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STARTUP CITY CANADA

The Geography of Venture Capital and Startup Activity in Canada



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STARTUP CITY CANADA The Geography of Venture Capital

and Startup Activity in Canada

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Executive Summary

Venture capital is the fuel that powers the entrepreneurial startup companies that drive innovation, define new industries, and disrupt existing ones. While venture capital financed companies used to cluster in suburban tech enclaves like Silicon Valley, venture capital investment and startup activity are taking on an increasingly urban orientation.

Startup City Canada examines venture capital activity in Canada, identifying its leading cities and metros and mapping its urban orientation in the county's three largest venture capital hubs: Toronto, Vancouver, and Montréal. This report is part of a larger, ongoing <u>research project</u> tracking the urban geography of venture capital and start-up activity.

Canadian startups attracted \$1.9 billion in venture capital investments in 2013. While the country has seen steady growth in venture capital activity over the last decade, this figure remains significantly lower than its peak in 2000.

Software is Canada's leading sector for venture capital investment, attracting over \$600 million (30.9 percent) of the national total. It is followed closely by the industrial/energy sector with \$530 million (26.9 percent). Together, these two sectors account for more than half of Canada's total venture investment. They are followed by the financial services (\$296 million), biotechnology (\$158 million), and

media and entertainment (\$77 million) sectors. Taken together, these five sectors account for \$1.7 billion in venture investment, 85 percent of the nation's total.

The geography of venture capital investment in Canada is highly concentrated and spiky. Five leading metros—Montréal, Vancouver, Toronto, Ottawa-Gatineau, and Calgary—account for 86 percent of venture investment. Montréal leads with \$633 million (32 percent), followed by Vancouver with \$380 million (19 percent), and Toronto with \$358 million (18 percent).

Venture investment in Canada is overwhelmingly urban, mirroring a broader global shift in venture activity. In the nation's three largest metros — Toronto, Vancouver, and Montréal — more than three quarters (77 percent) of all venture investment goes to urban areas, mainly in and around downtowns and close to major research universities.

Yet, Canada's venture capital industry continues to underperform compared to leading centers in the United States and around the world. The typical response has been for government to get into the venture capital business, by setting up or sponsoring venture capital funds in the hopes that increasing the supply of venture capital will lead to more startup activity and, in turn, to greater levels of innovation and economic development. Unfortunately, the research literature and historical track record of such government involvement suggests that this approach is both ineffective and misguided. Spurring more effective venture capital investment and startup activity in Canada requires a continued shift in focus from the supply side to the demand side, from providing venture capital to nurturing the underlying assets that can bolster its rapidly evolving urban innovation and entrepreneurial ecosystems.

Introduction

Venture capital is the fuel that powers the high-flying startup companies that drive innovation and define new industries. The ranks of venture capital financed companies include <u>Apple</u>, <u>Google</u>, <u>Facebook</u>, <u>Twitter</u>, and <u>Uber</u>. The world's foremost venture capital centers including the Bay Area, Boston, Seattle, Austin, and more recently, New York City — have long been America's leading tech hubs. But today, venture capital backed entrepreneurial startups have gone global, with major centers emerging in London, Berlin, Stockholm, Tel Aviv, and more. At the same time, the geography of venture capital and startup activity has shifted from its previous suburban orientation to a more urban one.¹ The urban neighborhoods around downtown San Francisco have surpassed Silicon Valley's classic suburban centers and the world's leading center for venture capital and startup activity.² Lower Manhattan has also emerged as a leading <u>startup hub</u>.³ And London too has grown as center for high-tech venture capital.⁴

This report examines venture capital and startup activity in Canada. It traces the rise of venture capital in Canada since 2000; identifies the leading industries for venture capital investment, and examines the geography of venture capital, tracing both the leading cities and metros for venture capital investment and the distribution of venture investment between cities and suburbs.

The research is based on our analysis of detailed data on venture capital investment from Thomson Reuters. These data provide granular information on venture capital investments, including the name of the recipient company, the total dollar value of the investment, the number of deals completed, the industry sectors that received the investment, and the geographic location of these investments by city and postal code. We analyze these venture capital investments by industry, metro area, and their urban versus suburban orientation.

This report is the second instalment of a larger and ongoing <u>Martin Prosperity Institute re-</u> <u>search project</u> on the urban geography of venture capital and start-up activity.⁵

The rest of this report is organized as follows: The next section presents an overview of venture capital investment in Canada. We then chart the geography of venture capital investment by metro—overall and for its leading industries. After that, we map the micro-geography of venture capital investment by neighborhood for Canada's top three metros—Toronto, Montréal, and Vancouver—charting its distribution of venture investment between cities and suburbs. The conclusion summarizes the key findings and implications for venture capital investment and startup activity in Canada.

