



2018 EDITION

# Economic Impacts of Commercial Real Estate in Canada

Prepared by

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# Economic Impacts of Commercial Real Estate in Canada

2018 Edition

Selected provinces and cities:

Alberta

Calgary

Edmonton

British Columbia

Vancouver

Ontario

Toronto

Ottawa-Gatineau

Quebec

Montreal

**Prepared for and funded by  
the NAIOP Research Foundation**

**Data and analytics provided by  
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NAIOP, the Commercial Real Estate Development Association, is the leading organization for developers, owners and related professionals in office, industrial, retail and mixed-use real estate. NAIOP comprises some 19,000 members in North America. NAIOP advances responsible commercial real estate development and advocates for effective public policy. For more information, visit [naiop.org](http://naiop.org).

The NAIOP Research Foundation was established in 2000 as a 501(c)(3) organization to support the work of individuals and organizations engaged in real estate development, investment and operations. The Foundation's core purpose is to provide information about how real properties, especially office, industrial and mixed-use properties, impact and benefit communities throughout North America. The initial funding for the Research Foundation was underwritten by NAIOP and its Founding Governors with an endowment established to support future research. For more information, visit [naiop.org/research](http://naiop.org/research).

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## About this Report

All monetary values are expressed in Canadian Dollars (CAD) in this report. NAIOP conducted a survey of its Canadian members in 2018 to estimate categories of their commercial real estate costs. The Conference Board of Canada is responsible for the analyses and forecasts in this report.

## Disclaimer

This project is intended to provide information and insight to industry practitioners and does not constitute advice or recommendations. NAIOP disclaims any liability for action taken as a result of this project and its findings.

# Introduction

In 2017, investment in commercial and industrial buildings in Canada totaled \$38.6 billion. Roughly 80 per cent of these expenditures went toward commercial facilities, with the remainder invested in industrial structures (Statistics Canada (a), 2018). This is equivalent to 15 per cent of the \$237 billion in total investment spending across all industries in Canada in 2017, including engineering construction in the resource sector (Statistics Canada (b), 2018).

According to Statistics Canada, “commercial” building investment includes assets like office towers, retail and wholesale complexes, convention centres, hotels, theatres and stadiums, and motor vehicle showrooms. Typically, these are assets that eventually serve consumers or service-producing firms. Industrial structures generally support goods producers and include things like manufacturing, agriculture, utility and transportation buildings. A more comprehensive overview of commercial and industrial facilities is shown in Table 1, and the remainder of this report will use the term “commercial” real estate to refer to investment in both these categories of assets.

It is also important to note that two significant sources of non-residential investment are deliberately excluded from the remainder of this analysis. The first is institutional investment, which includes hospitals, schools and libraries or other structures that are generally publicly funded. The second is heavy and civil engineering construction, which includes highways, bridges and land subdivision, as well as resource-related construction activity like development of oil and gas wells and pipelines, mines, refineries and utilities.

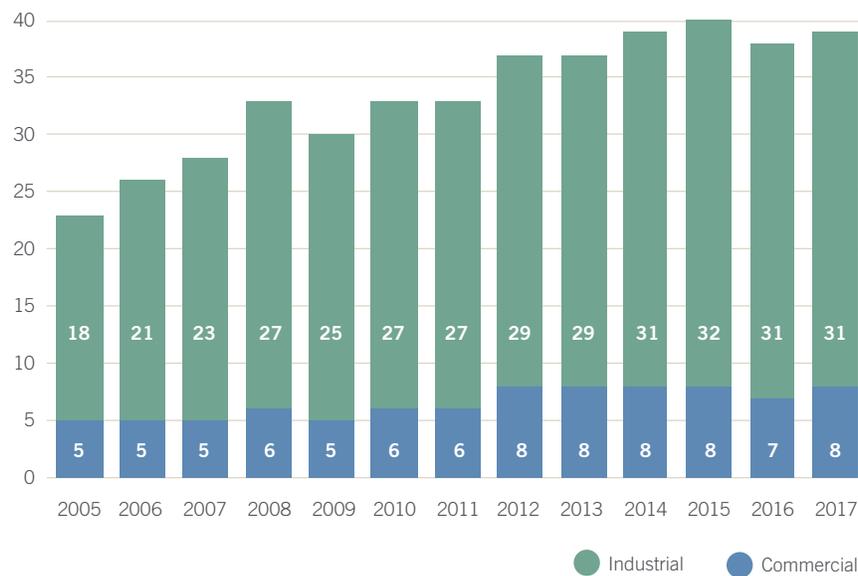
Table 1  
**Commercial Real Estate Investment Coverage by Types of Building**

Commercial Buildings	Industrial Buildings
Storage/warehouse building	Agricultural building
Retail and wholesale outlets	Mining building
Retail complex	Manufacturing building
Office building and complex	Transportation terminal
Hotel and motel	Maintenance building
Convention centre	Communication building
Restaurant	Utility building
Theatre and performing art centre	
Indoor recreational building	
Outdoor recreational building	
Motor vehicle showroom	
Service station	
Laboratory and research centre	

Sources: The Conference Board of Canada; Statistics Canada

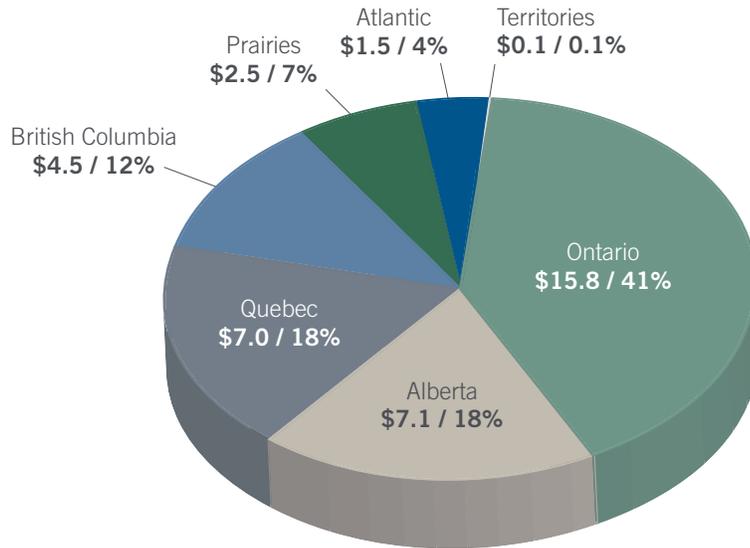
Growth in commercial real estate spending was exceptionally strong during the mid-2000s but has slowed somewhat in recent years. However, the long-term trend is clearly positive, with aggregate commercial real estate spending rising by 36 per cent, or \$10 billion a year, since 2007 (Chart 1). In 2017, more than 40 per cent of all commercial real estate investment occurred in Ontario alone, followed by Alberta and Quebec, which accounted for 18 per cent of the national total each, and British Columbia with 12 per cent (Chart 2).

Chart 1  
**Commercial Real Estate Spending Since 2005**  
 (\$ Billion)



Sources: The Conference Board of Canada; Statistics Canada

Chart 2  
**Commercial Real Estate Spending in 2017**  
(Investment in \$ Billions, and Per Cent of Total)



Sources: The Conference Board of Canada; Statistics Canada

Across the country, Canadian cities attract the bulk of commercial real estate investment. Together, Canada's six largest cities, or census metropolitan areas (CMAs)<sup>1</sup>, accounted for close to 60 per cent of all commercial real estate spending in the country in 2017. The largest city, Toronto, accounted for one-fifth of total commercial real estate spending alone.

The main purpose of this report is to quantify the economic impact of commercial real estate investment in Canada, with a specific focus on estimating the impact tied to investment in the country's largest CMAs, including:

- Vancouver
- Calgary
- Edmonton
- Toronto
- Ottawa-Gatineau
- Montreal

<sup>1</sup> Statistics Canada defines Census Metropolitan Areas (CMAs) as one or more neighbouring municipalities situated around a core. CMAs must have a total population of at least 100,000, of which 50,000 or more live in the core.

The impact of commercial real estate investment is estimated in this report along three key measures of economic activity: gross domestic product (GDP, or value-added), employment and labour income. The analysis also includes estimates of the government revenues that are associated with the economic activity stimulated in the country by commercial real estate through the indirect taxes (sales taxes and user fees) charged on products and services, and taxes on the labour and corporate income that is generated.

Based on a survey of Canadian member companies, NAIOP separates aggregate commercial real estate investment into four distinct types of costs, which are broadly associated with different temporal phases of a commercial real estate project. They are: soft costs, site development and infrastructure costs, hard construction costs, and interior buildout and tenant improvement costs. Example activities and associated products and services for each of these different types of costs are shown in Table 2, along with the estimated share of total commercial real estate investment they account for based on a NAIOP Canadian member survey.

**Table 2**  
**Phases of Construction with Corresponding Products & Services**  
 (Per Cent of Total Commercial Real Estate Investment)

Commercial Real Estate Costs	Associated products and services
Phase 1: Soft Costs (14%)	Architectural, engineering, legal, marketing, insurance, etc.
Phase 2: Site Development and Infrastructure Costs (10%)	Earthwork, excavation, utilities, infrastructure, surface and structured parking, etc.
Phase 3: Hard Construction Costs (64%)	Base building costs for concrete, masonry, metals, wood, doors, windows, insulation, elevators, etc.
Phase 4: Interior Buildout and Tenant Improvement Costs (13%)	Flooring, lighting fixtures, cabinets, painting, etc.

*Source: NAIOP Canadian member survey*

Hard construction costs, which includes all the building activities and assembly of the structure, are easily the largest segment of investment. They account for more than 60 per cent of commercial real estate spending — which amounted to nearly \$25 billion across Canada alone in 2017. Soft construction costs account for the next highest share at \$5.3 billion, followed by interior buildout (\$4.9 billion), and site development and infrastructure (\$3.7 billion).

## Economic Outlook

The Canadian economy is on pace to expand just 2.0 per cent in 2018, which is less than the 3.0 per cent expansion recorded in 2017. Furthermore, significant structural issues in the economy are expected to hold growth to 1.8 per cent expansion in each of the next two years. Although the recent conclusion of negotiations between Canada, Mexico and the United States for the new USMCA trade agreement has provided a modest degree of certainty in recent months, exporters remain concerned about their continued access to the U.S. market as the deal has yet to be ratified by any of the three signatories. This situation is compounded by worries about the impact of the federal government's carbon tax policy and the perception that Canada's tax competitiveness has eroded, causing investment to flee the country. These factors are limiting the willingness of firms to increase their capital spending. In The Conference Board of Canada's most recent business confidence survey, just 34 per cent of firms said they believe now is a good time to invest, which is the lowest level since the 2008 recession.

Labour markets are feeling the weight of decelerating growth. After creating 337,000 jobs in 2017, the economy is on pace to create just 213,200 in 2018 and only 195,000 in each of the next two years. Nevertheless, the national unemployment rate has held below 6 per cent for much of the year, and wage growth is starting to pick up from its unexpected slowdown in the third quarter. Those factors should help provide some underlying strength to household spending. Unfortunately, households are also coping with record levels of debt, and this situation will worsen as interest rates are expected to rise during the next two years. This will lift debt-servicing costs and eat away at disposable income. Overall, household spending is projected to increase by only 2.2 per cent in

2018 after rising by 3.5 per cent in 2017. In 2019 and 2020, growth in this key segment of the Canadian economy is projected to slow to just 2.0 per cent.

The recent economic update by the federal government introduces some upside risk into the outlook. New measures aimed at boosting domestic investment will allow firms to depreciate new assets more quickly, which lowers the tax burden for firms and improves the near-term investment picture. While this may provide some sense of relief to firms worrying that investment is shifting south of the border due to the higher Canadian corporate tax burden, these measures are no panacea. Canadian crude oil prices remain heavily discounted compared to other North American benchmarks due to transportation bottlenecks and the inability to develop new pipeline capacity, and the economic fallout, particularly in Western Canada, has been severe. Price-adjusted investment in the country's oil sector is projected to decline for a fifth consecutive year in 2019, and it has contracted by more than 50 per cent from the industry's recent peak in 2014.

