114,275	30.2%
Technology Engineering-Related	4,500	-13.5%	\$81,078	11.0%

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	497	15.0%	33.3%
Computer Science	143	23.3%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	72	-16.3%	
Other Tech Engineering	282	22.6%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$31.62** ▼
Vacancy Rate | **12.1%** ▲

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$288,600**
Avg Condo Rent: **\$1,308** (PER UNIT/MO.)
Avg Purpose-Built Apt Rent: **\$1,070** (PER UNIT/MO.)
Living Cost Index: **93%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

16 Regina, SK

SCORE
26.1



TOP SCORE DRIVERS

- Real Estate Cost
- Gross Occupancy
- Educational Attainment

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#11 RANK BY COST | **\$37.7M** TALENT + **\$2.0M** RENT = **\$39.7M** TOTAL
Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	6,000	-10.4%	\$84,614	9.6%
Software Developers/Programmers	900	-25.0%	\$77,334	-0.3%
Computer Support, Database & Systems	3,100	14.8%	\$84,885	14.1%
Computer & Info. Systems Managers	600	0.0%	N/A	N/A
Technology Engineering-Related	1,400	-33.3%	\$77,126	2.9%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	133	16.7%	32.1%
Computer Science	52	40.5%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	19	-9.5%	
Other Tech Engineering	62	10.7%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$28.50** ◀▶
Vacancy Rate | **14.0%** ▼

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$275,000**
Avg Condo Rent: **\$1,330** (PER UNIT/MO.)
Avg Purpose-Built Apt Rent: **\$1,035** (PER UNIT/MO.)
Living Cost Index: **94%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

17 St. John's, NL

SCORE
23.8



TOP SCORE DRIVERS

- Gross Occupancy
- Tech Concentration
- Real Estate Cost

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#15 RANK BY COST | **\$35.0M** TALENT + **\$2.2M** RENT = **\$37.2M** TOTAL
Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	5,900	-18.1%	\$75,650	0.3%
Software Developers/Programmers	1,600	6.7%	\$65,790	-10.7%
Computer Support, Database & Systems	1,800	-28.0%	\$71,406	6.7%
Computer & Info. Systems Managers	400	100.0%	N/A	N/A
Technology Engineering-Related	2,100	-30.0%	\$79,934	-2.5%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	170	9.7%	30.6%
Computer Science	23	0.0%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	27	35.0%	
Other Tech Engineering	120	7.1%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$31.42** ▼
Vacancy Rate | **31.1%** ▲

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$268,800**
Avg Purpose-Built Apt Rent: **\$896** (PER UNIT/MO.)
Living Cost Index: **96%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

18 Saskatoon, SK

SCORE
23.5



TOP SCORE DRIVERS

- Tech Employment Growth
- Real Estate Cost
- Educational Attainment

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#9 RANK BY COST | **\$37.6M** TALENT + **\$2.3M** RENT = **\$39.9M** TOTAL
Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	5,300	20.5%	\$83,699	9.8%
Software Developers/Programmers	1,900	90.0%	\$74,214	0.3%
Computer Support, Database & Systems	1,600	77.8%	\$78,978	12.5%
Computer & Info. Systems Managers	500	400.0%	N/A	N/A
Technology Engineering-Related	1,300	-45.8%	\$94,266	20.2%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	127	N/A	32.9%
Computer Science	91	N/A	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	13	N/A	
Other Tech Engineering	23	N/A	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$37.43** ▲
Vacancy Rate | **17.4%** ▲

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$301,400**
Avg Condo Rent: **\$1,251** (PER UNIT/MO.)
Avg Purpose-Built Apt Rent: **\$1,046** (PER UNIT/MO.)
Living Cost Index: **96%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

19 Windsor, ON

SCORE
19.5



TOP SCORE DRIVERS

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

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#17 RANK BY COST | **\$34.9M** TALENT + **\$1.3M** RENT = **\$36.2M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	6,100	15.1%	\$76,960	10.3%
Software Developers/Programmers	N/A	N/A	N/A	N/A
Computer Support, Database & Systems	2,200	46.7%	\$80,787	75.4%
Computer & Info. Systems Managers	N/A	N/A	N/A	N/A
Technology Engineering-Related	3,000	3.4%	\$76,544	-4.9%

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	1,175	99.5%	27.4%
Computer Science	222	200.0%	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	23	76.9%	
Other Tech Engineering	930	85.3%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$21.19** ▼
Vacancy Rate | **20.4%** ▼

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$430,810**
Avg Purpose-Built Apt Rent: **\$870** (PER UNIT/MO.)
Living Cost Index: **86%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

20 Moncton, NB

SCORE
15.1



TOP SCORE DRIVERS

- Gross Occupancy
- Real Estate Cost
- Tech Employment Growth

Source: Statistics Canada LFS (NOCs), 2020; CBRE Labor Analytics, CBRE Research, 2020.

TECH FIRM AVERAGE ANNUAL OPERATING COSTS

#20 RANK BY COST | **\$31.4M** TALENT + **\$1.7M** RENT = **\$33.1M** TOTAL

Source: Statistics Canada LFS (NOCs), 2020; CBRE Research, Q3 2020.

TECH TALENT EMPLOYMENT BREAKDOWN

	Employment	Growth 2014-2019	Average Wage	Growth 2014-2019
Total Tech Occupations	2,900	3.6%	\$68,078	14.3%
Software Developers/Programmers	1,100	22.2%	\$63,190	1.7%
Computer Support, Database & Systems	1,300	0.0%	\$66,997	25.5%
Computer & Info. Systems Managers	N/A	N/A	N/A	N/A
Technology Engineering-Related	500	N/A	N/A	N/A

N/A due to suppression

Source: Statistics Canada LFS (NOCs), 2020.

EDUCATION

Degrees	2018	Growth 2014-2018	Educational Attainment
Total Tech Degrees	85	4.9%	26.0%
Computer Science	N/A	N/A	BACHELOR'S DEGREE OR HIGHER
Math/Statistics	24	300.0%	
Other Tech Engineering	61	-18.7%	

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

Source: Environics Analytics, 2019.

DOWNTOWN OFFICE RENT & VACANCY TRENDS

Gross Rental Rate (SPSF) | **\$23.44** ▲
Vacancy Rate | **12.5%** ▲

Source: CBRE Research, Q3 2020.

HOUSING & RELATIVE COSTS

Benchmark Home Price: **\$217,700**
Avg Purpose-Built Apt Rent: **\$831** (PER UNIT/MO.)
Living Cost Index: **86%** (CANADA AVERAGE = 100)

Source: CREA, August 2020; CMHC, October 2019; Numbeo, 2020.

Contacts

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MARC MEEHAN

Director Research, Canada
+ 1 647 943 4205
marc.meehan@cbre.com

CHRISTINA CATTANA

Research Manager
+1 416 847 3255
christina.cattana@cbre.com

RYAN STARR

External Communications Correspondent
+1 647 215 9723
ryan.starr@cbre.com