Canadian Venture Capital Investment since 2000

Canada's venture capital industry was a late bloomer, only emerging in the 1990s alongside the boom in computers, software, and later, dotcoms.⁶ The graph below (*Exhibit 1*) charts the course of Canadian venture capital investment from 2000 to 2013. Venture capital investment in Canada has declined over the past dozen or so years from its high of roughly \$3 billion in 2000. Since the mid-2000s, venture capital investment has hovered around \$2 billion per year.

Nearly two billion dollars (\$1.9 billion) in ven-

ture capital was invested in Canada in 2013. That represents less than 6 percent of the \$35 billion invested in the United States, and less than a third of the \$7 billion dollars invested in the San Francisco Bay Area.⁷ Across the world, Canada ranks fifth in global venture capital, behind the United States, China, India, and the United Kingdom with less than five percent (4.7 percent) of total global venture capital activity.⁸ To put this in context, Canada's economy is one-tenth the size of the United States, while its venture capital investment is only 5.7 percent of America's total venture capital investment.



*U.S. million dollars Exhibit 1: Growth of venture capital investment dollars and deals, 2000 to 2013

The Geography of Venture Capital Investment in Canada

Metros account for 97 percent of all venture investment across Canada.⁹ And just the five largest metros — Montréal, Vancouver, Toronto, Ottawa-Gatineau, and Calgary — attracted 87 percent of it.

Exhibit 2 charts the leading centers of venture capital investment across Canada. *Exhibit 3* shows the totals for the top five.

Montréal leads with \$633 million, roughly a third (32 percent) of all Canadian venture capital investment. Vancouver is second with \$380 million, roughly 20 percent (19 percent), a figure buoyed by a major round of funding in social media management system <u>Hootsuite</u>.¹⁰ Toronto is third with \$358 million (18 percent). Ottawa-Gatineau is fourth with \$202 million, Calgary fifth with \$129 million, and Kitchener-Waterloo sixth with \$57 million.



Exhibit 2: Leading metros for venture capital investment, 2013

Rank Metro



Venture Capital Investment*

*U.S. million dollars

Exhibit 3: Top five metros for venture capital investment, 2013



Exhibit 4: Leading metros for venture capital investment, 2010

Exhibits 4, *5*, and *6* show the leading metros for venture capital investment in 2000, 2005, and 2010. These maps show the dominance of Canada's three largest metros—Toronto, Montréal, and Vancouver—over time.

Toronto topped the list in 2010, attracting \$460 million (27 percent) in venture capital. It was followed by Montréal with \$361 million (21 percent) and Vancouver with \$341 million (20 percent). Calgary was fourth with \$233 million (14 percent) and Ottawa-Gatineau fifth with \$54 million (3 percent).

Vancouver topped the list in 2005 with \$317 million in venture investment (30 percent), followed by Ottawa-Gatineau with \$169 million

(16 percent), Toronto with \$156 million (15 percent), and Montréal and Calgary with roughly \$145 million (14 percent) each.

The turn of the millennium, as we have seen, was the high-water mark for venture capital in Canada. Toronto topped the list that year with \$987 million (32 percent), followed by Montréal with \$866 million (28 percent). Ottawa-Gatineau was third with \$456 million (15 percent), Vancouver fourth with \$402 million (13 percent), and Calgary fifth with \$120 million (4 percent).



Exhibit 5: Leading metros for venture capital investment, 2005



Exhibit 6: Leading metros for venture capital investment, 2000

Venture Capital Investment on a Per Capita Basis

Larger metros have an advantaged based on their size. To control for this, we now look at venture capital investment on a per capita basis. *Exhibits* 7 and 8 show how Canada's metros stack up on venture capital investment per 100,000 people.

Now the pattern changes: Toronto drops considerably down the list. Montréal takes the top spot with \$17 million per 100,000 people, followed closely by Vancouver and Ottawa-Gatineau, which each attracted roughly \$16 million per 100,000. Kitchener-Waterloo is fourth overall (\$12 million) and Calgary fifth (\$11 million). Guelph is sixth, with \$8 million. Hamilton and Toronto follow with roughly \$6 million each. Kingston attracted \$5 million and Halifax attracted \$3 million. In Québec, Saguenay attracted \$2.9 million and Québec City, \$2.6 million.¹¹



Exhibit 7: Venture capital investment per 100,000 people, 2013



Venture Capital Investment per 100,000 People*

*U.S. million dollars

Exhibit 8: Top metros for venture capital investment per 100,000 people, 2013

This section drills down a little further, examining the leading industry sectors for venture capital investment in Canada and its major metros. Our data tracks venture capital investment across 17 major industry or sectors.¹² Of these, just five — software, industrial/energy, financial services, biotechnology, and media and entertainment — received 85 percent of total investment, while the first two accounted for more than half (57.8 percent) of it (see *Exhibit 9*, below).