All in all, the outlook for growth in the Canadian economy at this time remains positive, but modest. Moreover, the level of uncertainty that firms currently face is creating a murkier-than-normal picture of the future. On the positive side, labour markets have proven largely resilient, and fiscal stimulus is likely to provide a modest boost to investment in the near term. Offsetting these are tariffs on key export products, high levels of consumer debt, weak oil prices, stretched capacity in manufacturing and a cooling housing market. As a result, sub-2.0 per cent growth for the Canadian economy is currently expected through 2023.

# Key Findings

## National Results

In 2017, the \$38.6 billion spent on commercial real estate in Canada supported:

- \$40.2 billion in gross domestic product (GDP)
- \$25.2 billion in labour income<sup>2</sup>
- 419,197 jobs
- \$10.1 billion in government revenues

This economic activity includes not only the direct impact that commercial real estate investment makes on the economy, but also the indirect impact it has on other sectors through demand for products and services it supports. For example, investment in commercial real estate will naturally stimulate demand for directly impacted industries like engineering, design and construction. But it has secondary (supply-chain) impacts in industries like manufacturing, business services and utilities, which are prompted to produce at a higher level to provide products and services that are necessary to support the primary producers (for example, when manufacturers produce concrete or steel to support construction activity). Furthermore, there is a tertiary round of economic activity that is tied to commercial real estate activity in Canada through the “income” or “induced” effect. These impacts are caused when the workers who are directly or indirectly employed thanks to commercial real estate investment spend their wages and salaries into the economy. These impacts tend to be relatively smaller than the direct or indirect effects, and they also tend to be concentrated in consumer-oriented industries like food manufacturing, retail trade and transportation, and recreation activity.

## Highlights by Type of Cost

The economic impact results presented in this report were estimated separately for each of the different aspects of commercial real estate determined by the survey of NAIOP’s Canadian members. Given this distribution, which was provided in Table 2, it is unsurprising that hard construction costs sustain the largest footprint on the Canadian economy.

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<sup>2</sup> Labour income consists of wages, salaries and supplementary labour income, which includes employer-paid social contributions, bonuses and retirement contributions made by employers on behalf of employees.

Relative to the total, the spending on this phase of development makes up nearly two-thirds of the total economic activity tied to commercial real estate around the country in terms of GDP, employment, labour income and government revenues (Tables 3 and 4). Specifically, in 2017, the spending devoted to hard construction costs supported:

- \$25.6 billion in GDP
- \$16.4 billion in labour income
- 265,700 jobs
- \$6.6 billion in government revenues

By comparison, the combined other three phases of development sustained:

- \$14.7 billion in GDP
- \$8.8 billion in labour income
- 153,500 jobs
- \$3.4 billion in government revenues

Table 3  
**Economic Impact by Type of Construction Cost**  
 (2017 – Includes Direct, Indirect and Induced Effects)

Canada	Total	Breakdown by Type of Cost			
		Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
<b>Initial Investment</b> (billions)	<b>\$38.6</b>	\$5.3	\$3.7	\$24.7	\$4.9
<b>Total GDP</b> (billions)	<b>\$40.2</b>	\$6.4	\$3.6	\$25.6	\$4.7
<b>Total Labour Income</b> (billions)	<b>\$25.2</b>	\$4.0	\$2.0	\$16.4	\$2.8
<b>Total Employment</b> (000s)	<b>419.2</b>	62.8	32.3	265.7	58.4
<b>Total Government Revenues</b> (billions)	<b>\$10.1</b>	\$1.5	\$0.8	\$6.6	\$1.1

Sources: The Conference Board of Canada; Statistics Canada

Table 4  
**Breakdown of Economic Impact by Type of Costs**  
 (Share of Total Impact, Per Cent)

Canada	<u>Total Impact</u>	Breakdown by Type of Cost			
		Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
<b>Initial Investment</b>	<b>100</b>	13.7	9.5	64.0	12.8
<b>Total GDP</b>	<b>100</b>	15.8	9.0	63.5	11.7
<b>Total Labour Income</b>	<b>100</b>	15.8	7.9	65.1	11.3
<b>Total Employment</b>	<b>100</b>	15.0	7.7	63.4	13.9
<b>Total Government Revenues</b>	<b>100</b>	14.6	8.4	65.9	11.1

Sources: The Conference Board of Canada; Statistics Canada

One interesting result is that soft costs account for a noticeably higher share of the economic footprint relative to their share of total investment. Soft costs represent 13.7 per cent of total spending on commercial real estate but are estimated to account for between 15 and 16 per cent of the total impact in terms of GDP, labour income, employment and government revenues. For example, every \$1 million spent on soft costs translates into \$1.2 million in GDP, \$750,000 in labour income, 11.8 jobs and \$277,000 in government revenues. These are noticeably higher ratios than the average across all four phases of development, where \$1 million in spending translates into \$1.04 million in GDP, \$652,000 in labour income, 10.9 jobs and \$261,000 in government revenues (Table 5).

Table 5  
**Key Ratios**  
 (GDP and Labour Income, Per \$100 in Direct Spending; Employment per \$1 Million in Direct Spending)

	Average	Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
<b>GDP</b>	<b>\$104.13</b>	\$120.13	\$97.80	\$103.37	\$95.46
<b>Labour Income</b>	<b>\$65.22</b>	\$74.88	\$53.86	\$66.36	\$57.57
<b>Employment</b>	<b>10.85</b>	11.84	8.78	10.75	11.84
<b>Government Revenues</b>	<b>\$26.05</b>	\$27.66	\$22.99	\$26.85	\$22.62

Sources: *The Conference Board of Canada; Statistics Canada*

Part of the reason soft costs generate a larger economic impact per dollar spent relates to the types of activities that are involved in that phase of commercial real estate development. Prime activities include financing, architectural design and engineering services, which have high levels of output per worker and also pay above-average wages, resulting in a greater amount of induced (i.e. income-related) activity tied to these costs.

### Provincial Highlights

On a provincial basis, the economic impact of commercial real estate in terms of GDP tends to roughly align with the distribution of spending across the provinces. Consequently, approximately 40 per cent of GDP and labour income accrues to Ontario, followed by 18 per cent to both Alberta and Quebec, and 11 per cent to British Columbia (Tables 6 and 7). These four provinces combine to account for 88 per cent of all value-added generated by commercial real estate investment in Canada in 2017.

Table 6  
**Summary of Commercial Real Estate Impact\***  
 (2017, by Jurisdiction)

	Direct Spending (\$ billion)	GDP (\$ billion)	Labour Income (\$ billion)	Employment (000)	Government Revenues (\$ billion)
<b>Total Canada</b>	<b>38.6</b>	<b>40.2</b>	<b>25.2</b>	<b>419.2</b>	<b>10.1</b>
Total Four Provinces (BC, AB, ON, QC)	<b>34.4</b>	<b>35.5</b>	<b>22.4</b>	<b>365.0</b>	<b>8.7</b>
Total Six Cities (Van, Edm, Calg, TO, Ott, Mtl)	<b>22.0</b>	<b>22.7</b>	<b>14.3</b>	<b>230.6</b>	<b>5.3</b>
<b>British Columbia</b>	<b>4.5</b>	<b>4.8</b>	<b>2.9</b>	<b>47.5</b>	<b>1.1</b>
Vancouver	2.9	3.1	1.9	30.8	0.7
<b>Alberta</b>	<b>7.1</b>	<b>7.3</b>	<b>4.3</b>	<b>60.7</b>	<b>1.5</b>
Edmonton	2.8	2.8	1.7	23.6	0.6
Calgary	2.7	2.8	1.7	23.1	0.6
<b>Ontario</b>	<b>15.8</b>	<b>16.3</b>	<b>10.4</b>	<b>172.1</b>	<b>4.1</b>
Toronto	8.4	8.7	5.6	91.9	2.2
Ottawa	1.5	1.5	1.0	16.1	0.4
<b>Quebec</b>	<b>7.0</b>	<b>7.2</b>	<b>4.7</b>	<b>84.6</b>	<b>2.0</b>
Montreal	3.7	3.8	2.5	45.1	1.0

Sources: The Conference Board of Canada; Statistics Canada

\*These results show the impact of commercial real estate investment, by jurisdiction, and include direct, indirect and induced effects.

However, the distribution of employment impacts does exhibit some important variations — most notably in Alberta and Quebec. For example, only 14 per cent of the employment sustained by commercial real estate is estimated to accrue to Alberta, which is noticeably lower than the 20 per cent of spending that it accounts for. This is due in large part to the higher average productivity levels observed in the province.<sup>3</sup> For every \$1 million spent on commercial real estate in Alberta, a total of 8.5 jobs are supported across the economy. This is lower than the 10.8 workers supported in Canada on average for every \$1 million invested in commercial real estate.

At the other end of the spectrum is Quebec. There, output per worker is lower (Gagne, Deslaurier, & Pare, 2017), which means more workers are required to accommodate an equal level of spending. For every \$1 million spent on commercial real estate in Quebec, there are 12 jobs supported across the economy — easily the highest among the four provinces considered in this report. As a result, Quebec accounts for 20 per cent of all jobs tied to commercial real estate investment in Canada, even though it secures only 18 per cent of investment spending (Table 7).

<sup>3</sup> In 2017, real GDP per worker in Alberta equaled \$133,000; \$92,400 in British Columbia; \$91,400 in Ontario; and \$77,700 in Quebec.

In terms of government revenues, the breakdown across Canada's regions is fairly similar to the spending breakdown, with the exception of Alberta. It has by far the lowest personal income tax rates in the country, and corporate income tax rates are among the lowest overall as well. As a result, the province derives a relatively lesser amount of government revenues for any given amount of economic activity that occurs in the province.

Table 7  
**Breakdown of Economic Impact by Province and Cities**  
 (Share of National Commercial Real Estate Spending and Impact, Per Cent)

	Direct Spending	GDP	Labour Income	Employment	Government Revenues
<b>Total Canada</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Total Four Provinces (B.C., AB, ON, QC)	<b>89.1</b>	<b>88.2</b>	<b>88.8</b>	<b>87.1</b>	<b>86.2</b>
Total Six Cities (Van, Edm, Calg, TO, Ott, Mtl)	<b>57.1</b>	<b>56.5</b>	<b>56.6</b>	<b>55.0</b>	<b>52.9</b>
<b>B.C.</b>	<b>11.8</b>	<b>11.8</b>	<b>11.3</b>	<b>11.3</b>	<b>11.3</b>
Vancouver	7.6	7.7	7.4	7.3	7.0
<b>Alberta</b>	<b>18.5</b>	<b>18.2</b>	<b>17.2</b>	<b>14.5</b>	<b>15.2</b>
Edmonton	7.2	7.1	6.7	5.6	5.9
Calgary	7.0	6.9	6.5	5.5	5.7
<b>Ontario</b>	<b>40.8</b>	<b>40.4</b>	<b>41.4</b>	<b>41.1</b>	<b>40.4</b>
Toronto	21.8	21.6	22.1	21.9	21.4
Ottawa	3.8	3.8	3.9	3.8	3.8
<b>Quebec</b>	<b>18.1</b>	<b>17.8</b>	<b>18.8</b>	<b>20.2</b>	<b>19.4</b>
Montreal	9.6	9.5	10.0	10.8	10.3

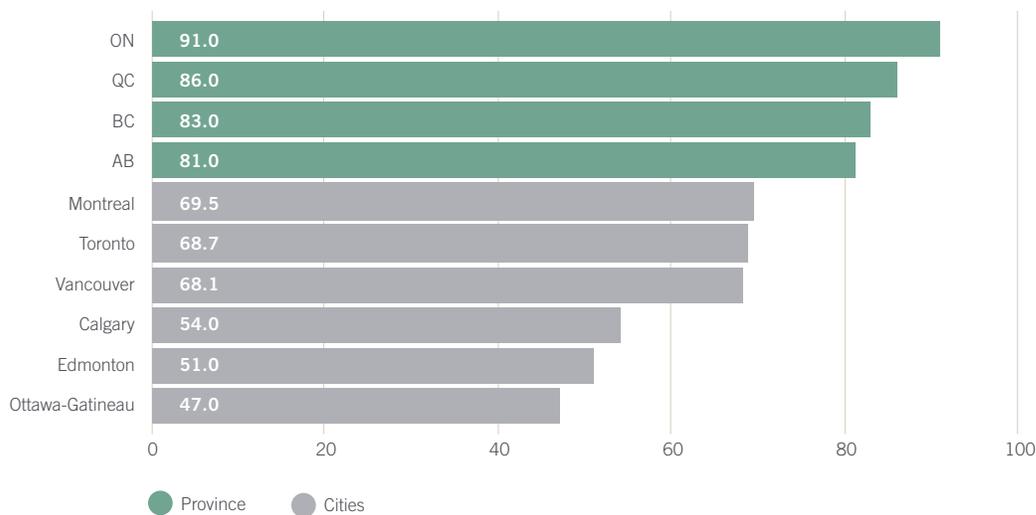
Sources: The Conference Board of Canada; Statistics Canada

\*Totals may not add due to rounding.