The leading sector is software with more than \$600 million (31 percent) in investment, followed by industrial/energy, which includes oil and gas production with \$529 million (27 percent). Financial services, which includes the banking and real estate industries, is third with \$296 million (15 percent). Biotechnology is fourth with \$158 million (8.0 percent). The media and entertainment industry, which includes TV and film production, received \$77 million (3.9 percent).

The table below shows the leading industries in five of Canada's major metros — Toronto, Vancouver, Montréal, Calgary, and Ottawa-Gatineau (see *Exhibit 10*).

Software topped the list in three metros. Vancouver saw \$201 million in software investment, thanks mainly to the major investment made in social media dashboard <u>Hootsuite</u>. Ottawa-Gatineau saw another \$154 million in software investment and Toronto an additional \$126 million. The industrial/energy sector topped the list in both Montréal (\$236 million) and Calgary (\$93 million).

Rank Industry 1. Software 2. Industrial/Energy **Financial Services** 3. 4. Biotechnology Media and Entertainment 5. 0 100 200 300 400 500 600 \$700

Venture Capital Investment*

*U.S. million dollars Exhibit 9: Top five industries for venture capital investment, 2013

Montréal



*U.S. million dollars

Exhibit 10: Top three industries for venture capital investment by metro

Not surprisingly, Toronto saw considerable investment in finance (\$80 million) and media and entertainment (\$54.5 million). Vancouver attracted \$75 million for biotechnology and another \$69 million for and industrial/energy. Ottawa-Gatineau saw significant investment in hardware, including both semiconductors (\$20 million) and telecommunications (\$11 million). Calgary attracted \$30 million in software investment and another \$6 million in IT services.

Exhibit 11 looks at the connection between metros and industry a different way, showing the top five metros in each of the top five leading technology fields.

The pattern here is interesting. Montréal tops the lists in two areas: it bests Toronto in finance (\$214 million versus \$80 million) and beats Calgary in industrial/energy (\$236 million versus \$93 million). Vancouver comes out on top in software (\$201 million) and biotechnology (\$75 million) and Toronto tops the list in media and entertainment with \$54 million in investment.

Software



Venture Capital Investment*

*U.S. million dollars

Exhibit 11: Top metros for venture capital investment by leading industry, 2013

The Urban Shift in Canadian Venture Capital

Recent years have seen a shift in high-tech startups away from suburban "nerdistans" to more urban environments — a trend we documented in our original 2013 <u>Startup City</u> report.¹³ We use postal data to map the distribution of venture capital investments between cities and suburbs for Canada' s three largest metro areas — Toronto, Vancouver, and Montréal — which together account for more than two-thirds (70 percent) of all Canadian venture capital investment. More specifically, we tracked 93 postal codes in these three metros.¹⁴ We classified those in the principal cities of Toronto, Montréal, and Vancouver as urban and areas outside these cities as suburban. All in all, 61.2 percent (57 of 93) of postal codes were located in cities and 38.8 percent (36) were located in suburbs.

Toronto

Exhibit 12 plots the geography of venture capital investment for the Greater Toronto area. The map extends beyond the city of Toronto



Exhibit 12: Venture capital investment in Greater Toronto

| Neighborhood | Postal Code | City | Venture Capital Investment* | Share of Metro Total |
|----------------------------|-------------|---------|--------------------------------|-------------------------|
| The Annex | M5R | Toronto | \$81.0 | 24.0% |
| Fashion District | M5V | Toronto | \$74.2 | 22.0% |
| Thornhill / Langstaff | L3T | Markham | \$40.0 | 11.9% |
| North Toronto | M4P | Toronto | \$25.3 | 7.5% |
| Eatonville/West Deane Park | M9B | Toronto | \$14.3 | 4.2% |

Exhibit 13: Top five Toronto neighbourhoods for venture capital investment

and its surrounding census metropolitan area to include Guelph, Waterloo, and other communities on its outskirts.

The largest dots, indicating the largest volumes of venture capital investment, are in and around the city center. These investments straddle the business and financial core, with large concentrations around the <u>University of Toronto</u> and slightly to the west of downtown, around the Fashion District and King and Spadina, a hub for creative companies in media and design. The Annex, just north of the University of Toronto, attracted \$81 million in venture capital investment, nearly a quarter (24 percent) of the region's total (see Exhibit 13). The Fashion District attracted another 22 percent (\$74 million). Venture capital investment in just these two neighborhoods comprised nearly half (46 percent) of all investment in greater Toronto. North of downtown, the area around Yonge and Eglington attracted an additional \$25.2 million (7.5 percent), while \$8.2 million (2.4 percent) was concentrated in the medical and hospital cluster around the University of Toronto.

Smaller levels of venture capital investment were located in the urban neighbourhoods of Liberty Village (\$7.9 million, 2.3 percent), the Portlands (\$5.8 million, 1.7 percent), the Financial District (\$5.3 million, 1.5 percent), around Ryerson University (\$5.1 million, 1.5 percent), the Distillery District/Corktown (\$4.1 million, 1.2 percent), and West Queen West (\$3.6 million, 1.1 percent).

Outlying, more suburban areas accounted for about a quarter of venture capital investment in Greater Toronto. The northern suburb of Markham, which is home to many large hightech companies like IBM, attracted \$45.3 million in venture capital — 13.4 percent of the region's total — mainly as a result of a \$40 million investment in a single financial services technology company.

Near Pearson International, Mississauga, a large suburb of Toronto that is Canada's sixth largest city, attracted \$17 million in venture capital, 5 percent of the region's total. Oakville attracted an additional \$8.2 million (2.4 percent). The large dot southwest of Toronto is a single large deal in Burlington worth \$46 million that went to a clean water and energy company.

There are several additional clusters of venture investment outside of Toronto, including Guelph (\$11.5 million), and Kitchener-Waterloo, home to the University of Waterloo, RIM, and a cluster of high tech companies (\$57.1 million).

Overall, more than three-quarters (75.6 percent) of investments (\$254.9 million) were located in the city of Toronto, much of it in and around the urban core.

Vancouver

The next map (*Exhibit 14*) plots the geography of venture capital investment in Greater Vancouver, spanning the city and its surrounding suburbs of North Vancouver, Richmond, Coquitlam, Surrey, and Langley.

The Mount Pleasant neighbourhood, just outside of downtown, attracted nearly half (46.8 percent) of the region's total, slightly more than \$170 million, (see *Exhibit 15*). Most of this came from the \$165 million investment in Hootsuite. Other hubs of investment are located near the city's core. Gastown and Yaletown accounted for an additional \$30 million (8.2 percent) of the region's total. Coal Harbour and the area surrounding Canada Place attracted an additional \$26.1 million (7.1 percent). Elsewhere in Vancouver, South Cambie attracted another \$15 million (4.1 percent) and the West End \$13.1 million (3.6 percent).

There are clusters of venture capital investment around three of the region's major universities. The area surrounding the <u>University of British Columbia</u> attracted \$20 million in venture investment (5.5 percent). East of the city, the area around the British Columbia Institute of Technology (BCIT) accounted for \$19.1 million (5.2 percent), while the neighbourhood around Simon Fraser University drew an additional \$4.1 million (1.1 percent). All told Burnaby, which includes both BCIT and Simon Fraser University, attracted roughly \$40 million (10.8 percent). Richmond, a suburb to the south, attracted \$18.2 million (4.9 percent), largely as



Exhibit 14: Venture capital investment in Greater Vancouver

| Neighborhood | Postal Code | City | Venture Capital Investment* | Share of Metro Total |
|--|-------------|-----------|--------------------------------|-------------------------|
| Mount Pleasant | V5T | Vancouver | \$171.2 | 46.8% |
| Yaletown/Gastown | V6B | Vancouver | \$29.9 | 8.2% |
| Coal Harbour/Canada Place | V6C | Vancouver | \$26.1 | 7.1% |
| University of British Columbia | V6T | Vancouver | \$20.1 | 5.5% |
| British Columbia Institute of Technology | V5G | Burnaby | \$19.1 | 5.2% |

Exhibit 15: Top five Vancouver neighbourhoods for venture capital investment

a result of single \$18 million investment. Further outside the city, Langley attracted \$14.5 million (4.0 percent) and Surrey, \$13.4 million (3.7 percent).

Overall, the bulk of venture capital investment in the metro (70 percent, \$257 million) was located in the city.

Montréal

Exhibit 16 plots the geography of venture capital investment in Greater Montréal, including the suburbs of Laval, Brossard, and Longueuil.

Once again, we see the urban orientation of venture capital investment. The great majority of venture activity in the region is tightly clustered in and around the city centre and Old Montréal. Investment in Old Montréal accounted for 30 percent of the region's total (\$171.2 million), with an additional \$100 million (17.6 percent of the total) going to the area around McGill University (see *Exhibit 17*). These two neighbourhoods combined accounted for nearly half the region's venture investment (\$270 million), led by two large investments worth \$167 million and \$86 million respectively.