The economic impact of commercial real estate investment always extends beyond the jurisdiction in which it occurs. And the smaller and less diverse a jurisdiction's economy is, whether at the provincial or municipal level, the more likely it is to require services, products or resources from external regions. For example, the smaller CMAs in this analysis — Edmonton, Calgary and Ottawa-Gatineau — see as much as half of the GDP generated by commercial real estate investment in their respective cities leak out into other jurisdictions. In some instances, these leakages create value and jobs elsewhere in their home province. In others, the impacts occur somewhere else in the country.

On the other end of the spectrum are Toronto, Montreal and Vancouver, which are not only larger but are also the established engines of their provincial economies. Their larger scale and diversity mean that these cities have a greater capacity to produce the bulk of the products and services required for the completion of commercial real estate projects — from engineering and architecture services, all the way to the finishing touch of paint.

**Chart 3**  
**Economic Leakages**  
 (Share of GDP Sustained by Commercial Real Estate Investment in a Jurisdiction that Remains with the Same Jurisdiction, Per Cent)



Sources: The Conference Board of Canada; Statistics Canada

For example, Table 6 shows that commercial real estate investment in Ontario amounted to \$15.8 billion in 2017, and including the direct, indirect and induced effects, it generated \$16.3 billion in GDP across the entire country. The analysis suggests that 91 per cent (or \$14.8 billion) of this value-added will actually occur in Ontario, while the remainder spills over into other Canadian provinces (Chart 3). On the other end is Alberta, which has the smallest economy among the four provinces in this analysis. It could be expected to secure only 81 per cent of the \$7.3 billion in GDP that is generated in the Canadian economy due to commercial real estate investment in the province. Quebec and British Columbia fall between these two extremes.

The share of economic activity that leaks out into other jurisdictions increases as the size and breadth of the economy in question shrinks. Thus, it is more significant at the municipal level than for provinces in aggregate. Toronto, Montreal and Vancouver, which are the three largest and most complex municipal economies in Canada, would still only secure 68 to 69 per cent of the total value that is created across the entire country due to commercial real estate investment that occurs in the city. Ottawa-Gatineau, which is the smallest municipal economy in this study, secures just 47 per cent of all value-added created in the country due to its commercial real estate investment.

There are many reasons why a portion of economic activity that is directly caused in one jurisdiction will result in economic activity elsewhere in the country. For example, a commercial real estate investment in Calgary may require financing from one of the major chartered banks in Canada, which are all headquartered in Toronto. Similarly, the transportation activity associated with shipping construction materials to a job site in Vancouver will require the trucking companies to use more diesel (and thus more crude oil), and this crude oil will actually come from the neighbouring province of Alberta. Or, the structural steel required for a commercial asset in Montreal may be manufactured in Quebec but not inside the city's economic zone. The degree to which these kinds of economic leakages occur depends not only on the size of the local economy, but also on the distribution of products and services that are required to successfully achieve the intended outcome. For example, cities are more likely to source services from within their borders and less likely to provide natural resources, agricultural products and heavy manufacturing activity. These types of industries tend to locate away from population centres for health and safety reasons.

Economic activity that is directly created in one jurisdiction and spills into other parts of the province (or country) simply reflects the interconnectedness of the Canadian economy, because some products and services required to develop commercial real estate cannot be produced within the borders of a particular city or province. It also highlights the truly national impact that commercial real estate makes on the Canadian economy, regardless of where the investment actually occurs.

## Spotlight on Canadian Cities

Canada's six largest urban areas<sup>4</sup> — Toronto, Vancouver, Montreal, Edmonton, Calgary and Ottawa-Gatineau — accounted for more than half of national investment in commercial real estate in 2017. Given their importance to the national and provincial results presented above, it is worthwhile to examine the contributions these cities make to the sector's national impact and the key fundamentals that are likely to impact market dynamics in these economies in coming years. For detailed information on each city's impact and CMA maps, see the Appendices.

Table 8 presents a summary of the key statistics for each of the CMAs covered in the analysis. It includes the vacancy rates for office space in each CMA's downtown core and suburban regions. The table also provides the latest availability rates for industrial facilities, which consist of storage, fulfillment and other warehousing buildings, as well as structures where manufacturing can take place. The rest of this section outlines the key impact results for each CMA, ordered by their amount of commercial real estate spending in 2017.

Table 8  
Commercial Real Estate Key Statistics  
(2018 Q3)

<b>Downtown Office Market</b>	<b>Canada</b>	<b>Toronto</b>	<b>Montreal</b>	<b>Vancouver</b>	<b>Edmonton</b>	<b>Calgary</b>	<b>Ottawa</b>
Class A Vacancy Rate	8.9%	2.2%	8.3%	4.8%	15.7%	21.2%	4.2%
Average Class A Net Rent (\$/sq. ft.)	\$21.36	\$32.91	\$22.10	\$34.99	\$21.11	\$16.28	\$23.83
<b>Suburban Office Market</b>							
Class A Vacancy Rate	15.2%	13.9%	17.6%	8.4%	19.0%	23.0%	10.0%
Average Class A Net Rent (\$/sq. ft.)	\$17.55	\$17.64	\$15.06	\$23.64	\$18.32	\$19.02	\$16.25
<b>Industrial Market</b>							
Overall Availability Rate	3.3%	1.6%	5.3%	2.3%	7.6%	7.0%	3.4%
Average Net Rent (\$/sq. ft.)	\$7.48	\$6.68	\$5.71	\$11.74	\$10.01	\$7.34	\$9.40

Source: CBRE Canada

<sup>4</sup> Maps of the geographical areas covered by each CMA are presented in Appendix III.

## Toronto

The detailed impact results of commercial real estate in Toronto's economy are shown in Table 9. In 2017, there was a total of \$8.4 billion invested in commercial real estate in the city. This supported \$8.7 billion in GDP, 91,936 jobs and \$2.2 billion in government revenues to the federal government and provincial governments in Canada. In relative terms, for every \$1 million invested in the city, there is \$1.03 million in GDP, 10.9 jobs and \$256,526 in government revenues supported on a national basis.

Furthermore, a high share of these effects will occur within the city itself. In aggregate, it is estimated that 68.6 per cent of GDP and 64.0 per cent of the jobs supported by commercial real estate will occur within the CMA boundaries, while the remainder of the effects occur elsewhere in the province, or in other Canadian provinces. This amounts to \$6.0 billion in GDP and 58,880 jobs (which are paid nearly \$3.9 billion in wages and salaries) that are supported in Toronto thanks to commercial real estate investment.

Table 9  
Toronto's Commercial Real Estate Economic Impact

Toronto	Total Impact	Breakdown by Type of Cost			
		Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
Investment (million)	\$8,413.67	\$1,154.36	\$801.82	\$5,383.07	\$1,074.43
Total GDP (million)	\$8,691.35	\$1,362.46	\$772.52	\$5,568.71	\$987.67
Total Labour Income (million)	\$5,577.91	\$866.19	\$437.11	\$3,676.99	\$597.62
Total Employment (000s)	91.94	13.92	6.90	59.35	11.78
Total Government Revenues (million)	\$2,158.33	\$304.58	\$177.72	\$1,465.94	\$210.08

Sources: The Conference Board of Canada; Statistics Canada

Overall, Toronto accounts for more than 20 per cent of total spending on commercial real estate in Canada (Table 7). The city has had a strong run during the past few years, with the region reaping the benefits of a red-hot housing market, high levels of consumer confidence and strong population growth. These factors have helped keep economic growth above 3 per cent every year since 2014, with annual gains averaging 3.4 per cent through 2017.

However, higher interest rates and a downturn in the city's housing market will lead to weakness in both household spending and residential construction, resulting in a more subdued outlook for the province between now and 2020. As a result, the expansion of Toronto's economy is projected to moderate, coming in at 2.3 per cent in 2018 and at 2.4 per cent in 2019. Still, despite weaker economic growth, the commercial real estate sector has reason to remain upbeat.

Toronto's office segment is the most vibrant in the country. This should remain the case during the next several years, as close to 50 per cent of the office space construction pipeline in Canada is currently expected to be delivered in the city (CBRE (c), 2018). More than 8 million square feet of office space is under construction in the Greater Toronto Area, with 7.2 million square feet in the downtown core alone. That is equivalent to 10 per cent of existing supply (Avison Young (b), 2018). The four largest projects currently under construction represent \$3.8 billion in new commercial real estate investment by themselves (Table 10). Moreover, there are an additional 29 projects in the pre-construction stage, representing another 16 million square feet of office space (City of Toronto, 2018).

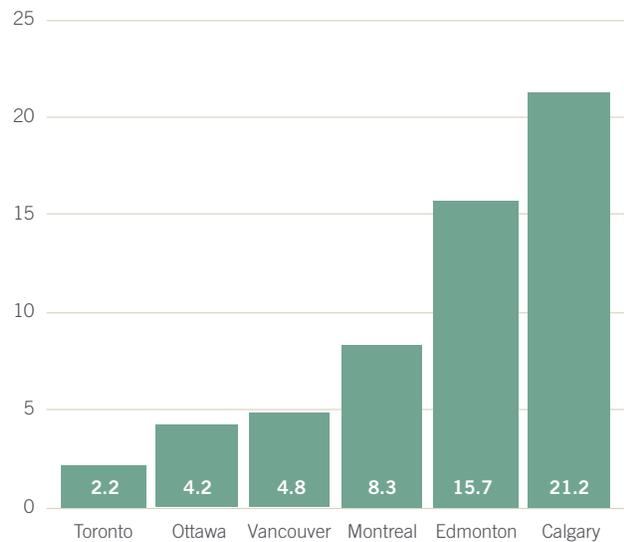
Table 10  
Toronto's Largest Office Tower Projects

Project	Value	Office Surface Area (sq. ft)	Lead Tenant	Completion Date
81 Bay St and 141 Bay Street (CIBC Square)	\$2 billion	2.7 million (49 storeys)	CIBC & Microsoft Canada	2020 (1st tower) 2023 (2nd tower)
160 Front Street W	\$800 million	1.2 million (46 storeys)	Ontario Teachers' Pension Plan	2022
The Well		1.1 million	Shopify & Spaces (coworking spaces)	2022
16 York Street (Southcore)	\$479 million	879,000 (32 storeys)	No tenant confirmed (speculative project)	2020
40 Temperance Street and 37 Richmond Street W (Bay Adelaide North Tower)	\$500 million	820,000 (32 storeys)	ScotiaBank	2022
100 Queens Quay E		763,000 (25 storeys)	LCBO	2021

Sources: City of Toronto, "Major Non-Residential Developments"; The Conference Board of Canada

The strong pipeline for office construction in Toronto is not surprising. The vacancy rate in the city's downtown core stands at 2.2 per cent, which is easily the lowest in Canada (Chart 4) and among the lowest in North America (CBRE (a), 2018). Exceptionally low vacancy rates have predictably led to a surge in rents. In 2017, net asking rent for Class A office space downtown rose by 11 per cent, going from \$27.98 to \$30.96 per square foot, and CBRE expects a further 3.8 per cent increase in 2018 to \$32.13 per square foot (CBRE (a), 2018).