Other city neighbourhoods receiving venture capital investment include Chameran (\$52.7 million, 9.2 percent), Saint-Laurent (\$30.3 million, 5.3 percent), Outremont (\$19 million,

3.3 percent), Place Ville-Marie (\$16.3 million, 2.8 percent), Le Plateau-Mont-Royal (\$15.8 million, 2.8 percent), Mile End (\$10.6 million, 1.9 percent), and Pointe-Saint-Charles (\$7.3 million, 1.3 percent).

Outside the core, the area surrounding the airport is a hub for venture investment, attracting nearly \$40 million (\$39.8 million), 7 percent of the region's total.

Beyond the city, the eastern suburb of Brossard attracted \$38 million (6.7 percent), largely from a single investment. Longueuil received another \$20 million, most of it in another single investment, while Boucherville received \$8.1 million (1.4 percent). The south-eastern suburb of la Prairie attracted another \$15.1 million (2.8 percent).

Venture capital investment in Montréal is overwhelming urban, with the city attracting \$473 million, more than 80 percent of the region's total.

Exhibit 18 shows the breakdown of venture capital investment between the urban core and suburban areas for Canada's three largest metros — Toronto, Vancouver, and Montréal. Each has the bulk of its venture capital investment and startup activity in the urban core and around major research hubs like the University



Exhibit 16: Venture capital investment in Greater Montréal

| Neighborhood | Postal Code | City | Venture Capital Investment* | Share of Metro Total |
|----------------|-------------|----------|--------------------------------|-------------------------|
| Old Montréal | H2Y | Montréal | \$171.2 | 30.0% |
| McGill | H3A | Montréal | \$100.3 | 17.6% |
| Chameran | H4N | Montréal | \$52.7 | 9.2% |
| Brossard South | J4Y | Brossard | \$38.0 | 6.7% |
| Saint-Laurent | H4M | Montréal | \$30.3 | 5.3% |

*U.S. million dollars

Exhibit 17: Top five Montréal neighbourhoods for venture capital investment

of Toronto, the University of British Columbia, and McGill University.

Montréal has the largest share of urban venture capital with 82.9 percent of its investments flowing to the city, followed by Toronto with 75.6 percent and Vancouver with 70.3 percent. Across these three metros, urban areas accounted for 77.3 percent of venture investment and the suburbs just 22.7 percent.



*U.S. million dollars

Exhibit 18: Venture capital investment in cities and suburbs

Conclusion

This report has examined venture capital and startup activity in Canada. It analyzed unique data on venture capital investment by industry and metro, and mapped the urban versus suburban orientation of venture capital investment in the nation's three largest metros— Toronto, Vancouver, and Montréal.

The geography of venture capital investment in Canada is highly concentrated and spiky. The five leading metros account for \$1.7 billion, or 86.5 percent, of venture investment and just the top three account for \$1.4 billion, or 70 percent. Montréal leads with \$633 million (32 percent) in venture capital investment, followed by Vancouver with \$380 million (19 percent), and Toronto with \$358 million (18 percent).

Venture capital investment in Canada is overwhelmingly urban, in sync with the he broader urban shift in venture capital occurring the United States and around the world. Across the nation's three largest metros areas more than three-quarters of all venture capital investment goes to urban areas, mainly in and around downtowns and around major research universities.

That said, Canada and its largest cities and metros continue to underperform on venture capital investment and startup activity. The nation's venture capital investment peaked in 2000 at nearly \$3 billion,

but fell to less than \$2 billion in 2013.¹⁵ While this places Canada among the world's five leading nations for venture capital investment, it is just 6 percent of the United States total and less than 15 percent of the venture capital invested in the San Francisco Bay Area. This is particularly worrying since these metros are home to leading research universities, significant talent bases, world-leading levels of openness and diversity, and frequently rank among the most attractive and liveable cities in the world—all factors which contribute to thriving urban entrepreneurial ecosystems. Based on these underlying conditions, Canada's leading cities and metros should be doing better.

As in many places around the world, the typical response has been to call on government to fill in the so-called gaps in venture capital, in the hope that increasing the supply of venture capital will lead to lead to an increase in high quality start-up activity, greater innovation, and ultimately, greater economic development. Both the federal government, and several of the provinces have developed programs invest in venture capital in the hope of doing just that.¹⁶

But there are good reasons to question the efficacy of these efforts. Both research on the subject and the historical track record of publically supported venture capital suggest that this kind of approach is both ineffective and misguided. Research on publically supported venture capital funds in Canada and the United States finds that they have generated much lower returns than private venture funds and have not led to substantial increases in local start-up and entrepreneurial activity.¹⁷ The great bulk of research and studies show that the supply of venture capital is not the problem; the real problem is on the demand side — venture capital flows to companies in places that have the well-developed entrepreneurial ecosystems that generate favourable investments in the first place. $^{18}\,$

Canada's major cities have all the attributes required for success in the venture capital and startup sector. Toronto, Vancouver, and Montréal are all exemplars of dense urban living that is attractive to technology talent. All three have excellent research institutions. And all three embody the openness and tolerance that is key to attracting talent from around the world. Spurring more effective venture capital investment and startup activity in Canada requires a continued shift in focus from the supply side to the demand side — from providing venture capital to nurturing the underlying assets that can bolster its rapidly evolving urban innovation and entrepreneurial ecosystems.