**Chart 4**  
**Office Vacancy Rates by City**  
 (Class A Properties in Downtown Core, Per Cent – 2018 Q3)



Source: CBRE Canada

In line with strong demand and rising rents, the city has reached the point where a growing number of speculative investments — projects that have not secured an anchor tenant — are now moving forward. As much as 1.8 million square feet of office space currently under construction in Toronto is speculative, the largest amount in a generation (CBRE (b), 2018). The most recent project is 65 King East, a 400,000-square-foot structure and the second-largest office tower project ever launched on speculative terms in the city (CBRE (b), 2018). The One, an 85-storey mixed-use tower at Yonge and Bloor, is another example of the large-scale projects that will keep commercial real estate strong in the city in coming years. It will have seven levels of retail space and restaurants, a hotel with 175 rooms, and 60 floors of luxury condo apartments and penthouses (Bozikovic, 2017). When completed, it will be Canada's tallest building.

The outlook remains bright for the Toronto office market segment, especially downtown. There will be an additional 250,000 jobs created in the downtown core during the next two decades, which will require more than 30 million square feet of new office space (Matthew, n.d.). At the current pace of office construction, half of this expected demand would be met by the mid-2020s. One of the key drivers behind the rapid rise in office space demand is the buoyant tech sector. Estimates suggest that technology firms are driving as much as 20 per cent of new office space requirements in downtown Toronto, despite currently occupying only 4 per cent of office space (CBRE (a), 2018). Moving forward, the tech sector will continue to be a major contributor to office space demand. Pinterest recently announced the opening of its first Canadian office in Toronto, and Shopify announced it would lease 253,000 square feet at the Well Complex, a 38-storey office tower set to open in 2022.

The outlook for the industrial market is equally robust. In the third quarter of 2018, the industrial vacancy rate in Toronto reached a historic low of 1.6 per cent — by far the lowest across North America (CBRE (c), 2018). And this is despite the introduction of nearly 5 million square feet of new supply so far this year (CBRE (c), 2018). Given such a tight market, asking rents reached an all-time high of \$6.68 per square foot, and there are very few concerns that the estimated 5.6 million square feet currently under construction won't be quickly absorbed (CBRE (c), 2018).

## Montreal

The economic activity tied to commercial real estate investment in Montreal is shown in Table 11. Total commercial real estate spending amounted to \$3.7 billion in 2017. On a national basis, this sustained \$3.8 billion in GDP, 45,112 jobs and \$1.0 billion in revenues to the federal and provincial governments. Put another way, for every \$1 million in commercial real estate investment in the city, there is a total of \$1.03 million in GDP, 12.1 jobs and \$278,895 in government revenues supported across the country.

Of the six cities covered in this report, Montreal could be expected to secure the highest share of the total benefits created by commercial real estate investment that occurs there. When accounting for direct and spinoff impacts, slightly more than 69 per cent of the national impact on GDP and employment occurs in Montreal. This is equivalent to \$2.7 billion in GDP, 31,284 jobs and \$1.8 billion in labour income paid to workers.

Table 11  
**Montreal's Commercial Real Estate Economic Impact**

Montreal	<u>Total Impact</u>	Breakdown by Type of Cost			
		Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
<b>Investment</b> (million)	<b>\$3,719.83</b>	\$510.36	\$354.50	\$2,379.95	\$475.02
<b>Total GDP</b> (million)	<b>\$3,813.67</b>	\$590.24	\$320.62	\$2,482.25	\$420.56
<b>Total Labour Income</b> (million)	<b>\$2,518.62</b>	\$367.90	\$190.52	\$1,688.66	\$271.54
<b>Total Employment</b> (000s)	<b>45.11</b>	6.37	3.67	29.89	5.17
<b>Total Government Revenues</b> (million)	<b>\$1,037.44</b>	\$156.31	\$84.71	\$684.65	\$111.77

Sources: The Conference Board of Canada; Statistics Canada

Montreal's economy is healthy and on track to expand by 2.9 per cent in 2018. Although this pace of growth is somewhat slower than 2017, it is nonetheless strong in the context of tighter mortgage rules, higher interest rates and the international trade uncertainty that the Canadian economy is grappling with. Looking forward, issues like the aging population and still-elevated levels of consumer debt will lead to a slowdown in consumer spending, lowering growth expectations to just 1.8 per cent in 2019 and 1.7 per cent in 2020.

The outlook is solid for the next several years, but the pipeline for major office projects is less impressive than what is currently online in Toronto. Average Class A rents in the city have trended lower in the past three years, which softens the incentive to develop large-scale projects that haven't secured an anchor tenant. One major project that is coming forth, however, is the National Bank of Canada's new headquarters, a \$500 million project scheduled for completion in 2022. This will be the largest office tower built in Montreal in more than a quarter-century. The relocation of National Bank's main operations will also free up 500,000 square feet at the firm's previous location.

Montreal's industrial segment has a somewhat more upbeat outlook during the next several years. Vacancy rates have trended steadily lower in the past 12 to 18 months and now stand at 16-year lows. Rents have increased despite the addition of more than 200,000 square feet of industrial space in 2018, and there is another 1.5 million square feet currently under construction (CBRE (c), 2018). A large share of this is represented by Stuctube's new 650,000-square-foot distribution centre under construction in Laval, with a projected cost of \$80 million.

## Vancouver

The national impact of commercial real estate investment in Vancouver is shown in Table 12. In 2017, total investment in the city reached \$2.9 billion, which supported \$3.1 billion in GDP, 30,785 jobs and \$710 million in revenues for the federal and different provincial governments. Thus, for every \$1 million invested in the city, Canada benefits from \$1.05 million in GDP and 10.4 jobs. There is also \$240,836 in revenue that accrues to the federal and provincial governments in Canada for every \$1 million invested in Vancouver's commercial real estate market.

This study estimates that 68.1 per cent of the GDP benefits and 66.5 per cent of the employment across the country will actually occur in Vancouver after accounting for both the direct impact and the related spinoff effects. This is slightly lower than the share of activity that is estimated to accrue to Montreal, but on par with Toronto. In 2017, the total benefit to Vancouver's economy amounted to \$2.1 billion in GDP and \$1.3 billion in wages and salaries, paid to 20,466 workers.

Table 12  
Vancouver's Commercial Real Estate Economic Impact

Vancouver	Total Impact	Breakdown by Type of Cost			
		Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
Investment (million)	\$2,946.43	\$404.25	\$280.80	\$1,885.13	\$376.26
Total GDP (million)	\$3,081.54	\$490.53	\$277.24	\$1,946.88	\$366.89
Total Labour Income (million)	\$1,852.62	\$296.96	\$150.86	\$1,189.77	\$215.04
Total Employment (000s)	30.79	4.87	2.50	19.27	4.14
Total Government Revenues (million)	\$709.61	\$104.61	\$59.98	\$466.87	\$78.14

Sources: The Conference Board of Canada; Statistics Canada

Few municipal economies have performed as well as Vancouver's in recent years. Last year, economic activity expanded by an exceptional 4.5 per cent, which was the highest rate in 12 years. The economy's expansion will slow from this pace, in line with most regions in the country, and current expected gains may ease to 2.6 per cent this year and 2.4 per cent in 2019. A key factor in Vancouver's more modest outlook is the region's housing

market, which has been cooling since 2016. Although the resale market rallied last year, activity is slowing once again, as high housing prices, rising interest rates, tougher mortgage rules and new provincial housing taxes are dissuading buyers. As a result, activity in the housing market, which has supported above-average growth in recent years, will be the key factor behind the economy's deceleration over the next 12 to 18 months.

Despite the slowdown on the residential front, the sky remains bright for commercial real estate, particularly in Vancouver's industrial segment. Between early 2015 and the third quarter of 2018, the city's industrial availability rate fell from just under 6 per cent to 2.3 per cent (CBRE (c), 2018), suggesting that more than 60 per cent of the vacant space in the city has been absorbed. This leaves Vancouver with the second-lowest industrial vacancy rate in North America, just behind Toronto. Although more than 2.3 million square feet of new supply was added in the first three quarters of 2018 alone, net absorption has outpaced new supply in seven of the past eight quarters. As a result, average rent for industrial space in the city has risen from \$9 per square foot in early 2017 to \$11.59 per square foot midway through 2018 — an increase of nearly 30 per cent in 18 months. Nevertheless, Vancouver remains a relatively affordable city for industrial spaces compared to its global peers, with asking rents similar to Seattle's. For this reason, along with Vancouver's role as a Canadian hub of international trade activity, the city will remain an attractive investment location.

Because Vancouver houses the country's largest tidewater port, it is a focal point of international commerce, and the city's importance in this regard is expected to increase as Canadian trade continues to diversify away from its dependence on the U.S. and toward other high-growth regions of the world. As a result, firms operating in e-commerce, distribution, logistics and transportation are a driving force behind the 4.7 million square feet of industrial space currently under construction in the city. This includes Delta iPort's \$130-million logistics facility in Tsawwassen. This project, which will have Amazon as an anchor tenant, is scheduled for completion in 2020 and will add 1 million square feet of leasable distribution space to the region. Purchasing activity also indicates that the future pipeline will remain full. Last year, 23 land sites of 5 acres or more were purchased in the city, with total value equaling \$345 million. This means there is a long list of new industrial projects expected to come forth over the next several years (CBRE (d), 2018).

Vancouver's office market is also expected to stay strong. Absorption rates have easily outpaced new supply in each of the past eight quarters, pushing vacancy rates down significantly and boosting average rent costs. The city's downtown vacancy rate is now below 5 per cent, making Vancouver one of the tightest office markets in North America. Strong demand and higher rents are in turn leading to more development, with close to 2 million square feet of office or commercial space under construction (CBRE (c), 2018).

As with Toronto, the pace of activity has reached the point where projects move forward on speculative terms, including the launch of Vancouver Centre II, a 33-storey office tower, last year. Also like Toronto, a significantly outsized share of new space is being driven by tech firms, which account for half of all tenants currently searching for office space in the city (CBRE, 2017). In line with the strong outlook for economic activity in the region, office supply is expected to surge nearly 20 per cent, or 4.3 million square feet, by the end of 2022 (Avison Young (a), 2018).

## Edmonton

In 2017, commercial real estate investment in Edmonton totalled \$2.8 billion (Table 13). The total economic activity associated with this spending across Canada amounted to \$2.8 billion in GDP and 23,555 jobs that are paid \$1.7 billion in wages and salaries. There were also \$590 million in revenues for the federal and provincial governments supported by commercial real estate investment in the city. This implies that for every \$1 million spent on commercial real estate, there is \$1.02 million in GDP and 8.5 jobs created in the Canadian economy. Each \$1 million in spending also supports \$212,667 in government revenues to the federal and provincial governments.

Edmonton is considerably smaller than Toronto, Vancouver and Montreal. As such, commercial real estate investment there represents a smaller share of activity in the Canadian economy than elsewhere. Nevertheless, commercial real estate investment in the city still supported \$1.4 billion in GDP and 10,623 jobs in 2017, and these workers were paid \$841 million in wages and salaries. This amounts to 51 per cent of the total impact in terms of GDP and 45 per cent of the total impact on employment.

Table 13  
Edmonton's Commercial Real Estate Economic Impact

Edmonton	Total Impact	Breakdown by Type of Cost			
		Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
Investment (million)	\$2,772.94	\$380.45	\$264.26	\$1,774.13	\$354.10
Total GDP (million)	\$2,836.53	\$446.54	\$269.46	\$1,782.43	\$338.10
Total Labour Income (million)	\$1,682.78	\$277.11	\$133.60	\$1,070.10	\$201.98
Total Employment (000s)	23.55	3.79	1.80	14.31	3.65
Total Government Revenues (million)	\$589.71	\$88.04	\$51.96	\$385.26	\$64.45

Sources: The Conference Board of Canada; Statistics Canada

Although it held up fairly well in 2017, Edmonton's economy continues to cope with the massive, province-wide fallout from the extended period of low petroleum prices that have significantly dampened the prospects for oil producers. This is a key reason why real GDP growth is forecasted to moderate from its 3.1 per cent expansion in 2017 to just 2.3 per cent in 2018 and 2019. Not until late 2019 will the municipal region regain all the value lost when its economy contracted by a cumulative 7.3 per cent in 2015 and 2016.

The outlook for commercial real estate in Edmonton is somewhat murkier than elsewhere in the country. Its population and economic growth is stronger than the national average, but it is also the provincial capital; as such, an outsized share of its investment is public or institutional. Furthermore, the generalized weakness in the provincial economy during the past several years has driven vacancy rates up to 15.7 per cent in the downtown core. Unsurprisingly, average asking rent has been steadily falling since early in 2017 (CBRE (c), 2018). The revitalization of Edmonton's core, including the \$2.5 billion mixed-used ICE District development still under construction, provides a relatively high floor. But significant investments in new commercial activity in the near term will hinge heavily on how quickly the economy can shake off the negative impacts of low oil prices.

## Calgary

Total commercial real estate investment in Calgary reached \$2.7 billion in 2017 (Table 14). This spending sustained a total of \$2.8 billion in GDP and 23,101 jobs, which are paid \$1.7 billion in wages and salaries. It is further estimated that this economic activity supports a total of \$578 million in revenues to the federal and provincial governments around the country. The relative impacts of commercial real estate investment in Calgary are similar to those in Edmonton: every \$1 million in investment results in \$1.03 million in GDP, 8.5 jobs and \$212,667 in tax collections.

Approximately 54.5 per cent of the national impact on GDP and 46.3 per cent of the national impact on employment will accrue to Calgary's municipal economy. This amounts to \$1.5 billion in GDP and 10,586 jobs paid \$1.7 billion in wages and salaries directly in the city.

Table 14  
**Calgary's Commercial Real Estate Economic Impact**

Calgary	<u>Total Impact</u>	Breakdown by Type of Cost			
		Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
<b>Investment</b> (million)	<b>\$2,719.57</b>	\$373.13	\$259.17	\$1,739.98	\$347.29
<b>Total GDP</b> (million)	<b>\$2,781.93</b>	\$437.95	\$264.27	\$1,748.12	\$331.59
<b>Total Labour Income</b> (million)	<b>\$1,650.39</b>	\$271.77	\$131.03	\$1,049.50	\$198.09
<b>Total Employment</b> (000s)	<b>23.10</b>	3.72	1.77	14.04	3.58
<b>Total Government Revenues</b> (million)	<b>\$578.36</b>	\$86.35	\$50.96	\$377.85	\$63.21

Sources: The Conference Board of Canada; Statistics Canada

The key macroeconomic trends affecting Calgary's economy are similar to those in Edmonton. The city produced blistering growth of 4.9 per cent in 2017, but this was on the heels of dramatic contractions in both 2015 and 2016. Sustained weakness in petroleum prices negatively impacted not only oil producers but also manufacturers and suppliers, while consumer-oriented industries suffered from weak labour markets. Arguably, the fallout from the contraction in oil prices is even more severe in Calgary than Edmonton, which has a higher share of private-sector activity to support it. Most of the head offices for the country's major oil and natural gas producers are located in Calgary, and higher oil prices earlier in the decade spurred commercial investment to support the sector's expansion needs at that time. Unfortunately, just as this new space was coming available, oil prices crashed, resulting in much weaker-than-anticipated absorption rates. Consequently, in the fall of 2018, office vacancy rates in the city have soared to 21.2 per cent — up from less than 9 per cent in 2014. And during that period, average asking rent has fallen by more than 30 per cent from \$24 per square foot to \$16.28 per square foot (CBRE (c), 2018).

Calgary's industrial market has performed somewhat better, with seven consecutive quarters of positive net absorption, and prices are higher on average compared to the same time last year. But the outlook for the city's commercial real estate sector is, like Edmonton's, highly uncertain at this time. Oil producers are experiencing foregone revenues that amount to billions of dollars a year at current prices. Business confidence is low, which makes firms more cost-conscious and less likely to hire and expand. In turn, this puts downward pressure on new commercial real estate investment.

Some relief is expected in the third quarter of 2019 as new pipeline space becomes available, but this is only a temporary measure, and it will not solve the longer-term difficulties local companies face in getting their product to market. Economic growth will remain positive, but modest, until this situation is resolved. After the 4.9 per cent expansion this year, Calgary is forecast to see gains of 2.5 per cent in 2019 and 2.4 per cent in 2020.

### Ottawa-Gatineau

Commercial real estate investment in Ottawa-Gatineau totalled \$1.4 billion in 2017, and the resulting economic impact on the Canadian economy is shown in Table 15. In aggregate, this spending supported approximately \$1.5 billion in GDP and 16,132 jobs, and these workers were paid a total of \$979 million in wages and salaries. There is also an estimated \$379 million in revenues that accrue to different levels of government in Canada as a result of the economic activity sustained by commercial real estate investment in the city. In relative terms, for every \$1 million in commercial real estate spending in Ottawa-Gatineau, the Canadian economy benefits from \$1.03 million in GDP and 10.9 jobs. In turn, it also supports \$256,526 in government revenues.

Ottawa-Gatineau has the smallest economy among the six cities considered in this report. As a result, a relatively lower share of economic activity supported by commercial real estate in the city actually remains within the municipal economy. Just 47 per cent of both the national GDP and employment effects are estimated to occur within the city, which is the lowest municipal share in this report. Nevertheless, it still amounted to \$721 million in GDP and 7,660 workers who were paid more than \$630 million in wages and salaries.

Table 15  
Ottawa-Gatineau's Commercial Real Estate Economic Impact

		Breakdown by Type of Cost			
Ottawa	<u>Total Impact</u>	Soft Costs	Site & Infrastructure Costs	Construction Costs	Interior Buildout and Tenant Improvement Costs
<b>Investment</b> (million)	<b>\$1,476.30</b>	\$202.55	\$140.69	\$944.54	\$188.52
<b>Total GDP</b> (million)	<b>\$1,525.02</b>	\$239.06	\$135.55	\$977.11	\$173.30
<b>Total Labour Income</b> (million)	<b>\$978.72</b>	\$151.99	\$76.70	\$645.18	\$104.86
<b>Total Employment</b> (000s)	<b>16.13</b>	2.44	1.21	10.41	2.07
<b>Total Government Revenues</b> (million)	<b>\$378.71</b>	\$53.44	\$31.18	\$257.22	\$36.86

Sources: The Conference Board of Canada; Statistics Canada

Ottawa-Gatineau's economy expanded by 2.7 per cent in 2017, the highest rate in 10 years. As with the other major jurisdictions in this report, however, economic activity will moderate during the next two years. This study forecasts a gain of 2.0 per cent in 2018, followed by 1.8 per cent in 2019. The housing market has cooled, but not to the same extent as in other major jurisdictions across the country. Population growth remains solid, and non-residential construction activity continues on an upward trajectory.

Several major infrastructure initiatives that are currently underway are boosting commercial real estate activity in Ottawa-Gatineau. One of the highest-profile projects is the O-Train light-rail transit system. The project's \$2.1 billion first stage, the 12.5-kilometre Confederation Line, is scheduled to enter service in early 2019. The \$3.6 billion Stage 2, scheduled to start in late 2019, will add 38 kilometres of rail to both the Confederation and Trillium lines. At the same time, Gatineau plans to build its own 26-kilometre, \$2.1 billion light-rail line, which would include two bridge connections with Ottawa-Gatineau's light-rail system. The city hopes to have its system up and running by 2028. Commercial real estate activity along this new public transportation infrastructure is picking up to leverage the increased traffic. The development of 900 Albert Street is a good example of this dynamic. The property is located near the newly renovated Bayview station, which is where the Confederation LRT line and the Trillium Line meet. The project consists of three 50-storey towers, including 187,000 square feet of office space and 116,000 square feet of retail space.

After trending down throughout 2016 and 2017, average asking rent in the city is now increasing (CBRE (c), 2018). However, the office market in Canada's capital is somewhat less vibrant than its counterparts in this report, with no new supply added to the market so far this year and very few additional square feet currently under construction.

By contrast, as in other large cities, the industrial segment in Ottawa-Gatineau is also reaping the benefits from robust demand for distribution and logistics space. Industrial availability rates reached a record low of 3.4 per cent in the third quarter of 2018 after declining steadily during the past two years (CBRE (c), 2018). This summer, Broccolini announced it would be building a 1 million-square-foot distribution centre for Amazon (Kovessy, 2018). Located south of the city on a 96-acre parcel of land, it will be the largest distribution facility in the region.

## Conclusion

In 2017, \$38.6 billion was invested in commercial real estate assets in Canada. This generated slightly more than \$40 billion in GDP and employed nearly 420,000 people when accounting for the direct, indirect and induced effects tied to this economic activity. This report estimates that this lift to the economy also helped support \$10.1 billion in provincial and federal government revenues across the country.

The main purpose of this report was to look beyond the impact of national commercial real estate investment to examine the economic activity in Canada's six largest cities: Toronto, Montreal, Vancouver, Calgary, Edmonton and Ottawa-Gatineau. Combined, commercial real estate investment in these jurisdictions amounted to \$22 billion in 2017, or 57 per cent of the Canadian total. Toronto, which alone accounts for 22 per cent of all commercial real estate investment in the country, easily has the largest impact. The city secures \$8.7 billion in GDP and 91,900 jobs thanks to the sector. Montreal has the second-largest impact, equivalent to \$3.8 billion in GDP and 45,112 jobs, followed by Vancouver (\$3.1 billion in GDP and 30,800 jobs), Edmonton (\$2.8 billion in GDP and 23,555 jobs), Calgary (\$2.7 billion in GDP and 23,101 jobs), and Ottawa-Gatineau (\$1.5 billion in GDP and 16,132 jobs).

Based on its forecast for the Canadian and regional economies, The Conference Board expects that commercial real estate will remain a key driver of economic growth during the next several years. However, the expansion will be slower than in the post-recession period, and performance will vary depending on location. High levels of consumer debt, combined with the prospect of rising interest rates in the near term, will weigh negatively on the outlook for consumer spending across the country. But these trends will have an outsized impact on municipal economies like Toronto and Vancouver, where the housing market has fueled considerable growth in recent years. Meanwhile, resource-dependent regions — Calgary and Edmonton — are still grappling with low oil prices, which have caused significant damage to labour markets, as well as to consumer and business confidence. Although oil prices are expected to regain some strength late in 2019, it will take some time before these economies rebound from the contraction in activity they have experienced since 2014.