Data Appendix

| Year | Rank | Metro | Venture Capital Investment* |
|------|------|------------------------------|-----------------------------|
| | 1 | Montréal | \$633 |
| | 2 | Vancouver | \$380 |
| 2013 | 3 | Toronto | \$358 |
| | 4 | Ottawa-Gatineau | \$202 |
| | 5 | Calgary | \$129 |
| | 1 | Toronto | \$1,346 |
| | 2 | Calgary | \$463 |
| 2012 | 3 | Montréal | \$323 |
| | 4 | Vancouver | \$193 |
| | 5 | Kitchener-Cambridge-Waterloo | \$97 |
| | 1 | Toronto | \$492 |
| | 2 | Montréal | \$386 |
| 2010 | 3 | Vancouver | \$364 |
| | 4 | Calgary | \$249 |
| | 5 | Ottawa-Gatineau | \$57 |
| | 1 | Vancouver | \$378 |
| 10 | 2 | Ottawa-Gatineau | \$202 |
| 2005 | 3 | Toronto | \$187 |
| | 4 | Montréal | \$173 |
| | 5 | Calgary | \$173 |
| | 1 | Toronto | \$1,336 |
| | 2 | Montréal | \$1,172 |
| 2000 | 3 | Ottawa-Gatineau | \$617 |
| | 4 | Vancouver | \$544 |
| | 5 | Calgary | \$162 |

*U.S. million dollars

Appendix 1: Top five metros for venture capital investment

| All Metros and Census Agglomerations | Venture Capital Investment per 100,000 People* |
|--------------------------------------|---|
| Rouyn-Noranda | \$35.2 |
| Montréal | \$16.5 |
| Vancouver | \$16.4 |
| Ottawa-Gatineau | \$16.3 |
| Baie-Comeau | \$16.0 |
| Amos | \$12.6 |
| Kitchener-Cambridge-Waterloo | \$12.0 |
| Calgary | \$10.6 |
| Guelph | \$8.2 |
| Joliette | \$7.6 |
| Hamilton | \$6.4 |
| Toronto | \$6.4 |
| Granby | \$5.5 |
| Kingston | \$4.8 |
| Lachute | \$3.9 |
| Alma | \$3.2 |
| Halifax | \$3.2 |
| Fredericton | \$3.1 |
| Saguenay | \$2.9 |
| Matane | \$2.7 |
| Québec | \$2.6 |
| Edmonton | \$2.4 |
| Saskatoon | \$2.3 |
| Oshawa | \$2.2 |
| Cobourg | \$2.2 |
| Cape Breton | \$2.0 |
| Drummondville | \$1.7 |
| Trois-Rivières | \$1.5 |
| Saint John | \$1.3 |
| Victoria | \$1.1 |
| Sherbrooke | \$1.0 |

Appendix 2: Venture capital investment per 100,000 people

| Neighbourhood | Postal Code | City | Metro | Venture Capital Investment* | Share of Metro Total |
|--|----------------|-------------|---------|--------------------------------|-------------------------|
| The Annex | M5R | Toronto | Toronto | \$81.0 | 24.0% |
| Fashion District | M5V | Toronto | Toronto | \$74.2 | 22.0% |
| Thornhill/Langstaff | L3T | Markham | Toronto | \$40.0 | 11.9% |
| North Toronto | M4P | Toronto | Toronto | \$25.3 | 7.5% |
| Eatonville/ West Deane Park | M9B | Toronto | Toronto | \$14.3 | 4.2% |
| Bolton | L7E | Caledon | Toronto | \$11.8 | 3.5% |
| Erin Mills/UTM | L5L | Mississauga | Toronto | \$9.8 | 2.9% |
| Bay Street Corridor | M5G | Toronto | Toronto | \$8.2 | 2.4% |
| Liberty Village/Parkdale | M6K | Toronto | Toronto | \$7.9 | 2.3% |
| Rexdale/Woodbine | M9W | Toronto | Toronto | \$7.0 | 2.1% |
| Riverside/Port Lands | M4M | Toronto | Toronto | \$5.8 | 1.7% |
| Buttonville/Unionville | L3R | Markham | Toronto | \$5.3 | 1.6% |
| Oakville (East) | L6J | Oakville | Toronto | \$5.3 | 1.6% |
| Financial District | M5H | Toronto | Toronto | \$5.3 | 1.6% |
| Ryerson | M5B | Toronto | Toronto | \$5.1 | 1.5% |
| Distillery District/ Corktown/Regent Park | M5A | Toronto | Toronto | \$4.1 | 1.2% |
| West Queen West/ Little Portugal | M6J | Toronto | Toronto | \$3.6 | 1.1% |
| Meadow Wood | L5J | Mississauga | Toronto | \$3.1 | 0.9% |
| Oakville (West) | L6H | Oakville | Toronto | \$2.9 | 0.9% |
| Newtonbrook | M2M | Toronto | Toronto | \$2.9 | 0.9% |
| The Kingsway | M8X | Toronto | Toronto | \$2.9 | 0.9% |
| Lawrence Park/York-Glendon | M4N | Toronto | Toronto | \$2.3 | 0.7% |
| Fairview/Cooksville | L5B | Mississauga | Toronto | \$2.1 | 0.6% |
| Chinatown | M5T | Toronto | Toronto | \$2.1 | 0.6% |
| The Esplanade | M5E | Toronto | Toronto | \$1.7 | 0.5% |
| Britannia | L5R | Mississauga | Toronto | \$1.5 | 0.4% |
| University of Toronto | M5S | Toronto | Toronto | \$1.0 | 0.3% |