However, despite the slowing outlook, the six cities covered in this report are expected to continue to outpace the national economy. They all benefit from stronger-than-average population growth and are the economic engines of their respective provincial economies. They are innovation hubs that account for the bulk of new firm creation in Canada, and they are also the locations of most head office activity, which is a key driver of the international trade that is crucial to the performance of the Canadian economy. Thus, even though growth is forecast to slow during the next two to three years, the underlying fundamentals for commercial real estate development remain robust and will continue to be a key driver of economic activity for Canada going forward.

## Appendix I: Economic Impact Methodology

This analysis relies on The Conference Board of Canada's models that employ an input-output (I-O) framework to determine the economic impacts that would result from the different types of commercial real estate costs specified in this report. At their core, I-O frameworks are a system of linear equations that fully reconcile total supply (whether domestically produced or imported) of every commodity in the Canadian economy with total use of those commodities by firms and individuals. The Conference Board forecasting and modeling tools, based on this I-O framework, are designed to capture the interdependence of industries at both the national level of aggregation and for the individual provinces and territories, which reflects the extensive interprovincial flow of goods and services within the country. Municipal-level estimates are produced using the Conference Board's satellite CMA economic impact tool, which uses census and labour force data to determine to what extent the demand created in a given jurisdiction can be supplied from within that same jurisdiction.

I-O models are often used to conduct impact and footprint analysis as they measure how changes in industry output or final demand for commodities impact the economy in terms of value-added (GDP), employment and labour income. The resulting outputs can also be used to estimate the impact on government revenues. Thus, the results of the analysis can appeal to a wide range of stakeholders and decision-makers.

Two main sources of information were used to conduct the impact analysis in this report. The first was aggregate commercial real estate investment, by asset class, for Canada, the four provinces and the six cities outlined above, which comes from Statistics Canada and is noted in this report's references. This information was supplemented with information obtained by NAIOP's Canadian member survey, which provided a distribution in terms of specific project costs that could be applied to the aggregated information collected from Statistics Canada.

The result of combining these two sources of information is an overview of the aggregate commercial real estate that occurs in a given jurisdiction, as well as a more detailed outlook on how exactly those funds are dispersed in the economy. For example, based on the information obtained through NAIOP's survey, soft construction costs were estimated to account for 14 per cent of total commercial real estate spending. (This consists specifically of activities like engineering, design, financing and other pre-construction costs.) The footprint these activities make on the economy can be quite different than other construction-related activities, which have a completely different mix of activities, products and services. By estimating these impacts separately, the results provide a more complete assessment of the economic activity that is generated by each phase of the project. The final step is to aggregate the impact for each phase to determine the total impact of all commercial real estate spending within a jurisdiction.

## Appendix II: Additional Data Tables

Table A1: Detailed Impact Results, Toronto

Toronto		Initial Investment (million)	Total GDP (million)	Direct GDP	Indirect GDP	Induced GDP
<b>Total Impact</b>	Toronto	\$8,413.67	\$5,969.23	\$3,894.30	\$1,144.98	\$929.95
	Outside City	N/A	\$2,722.12	\$396.83	\$1,244.57	\$1,080.72
	<b>Total</b>	\$8,413.67	\$8,691.35	\$4,291.13	\$2,389.55	\$2,010.67
<b>Construction Costs</b>	Toronto	\$5,383.07	\$4,092.06	\$2,741.55	\$741.33	\$609.18
	Outside City	N/A	\$1,476.64	\$0.00	\$772.77	\$703.88
	<b>Total</b>	\$5,383.07	\$5,568.71	\$2,741.55	\$1,514.10	\$1,313.06
<b>Soft Costs</b>	Toronto	\$1,154.36	\$911.09	\$614.36	\$148.75	\$147.98
	Outside City	N/A	\$451.36	\$143.39	\$139.83	\$168.14
	<b>Total</b>	\$1,154.36	\$1,362.46	\$757.75	\$288.59	\$316.12
<b>Interior Buildout and Tenant Improvement Costs</b>	Toronto	\$1,074.43	\$498.57	\$265.59	\$130.63	\$102.34
	Outside City	N/A	\$489.10	\$189.60	\$177.72	\$121.78
	<b>Total</b>	\$1,074.43	\$987.67	\$455.19	\$308.35	\$224.12
<b>Site &amp; Infrastructure Costs</b>	Toronto	\$801.82	\$467.50	\$272.80	\$124.26	\$70.45
	Outside City	N/A	\$305.02	\$63.84	\$154.25	\$86.93
	<b>Total</b>	\$801.82	\$772.52	\$336.63	\$278.51	\$157.37

Toronto		Initial Investment (million)	Total Employment	Direct Employment	Indirect Employment	Induced Employment
<b>Total Impact</b>	Toronto	\$8,413.67	58,880	41,808	10,741	6,331
	Outside City	N/A	33,056	4,577	14,400	14,079
	<b>Total</b>	\$8,413.67	91,936	46,385	25,141	20,410
<b>Construction Costs</b>	Toronto	\$5,383.07	40,701	29,337	7,217	4,147
	Outside City	N/A	18,646	0	9,459	9,187
	<b>Total</b>	\$5,383.07	59,347	29,337	16,676	13,334
<b>Soft Costs</b>	Toronto	\$1,154.36	8,817	6,420	1,390	1,007
	Outside City	N/A	5,099	1,157	1,742	2,201
	<b>Total</b>	\$1,154.36	13,916	7,576	3,132	3,208
<b>Interior Buildout and Tenant Improvement Costs</b>	Toronto	\$1,074.43	5,414	3,603	1,114	697
	Outside City	N/A	6,362	2,978	1,807	1,577
	<b>Total</b>	\$1,074.43	11,776	6,580	2,921	2,274
<b>Site &amp; Infrastructure Costs</b>	Toronto	\$801.82	3,948	2,448	1,020	480
	Outside City	N/A	2,949	443	1,392	1,115
	<b>Total</b>	\$801.82	6,897	2,891	2,412	1,594

Toronto		Initial Investment (million)	Total Labour Income (million)	Direct Labour Income	Indirect Labour Income	Induced Labour Income
<b>Total Impact</b>	Toronto	\$8,413.67	\$3,839.27	\$2,772.01	\$716.96	\$350.30
	Outside City	N/A	\$1,738.64	\$361.69	\$781.65	\$595.29
	<b>Total</b>	\$8,413.67	\$5,577.91	\$3,133.70	\$1,498.61	\$945.59
<b>Construction Costs</b>	Toronto	\$5,383.07	\$2,772.04	\$2,069.47	\$477.78	\$224.79
	Outside City	N/A	\$904.95	\$0.00	\$512.12	\$392.83
	<b>Total</b>	\$5,383.07	\$3,676.99	\$2,069.47	\$989.90	\$617.62
<b>Soft Costs</b>	Toronto	\$1,154.36	\$523.33	\$379.53	\$89.49	\$54.31
	Outside City	N/A	\$342.86	\$158.95	\$89.55	\$94.36
	<b>Total</b>	\$1,154.36	\$866.19	\$538.48	\$179.04	\$148.67
<b>Interior Buildout and Tenant Improvement Costs</b>	Toronto	\$1,074.43	\$298.34	\$175.65	\$77.53	\$45.16
	Outside City	N/A	\$299.28	\$140.87	\$98.21	\$60.20
	<b>Total</b>	\$1,074.43	\$597.62	\$316.52	\$175.74	\$105.36
<b>Site &amp; Infrastructure Costs</b>	Toronto	\$801.82	\$245.56	\$147.37	\$72.16	\$26.03
	Outside City	N/A	\$191.55	\$61.87	\$81.78	\$47.90
	<b>Total</b>	\$801.82	\$437.11	\$209.24	\$153.93	\$73.94

Source: The Conference Board of Canada; Statistics Canada

Table A2  
**Detailed Government Revenues, Toronto**

<b>Total Impact on Federal and Provincial Government Revenues (million)</b>			
	<b>In ON</b>	<b>Other Canada</b>	<b>Total</b>
<b>Total Personal Income Taxes</b>	<b>\$995.03</b>	<b>\$56.86</b>	<b>\$1,051.89</b>
Provincial PIT	\$343.72	\$36.48	\$380.20
Federal PIT	\$651.31	\$20.38	\$671.69
<b>Total Corporate Income Taxes</b>	<b>\$379.85</b>	<b>\$47.94</b>	<b>\$427.80</b>
Provincial CIT	\$181.66	\$18.92	\$200.57
Federal CIT	\$198.20	\$29.03	\$227.22
<b>Indirect Taxes</b>	<b>\$635.43</b>	<b>\$43.21</b>	<b>\$678.64</b>
Taxes on Products	\$81.80	\$11.70	\$93.50
Taxes on Production	\$553.63	\$31.51	\$585.14
<b>Total Tax Revenues</b>	<b>\$2,010.31</b>	<b>\$148.02</b>	<b>\$2,158.33</b>

Source: The Conference Board of Canada, Ontario public accounts and budgetary data

Table A3  
**Key Indicators, Toronto**

**Downtown Office Market**

Class A Vacancy Rate	2.2%
Average Class A Net Rent (\$/sq. ft.)	\$32.91

**Suburban Office Market**

Class A Vacancy Rate	13.9%
Average Class A Net Rent (\$/sq. ft.)	\$17.64

**Industrial Market**

Overall Availability Rate	1.6%
Average Net Rent (\$/sq. ft.)	\$6.68

Source: CBRE

Table A4: Detailed Impact Results, Montreal

Montreal		Initial Investment (million)	Total GDP (million)	Direct GDP	Indirect GDP	Induced GDP
<b>Total Impact</b>	Montreal	\$3,719.83	\$2,649.11	\$1,608.89	\$641.26	\$398.95
	Outside City	N/A	\$1,164.56	\$92.54	\$606.42	\$465.60
	<b>Total</b>	\$3,719.83	\$3,813.67	\$1,701.43	\$1,247.68	\$864.55
<b>Construction Costs</b>	Montreal	\$2,379.95	\$1,738.84	\$1,035.12	\$438.60	\$265.13
	Outside City	N/A	\$743.41	\$0.00	\$423.70	\$319.71
	<b>Total</b>	\$2,379.95	\$2,482.25	\$1,035.12	\$862.30	\$584.84
<b>Soft Costs</b>	Montreal	\$510.36	\$425.25	\$296.64	\$70.58	\$58.03
	Outside City	N/A	\$164.99	\$40.25	\$59.03	\$65.71
	<b>Total</b>	\$510.36	\$590.24	\$336.89	\$129.61	\$123.73
<b>Interior Buildout and Tenant Improvement Costs</b>	Montreal	\$475.02	\$262.35	\$153.66	\$66.71	\$41.98
	Outside City	N/A	\$158.20	\$35.47	\$71.73	\$51.00
	<b>Total</b>	\$475.02	\$420.56	\$189.14	\$138.44	\$92.98
<b>Site &amp; Infrastructure Costs</b>	Montreal	\$354.50	\$222.66	\$123.47	\$65.37	\$33.82
	Outside City	N/A	\$97.96	\$16.81	\$51.96	\$29.19
	<b>Total</b>	\$354.50	\$320.62	\$140.28	\$117.33	\$63.00
Montreal		Initial Investment (million)	Total Employment	Direct Employment	Indirect Employment	Induced Employment
<b>Total Impact</b>	Montreal	\$3,719.83	31,284	20,189	7,302	3,793
	Outside City	N/A	13,829	1,025	6,817	5,987
	<b>Total</b>	\$3,719.83	45,112	21,214	14,119	9,779
<b>Construction Costs</b>	Montreal	\$2,379.95	20,926	13,407	5,034	2,485
	Outside City	N/A	8,965	0	4,837	4,128
	<b>Total</b>	\$2,379.95	29,891	13,407	9,871	6,613
<b>Soft Costs</b>	Montreal	\$510.36	4,458	3,077	837	544
	Outside City	N/A	1,916	334	720	861
	<b>Total</b>	\$510.36	6,373	3,411	1,557	1,405
<b>Interior Buildout and Tenant Improvement Costs</b>	Montreal	\$475.02	3,239	2,128	717	394
	Outside City	N/A	1,935	519	759	657
	<b>Total</b>	\$475.02	5,174	2,647	1,476	1,051
<b>Site &amp; Infrastructure Costs</b>	Montreal	\$354.50	2,661	1,577	714	370
	Outside City	N/A	1,013	172	501	340
	<b>Total</b>	\$354.50	3,674	1,748	1,215	710
Montreal		Initial Investment (million)	Total Labour Income (million)	Direct Labour Income	Indirect Labour Income	Induced Labour Income
<b>Total Impact</b>	Montreal	\$3,719.83	\$1,771.49	\$1,200.85	\$397.58	\$173.07
	Outside City	N/A	\$747.13	\$106.77	\$393.41	\$246.95
	<b>Total</b>	\$3,719.83	\$2,518.62	\$1,307.62	\$790.98	\$420.02
<b>Construction Costs</b>	Montreal	\$2,379.95	\$1,223.38	\$844.01	\$272.28	\$107.08
	Outside City	N/A	\$465.28	\$0.00	\$288.29	\$176.99
	<b>Total</b>	\$2,379.95	\$1,688.66	\$844.01	\$560.57	\$284.08
<b>Soft Costs</b>	Montreal	\$510.36	\$265.75	\$184.41	\$48.14	\$33.20
	Outside City	N/A	\$102.15	\$43.25	\$31.89	\$27.01
	<b>Total</b>	\$510.36	\$367.90	\$227.66	\$80.03	\$60.21
<b>Interior Buildout and Tenant Improvement Costs</b>	Montreal	\$475.02	\$153.62	\$97.97	\$38.69	\$16.96
	Outside City	N/A	\$117.92	\$46.00	\$43.71	\$28.20
	<b>Total</b>	\$475.02	\$271.54	\$143.98	\$82.40	\$45.16
<b>Site &amp; Infrastructure Costs</b>	Montreal	\$354.50	\$128.75	\$74.46	\$38.47	\$15.82
	Outside City	N/A	\$61.77	\$17.52	\$29.51	\$14.75
	<b>Total</b>	\$354.50	\$190.52	\$91.97	\$67.98	\$30.57