Appendix 3A: Toronto's leading neighbourhoods for venture capital investment

| Neighbourhood | Postal Code | City | Metro | Venture Capital Investment* | Share of Metro Total |
|---|----------------|--------------------|-----------|--------------------------------|-------------------------|
| Mount Pleasant | V5T | Vancouver | Vancouver | \$171.2 | 46.8% |
| Yaletown/Gastown | V6B | Vancouver | Vancouver | \$29.9 | 8.2% |
| Coal Harbour/ Canada Place | V6C | Vancouver | Vancouver | \$26.1 | 7.1% |
| UBC | V6T | Vancouver | Vancouver | \$20.1 | 5.5% |
| British Columbia Institute of Technology | V5G | Burnaby | Vancouver | \$19.1 | 5.2% |
| Richmond (Northeast) | V6V | Richmond | Vancouver | \$18.0 | 4.9% |
| South Cambie | V5Z | Vancouver | Vancouver | \$15.0 | 4.1% |
| Aldergrove | V4W | Langley | Vancouver | \$14.5 | 4.0% |
| Cloverdale | V3S | Surrey | Vancouver | \$13.4 | 3.7% |
| West End | V6E | Vancouver | Vancouver | \$13.1 | 3.6% |
| Marine Way | V5J | Burnaby | Vancouver | \$8.7 | 2.4% |
| Brentwood | V5C | Burnaby | Vancouver | \$7.9 | 2.2% |
| Simon Fraser University | V5A | Burnaby | Vancouver | \$4.1 | 1.1% |
| Norgate | V7P | North Vancouver | Vancouver | \$2.4 | 0.7% |
| Renfrew | V5M | Vancouver | Vancouver | \$1.0 | 0.3% |

Appendix 3B: Vancouver's leading top neighbourhoods for venture capital investment

| Neighbourhood | Postal Code | City | Metro | Venture Capital Investment* | Share of Metro Total |
|------------------------------|----------------|---------------|----------|--------------------------------|-------------------------|
| Old Montréal | H2Y | Montréal | Montréal | \$171.2 | 30.0% |
| McGill | H3A | Montréal | Montréal | \$100.3 | 17.6% |
| Chameran | H4N | Montréal | Montréal | \$52.7 | 9.2% |
| Brossard South | J4Y | Brossard | Montréal | \$38.0 | 6.7% |
| Saint-Laurent | H4M | Montréal | Montréal | \$30.3 | 5.3% |
| Airport East | H4T | Montréal | Montréal | \$23.5 | 4.1% |
| Parc industriel de Longueuil | J4G | Longueuil | Montréal | \$20.2 | 3.5% |
| Outremont | H2V | Montréal | Montréal | \$19.0 | 3.3% |
| Place Ville-Marie | НЗВ | Montréal | Montréal | \$16.3 | 2.8% |
| Le Plateau-Mont-Royal | H2W | Montréal | Montréal | \$15.8 | 2.8% |
| La Prairie | J5R | La Prairie | Montréal | \$15.7 | 2.8% |
| Airport South | H8T | Montréal | Montréal | \$12.8 | 2.2% |
| Mile End | H2T | Montréal | Montréal | \$10.6 | 1.9% |
| Chomedey | H7V | Laval | Montréal | \$9.7 | 1.7% |
| Boucherville | J4B | Boucherville | Montréal | \$8.1 | 1.4% |
| Pointe-Saint-Charles | НЗК | Montréal | Montréal | \$7.3 | 1.3% |
| Airport/Saint-Laurent | H4S | Montréal | Montréal | \$3.4 | 0.6% |
| Ville Émard | H4E | Montréal | Montréal | \$3.1 | 0.5% |
| Saint-Vincent-de-Paul | H7C | Laval | Montréal | \$2.7 | 0.5% |
| Villeray/Parc-Jarry | H2R | Montréal | Montréal | \$1.5 | 0.3% |
| Gay Village | H2L | Montréal | Montréal | \$1.3 | 0.2% |
| Saint-Henri | H4C | Montréal | Montréal | \$1.1 | 0.2% |
| Pointe-Claire | H9R | Pointe-Claire | Montréal | \$1.0 | 0.2% |