Source: The Conference Board of Canada; Statistics Canada

Table A5  
**Detailed Government Revenues, Montreal**

<b>Total Impact on Federal and Provincial Government Revenues (million)</b>			
	<b>In QC</b>	<b>Other Canada</b>	<b>Total</b>
<b>Total Personal Income Taxes</b>	<b>\$563.68</b>	<b>\$41.66</b>	<b>\$605.33</b>
Provincial PIT	\$278.16	\$26.73	\$304.88
Federal PIT	\$285.52	\$14.93	\$300.45
<b>Total Corporate Income Taxes</b>	<b>\$158.28</b>	<b>\$29.36</b>	<b>\$187.64</b>
Provincial CIT	\$76.99	\$11.58	\$88.58
Federal CIT	\$81.29	\$17.77	\$99.06
<b>Indirect Taxes</b>	<b>\$214.88</b>	<b>\$29.60</b>	<b>\$244.47</b>
Taxes on Products	\$35.99	\$8.60	\$44.59
Taxes on Production	\$178.89	\$21.00	\$199.89
<b>Total Tax Revenues</b>	<b>\$936.83</b>	<b>\$100.61</b>	<b>\$1,037.44</b>

*Source: The Conference Board of Canada, Quebec public accounts and budgetary data*

Table A6  
**Key Indicators, Montreal**

**Downtown Office Market**

Class A Vacancy Rate	8.3%
Average Class A Net Rent (\$/sq. ft.)	\$22.10

**Suburban Office Market**

Class A Vacancy Rate	17.6%
Average Class A Net Rent (\$/sq. ft.)	\$15.06

**Industrial Market**

Overall Availability Rate	5.3%
Average Net Rent (\$/sq. ft.)	\$5.71

*Source: CBRE*

Table A7: Detailed Impact Results, Vancouver

Vancouver		Initial Investment (million)	Total GDP (million)	Direct GDP	Indirect GDP	Induced GDP
<b>Total Impact</b>	Vancouver	\$2,946.43	\$2,099.77	\$1,307.54	\$442.00	\$350.23
	Outside City	N/A	\$981.77	\$66.84	\$499.14	\$415.79
	<b>Total</b>	\$2,946.43	\$3,081.54	\$1,374.38	\$941.14	\$766.02
<b>Construction Costs</b>	Vancouver	\$1,885.13	\$1,354.42	\$830.59	\$300.08	\$223.75
	Outside City	N/A	\$592.46	\$0.00	\$325.91	\$266.55
	<b>Total</b>	\$1,885.13	\$1,946.88	\$830.59	\$625.99	\$490.30
<b>Soft Costs</b>	Vancouver	\$404.25	\$351.50	\$245.09	\$46.84	\$59.56
	Outside City	N/A	\$139.04	\$24.76	\$48.61	\$65.66
	<b>Total</b>	\$404.25	\$490.53	\$269.85	\$95.46	\$125.23
<b>Interior Buildout and Tenant Improvement Costs</b>	Vancouver	\$376.26	\$221.66	\$129.90	\$51.27	\$40.49
	Outside City	N/A	\$145.23	\$31.75	\$64.75	\$48.74
	<b>Total</b>	\$376.26	\$366.89	\$161.64	\$116.02	\$89.23
<b>Site &amp; Infrastructure Costs</b>	Vancouver	\$280.80	\$172.20	\$101.97	\$43.81	\$26.43
	Outside City	N/A	\$105.04	\$10.34	\$59.86	\$34.84
	<b>Total</b>	\$280.80	\$277.24	\$112.31	\$103.67	\$61.26
Vancouver		Initial Investment (million)	Total Employment	Direct Employment	Indirect Employment	Induced Employment
<b>Total Impact</b>	Vancouver	\$3,719.83	20,466	12,961	4,816	2,689
	Outside City	N/A	10,319	691	4,995	4,633
	<b>Total</b>	\$3,719.83	30,785	13,652	9,811	7,322
<b>Construction Costs</b>	Vancouver	\$2,379.95	12,927	7,856	3,353	1,718
	Outside City	N/A	6,340	0	3,371	2,969
	<b>Total</b>	\$2,379.95	19,267	7,856	6,724	4,687
<b>Soft Costs</b>	Vancouver	\$510.36	3,392	2,396	539	457
	Outside City	N/A	1,481	210	531	740
	<b>Total</b>	\$510.36	4,873	2,606	1,070	1,197
<b>Interior Buildout and Tenant Improvement Costs</b>	Vancouver	\$475.02	2,586	1,753	522	311
	Outside City	N/A	1,555	396	616	543
	<b>Total</b>	\$475.02	4,140	2,149	1,138	854
<b>Site &amp; Infrastructure Costs</b>	Vancouver	\$354.50	1,562	957	402	203
	Outside City	N/A	943	84	477	382
	<b>Total</b>	\$354.50	2,505	1,041	879	585
Vancouver		Initial Investment (million)	Total Labour Income (million)	Direct Labour Income	Indirect Labour Income	Induced Labour Income
<b>Total Impact</b>	Vancouver	\$3,719.83	\$1,265.23	\$868.37	\$276.13	\$120.72
	Outside City	N/A	\$587.39	\$67.68	\$308.00	\$211.71
	<b>Total</b>	\$3,719.83	\$1,852.62	\$936.05	\$584.14	\$332.44
<b>Construction Costs</b>	Vancouver	\$2,379.95	\$845.58	\$574.93	\$193.50	\$77.14
	Outside City	N/A	\$344.19	\$0.00	\$208.52	\$135.67
	<b>Total</b>	\$2,379.95	\$1,189.77	\$574.93	\$402.02	\$212.82
<b>Soft Costs</b>	Vancouver	\$510.36	\$204.27	\$156.19	\$27.58	\$20.50
	Outside City	N/A	\$92.69	\$29.02	\$29.97	\$33.70
	<b>Total</b>	\$510.36	\$296.96	\$185.21	\$57.55	\$54.20
<b>Interior Buildout and Tenant Improvement Costs</b>	Vancouver	\$475.02	\$124.59	\$79.63	\$31.00	\$13.96
	Outside City	N/A	\$90.45	\$27.92	\$37.74	\$24.79
	<b>Total</b>	\$475.02	\$215.04	\$107.56	\$68.73	\$38.75
<b>Site &amp; Infrastructure Costs</b>	Vancouver	\$354.50	\$90.79	\$57.62	\$24.06	\$9.12
	Outside City	N/A	\$60.06	\$10.73	\$31.78	\$17.55
	<b>Total</b>	\$354.50	\$150.86	\$68.35	\$55.84	\$26.67

Source: The Conference Board of Canada; Statistics Canada

Table A8  
**Detailed Government Revenues, Vancouver**

<b>Total Impact on Federal and Provincial Government Revenues (million)</b>			
	<b>In BC</b>	<b>Other Canada</b>	<b>Total</b>
<b>Total Personal Income Taxes</b>	<b>\$296.36</b>	<b>\$39.73</b>	<b>\$336.09</b>
Provincial PIT	\$97.87	\$25.49	\$123.36
Federal PIT	\$198.49	\$14.24	\$212.73
<b>Total Corporate Income Taxes</b>	<b>\$136.55</b>	<b>\$29.81</b>	<b>\$166.36</b>
Provincial CIT	\$59.25	\$11.76	\$71.01
Federal CIT	\$77.30	\$18.05	\$95.35
<b>Indirect Taxes</b>	<b>\$178.37</b>	<b>\$28.79</b>	<b>\$207.16</b>
Taxes on Products	\$81.64	\$7.72	\$89.36
Taxes on Production	\$96.73	\$21.07	\$117.80
<b>Total Tax Revenues</b>	<b>\$611.27</b>	<b>\$98.33</b>	<b>\$709.61</b>