Appendix 3C: Montréal's leading neighbourhoods for venture capital investment

Methodological Appendix

Venture Capital Data Source

The data are from Thomson Reuters which provides detailed information on venture capital investments, including the name of the recipient company, the total dollar value of the investment, the number of deals completed, the industry sector that received the investment, as well as geographic location information including city and postal code. The data cover the year 2013 and are denominated in U.S. dollars.

Industry/Technology Sector Definitions

We employ the <u>definitions</u> used by PricewaterhouseCoopers in their <u>regular reporting</u> on the U.S. venture capital industry.

Biotechnology: Developers of technology promoting drug development, disease treatment, and a deeper understanding of living organisms. Includes human, animal, and industrial biotechnology products and services. Also included are biosensors, biotechnology equipment, and pharmaceuticals.

Business products and services: Offers a product or service targeted at another business such as advertising, consulting, and engineering services. Also includes distributors, importers, and wholesalers.

Computers and peripherals: Includes manufacturers and distributors of PCs, mainframes, servers, PDAs, printers, storage devices, monitors, and memory cards. Also included are digital imaging and graphics services and equipment such as scanning hardware, graphics video cards and plotters. Integrated turnkey systems and solutions are also included in this category.

Consumer products and services: Offers products or services targeted at consumers such as restaurants, dry cleaners, automotive service centers, clothing, toiletries, and house wares.

Electronics/instrumentation: Includes electronic parts that are components of larger products and specialized instrumentation, including scientific instruments, lasers, power supplies, electronic testing products, and display panels. Also included are business and consumer electronic devices such as photocopiers, calculators, and alarm systems.

Financial services: Providers of financial services to other businesses or individuals including banking, real estate, brokerage services, and financial planning.

Healthcare services: Includes both in-patient and out-patient facilities as well as health insurers. Included are hospitals, clinics, nursing facilities, managed care organizations, physician practice management companies, child care and emergency care.

Industrial/energy: Producers and suppliers of energy, chemicals, and materials, industrial automation companies and oil and gas exploration companies. Also included are environmental, agricultural, transportation, manufacturing, construction and utility-related products and services.

IT services: Providers of computer and internet-related services to businesses and consumers including computer repair, software consulting, computer training, machine leasing/rental, disaster recovery, web design, data input and processing, internet security, e-commerce services, web hosting and systems engineering.

Media and entertainment: Creators of products or providers of services designed to inform or entertain consumers including movies, music, consumer electronics such as TVs/stereos/ games, sports facilities and events, recreational products or services. Online providers of consumer content are also included in this category (e.g., medical, news, education and legal).

Medical devices and equipment: Manufactures and/or sells medical instruments and devices including medical diagnostic equipment (e.g., X-ray, CAT scan and MRI), medical therapeutic devices (drug delivery, surgical instruments, pacemakers, artificial organs), and other health related products such as medical monitoring equipment, handicap aids, reading glasses and contact lenses.

Networking and equipment: Providers of data communication and fiber optics products and services. Includes WANs, LANs, switches, hubs, routers, couplers, and network management products, components and systems.

Retailing/distribution: Firms making consumer goods and services available for consumer purchase including discount stores, super centers, drug stores, clothing and accessories retailers, computer stores and book stores. Also included in this group are e-commerce companies (i.e., those selling their products or services via the internet).

Semiconductors: Design, develop or manufacture semiconductor chips/microprocessors or relat-

ed equipment including diodes and transistors. Also includes companies that test or package integrated circuits.

Software: Producers of bundled and/or unbundled software applications for business or consumer use including software created for systems, graphics, communications and networking, security, inventory, home use, educational, or recreational. Also included is software developed for specific industries such as banking, manufacturing, transportation, or healthcare.

Telecommunications: Companies focused on the transmission of voice and data including long distance providers, local exchange carriers, and wireless communications services and components. Also included are satellite and microwave communications services and equipment.

Other: If the classification criterion in all of the other categories does not appropriately describe the product or service offered, the firm may be categorized in this group.

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