Source: The Conference Board of Canada, B.C. public accounts and budgetary data

Table A9  
**Key Indicators, Vancouver**

**Downtown Office Market**

Class A Vacancy Rate	4.8%
Average Class A Net Rent (\$/sq. ft.)	\$34.99

**Suburban Office Market**

Class A Vacancy Rate	8.4%
Average Class A Net Rent (\$/sq. ft.)	\$23.64

**Industrial Market**

Overall Availability Rate	2.3%
Average Net Rent (\$/sq. ft.)	\$11.74

Source: CBRE

Table A10: Detailed Impact Results, Edmonton

Edmonton		Initial Investment (million)	Total GDP (million)	Direct GDP	Indirect GDP	Induced GDP
Total Impact	Edmonton	\$2,772.94	\$1,439.70	\$974.71	\$276.78	\$188.21
	Outside City	N/A	\$1,396.83	\$201.91	\$760.54	\$434.38
	<b>Total</b>	<b>\$2,772.94</b>	<b>\$2,836.53</b>	<b>\$1,176.62</b>	<b>\$1,037.33</b>	<b>\$622.59</b>
Construction Costs	Edmonton	\$1,774.13	\$979.08	\$672.88	\$188.92	\$117.27
	Outside City	N/A	\$803.35	\$0.00	\$524.11	\$279.25
	<b>Total</b>	<b>\$1,774.13</b>	<b>\$1,782.43</b>	<b>\$672.88</b>	<b>\$713.03</b>	<b>\$396.52</b>
Soft Costs	Edmonton	\$380.45	\$199.44	\$135.38	\$30.89	\$33.16
	Outside City	N/A	\$247.11	\$98.72	\$79.02	\$69.36
	<b>Total</b>	<b>\$380.45</b>	<b>\$446.54</b>	<b>\$234.10</b>	<b>\$109.92</b>	<b>\$102.53</b>
Interior Buildout and Tenant Improvement Costs	Edmonton	\$354.10	\$150.00	\$97.71	\$29.21	\$23.08
	Outside City	N/A	\$188.10	\$52.89	\$83.98	\$51.22
	<b>Total</b>	<b>\$354.10</b>	<b>\$338.10</b>	<b>\$150.60</b>	<b>\$113.19</b>	<b>\$74.30</b>
Site & Infrastructure Costs	Edmonton	\$264.26	\$111.19	\$68.73	\$27.76	\$14.70
	Outside City	N/A	\$158.27	\$50.29	\$73.43	\$34.55
	<b>Total</b>	<b>\$264.26</b>	<b>\$269.46</b>	<b>\$119.03</b>	<b>\$101.18</b>	<b>\$49.25</b>
Edmonton		Initial Investment (million)	Total Employment	Direct Employment	Indirect Employment	Induced Employment
Total Impact	Edmonton	\$2,772.94	10,623	7,278	2,209	1,136
	Outside City	N/A	12,932	1,731	6,801	4,400
	<b>Total</b>	<b>\$2,772.94</b>	<b>23,555</b>	<b>9,008</b>	<b>9,010</b>	<b>5,536</b>
Construction Costs	Edmonton	\$1,774.13	6,636	4,377	1,551	707
	Outside City	N/A	7,679	0	4,851	2,828
	<b>Total</b>	<b>\$1,774.13</b>	<b>14,315</b>	<b>4,377</b>	<b>6,402</b>	<b>3,535</b>
Soft Costs	Edmonton	\$380.45	1,696	1,229	267	201
	Outside City	N/A	2,092	657	731	703
	<b>Total</b>	<b>\$380.45</b>	<b>3,788</b>	<b>1,886</b>	<b>998</b>	<b>904</b>
Interior Buildout and Tenant Improvement Costs	Edmonton	\$354.10	1,606	1,253	213	139
	Outside City	N/A	2,044	849	676	519
	<b>Total</b>	<b>\$354.10</b>	<b>3,650</b>	<b>2,102</b>	<b>890</b>	<b>658</b>
Site & Infrastructure Costs	Edmonton	\$264.26	684	418	177	89
	Outside City	N/A	1,117	225	542	350
	<b>Total</b>	<b>\$264.26</b>	<b>1,801</b>	<b>643</b>	<b>719</b>	<b>438</b>
Edmonton		Initial Investment (million)	Total Labour Income (million)	Direct Labour Income	Indirect Labour Income	Induced Labour Income
Total Impact	Edmonton	\$2,772.94	\$841.19	\$618.17	\$163.74	\$59.28
	Outside City	N/A	\$841.60	\$166.02	\$452.45	\$223.12
	<b>Total</b>	<b>\$2,772.94</b>	<b>\$1,682.78</b>	<b>\$784.20</b>	<b>\$616.19</b>	<b>\$282.40</b>
Construction Costs	Edmonton	\$1,774.13	\$607.51	\$455.68	\$114.89	\$36.95
	Outside City	N/A	\$462.59	\$0.00	\$319.71	\$142.88
	<b>Total</b>	<b>\$1,774.13</b>	<b>\$1,070.10</b>	<b>\$455.68</b>	<b>\$434.60</b>	<b>\$179.83</b>
Soft Costs	Edmonton	\$380.45	\$107.42	\$78.43	\$18.56	\$10.43
	Outside City	N/A	\$169.69	\$85.78	\$47.83	\$36.08
	<b>Total</b>	<b>\$380.45</b>	<b>\$277.11</b>	<b>\$164.20</b>	<b>\$66.39</b>	<b>\$46.51</b>
Interior Buildout and Tenant Improvement Costs	Edmonton	\$354.10	\$79.61	\$56.03	\$16.31	\$7.27
	Outside City	N/A	\$122.37	\$49.45	\$46.47	\$26.45
	<b>Total</b>	<b>\$354.10</b>	<b>\$201.98</b>	<b>\$105.48</b>	<b>\$62.78</b>	<b>\$33.72</b>
Site & Infrastructure Costs	Edmonton	\$264.26	\$46.65	\$28.04	\$13.98	\$4.63
	Outside City	N/A	\$86.95	\$30.80	\$38.44	\$17.71
	<b>Total</b>	<b>\$264.26</b>	<b>\$133.60</b>	<b>\$58.84</b>	<b>\$52.42</b>	<b>\$22.34</b>

Source: The Conference Board of Canada; Statistics Canada

Table A11  
**Detailed Government Revenues, Edmonton**

<b>Total Impact on Federal and Provincial Government Revenues (million)</b>			
	<b>In AB</b>	<b>Other Canada</b>	<b>Total</b>
<b>Total Personal Income Taxes</b>	<b>\$260.94</b>	<b>\$43.49</b>	<b>\$304.43</b>
Provincial PIT	\$83.07	\$27.90	\$110.98
Federal PIT	\$177.86	\$15.59	\$193.45
<b>Total Corporate Income Taxes</b>	<b>\$97.85</b>	<b>\$29.05</b>	<b>\$126.90</b>
Provincial CIT	\$28.26	\$11.46	\$39.72
Federal CIT	\$69.59	\$17.59	\$87.18
<b>Indirect Taxes</b>	<b>\$124.75</b>	<b>\$33.63</b>	<b>\$158.38</b>
Taxes on Products	\$15.88	\$10.86	\$26.75
Taxes on Production	\$108.87	\$22.77	\$131.63
<b>Total Tax Revenues</b>	<b>\$483.54</b>	<b>\$106.18</b>	<b>\$589.71</b>

*Source: The Conference Board of Canada, Alberta public accounts and budgetary data*

Table A12  
**Key Indicators, Edmonton**

**Downtown Office Market**

Class A Vacancy Rate	15.7%
Average Class A Net Rent (\$/sq. ft.)	\$21.11

**Suburban Office Market**

Class A Vacancy Rate	19.0%
Average Class A Net Rent (\$/sq. ft.)	\$18.32

**Industrial Market**

Overall Availability Rate	7.6%
Average Net Rent (\$/sq. ft.)	\$10.01

*Source: CBRE*

Table A13: Detailed Impact Results, Calgary

Calgary		Initial Investment (million)	Total GDP (million)	Direct GDP	Indirect GDP	Induced GDP
Total Impact	Calgary	\$2,719.57	\$1,515.21	\$989.09	\$332.70	\$193.42
	Outside City	N/A	\$1,266.72	\$164.88	\$684.66	\$417.18
	<b>Total</b>	<b>\$2,719.57</b>	<b>\$2,781.93</b>	<b>\$1,153.97</b>	<b>\$1,017.36</b>	<b>\$610.61</b>
Construction Costs	Calgary	\$1,739.98	\$1,006.48	\$659.93	\$226.02	\$120.52
	Outside City	N/A	\$741.64	\$0.00	\$473.28	\$268.36
	<b>Total</b>	<b>\$1,739.98</b>	<b>\$1,748.12</b>	<b>\$659.93</b>	<b>\$699.30</b>	<b>\$388.88</b>
Soft Costs	Calgary	\$373.13	\$227.07	\$155.10	\$37.89	\$34.08
	Outside City	N/A	\$210.88	\$74.50	\$69.91	\$66.47
	<b>Total</b>	<b>\$373.13</b>	<b>\$437.95</b>	<b>\$229.60</b>	<b>\$107.80</b>	<b>\$100.55</b>
Interior Buildout and Tenant Improvement Costs	Calgary	\$347.29	\$153.68	\$95.23	\$34.74	\$23.72
	Outside City	N/A	\$177.91	\$52.48	\$76.28	\$49.15
	<b>Total</b>	<b>\$347.29</b>	<b>\$331.59</b>	<b>\$147.70</b>	<b>\$111.02</b>	<b>\$72.87</b>
Site & Infrastructure Costs	Calgary	\$259.17	\$127.98	\$78.83	\$34.05	\$15.11
	Outside City	N/A	\$136.29	\$37.90	\$65.19	\$33.19
	<b>Total</b>	<b>\$259.17</b>	<b>\$264.27</b>	<b>\$116.73</b>	<b>\$99.24</b>	<b>\$48.30</b>
Calgary		Initial Investment (million)	Total Employment	Direct Employment	Indirect Employment	Induced Employment
Total Impact	Calgary	\$2,719.57	10,685	7,290	2,354	1,042
	Outside City	N/A	12,416	1,545	6,483	4,388
	<b>Total</b>	<b>\$2,719.57</b>	<b>23,101</b>	<b>8,835</b>	<b>8,836</b>	<b>5,430</b>
Construction Costs	Calgary	\$1,739.98	6,590	4,293	1,648	649
	Outside City	N/A	7,450	0	4,631	2,819
	<b>Total</b>	<b>\$1,739.98</b>	<b>14,039</b>	<b>4,293</b>	<b>6,279</b>	<b>3,467</b>
Soft Costs	Calgary	\$373.13	1,816	1,342	290	184
	Outside City	N/A	1,900	508	689	703
	<b>Total</b>	<b>\$373.13</b>	<b>3,715</b>	<b>1,849</b>	<b>979</b>	<b>887</b>
Interior Buildout and Tenant Improvement Costs	Calgary	\$347.29	1,548	1,198	223	128
	Outside City	N/A	2,032	864	650	518
	<b>Total</b>	<b>\$347.29</b>	<b>3,580</b>	<b>2,062</b>	<b>873</b>	<b>646</b>
Site & Infrastructure Costs	Calgary	\$259.17	731	457	193	81
	Outside City	N/A	1,035	173	513	349
	<b>Total</b>	<b>\$259.17</b>	<b>1,766</b>	<b>631</b>	<b>706</b>	<b>430</b>
Calgary		Initial Investment (million)	Total Labour Income (million)	Direct Labour Income	Indirect Labour Income	Induced Labour Income
Total Impact	Calgary	\$2,719.57	\$864.81	\$626.95	\$177.19	\$60.67
	Outside City	N/A	\$785.59	\$142.16	\$427.14	\$216.29
	<b>Total</b>	<b>\$2,719.57</b>	<b>\$1,650.39</b>	<b>\$769.10</b>	<b>\$604.33</b>	<b>\$276.96</b>
Construction Costs	Calgary	\$1,739.98	\$607.72	\$446.90	\$123.00	\$37.82
	Outside City	N/A	\$441.78	\$0.00	\$303.24	\$138.55
	<b>Total</b>	<b>\$1,739.98</b>	<b>\$1,049.50</b>	<b>\$446.90</b>	<b>\$426.23</b>	<b>\$176.36</b>
Soft Costs	Calgary	\$373.13	\$124.21	\$92.82	\$20.72	\$10.67
	Outside City	N/A	\$147.56	\$68.22	\$44.40	\$34.94
	<b>Total</b>	<b>\$373.13</b>	<b>\$271.77</b>	<b>\$161.04</b>	<b>\$65.11</b>	<b>\$45.62</b>
Interior Buildout and Tenant Improvement Costs	Calgary	\$347.29	\$79.29	\$53.98	\$17.87	\$7.44
	Outside City	N/A	\$118.80	\$49.47	\$43.70	\$25.63
	<b>Total</b>	<b>\$347.29</b>	<b>\$198.09</b>	<b>\$103.45</b>	<b>\$61.57</b>	<b>\$33.07</b>
Site & Infrastructure Costs	Calgary	\$259.17	\$53.59	\$33.25	\$15.60	\$4.74
	Outside City	N/A	\$77.44	\$24.47	\$35.80	\$17.17
	<b>Total</b>	<b>\$259.17</b>	<b>\$131.03</b>	<b>\$57.71</b>	<b>\$51.41</b>	<b>\$21.91</b>

Source: The Conference Board of Canada; Statistics Canada

Table A14  
**Detailed Government Revenues, Calgary**

<b>Total Impact on Federal and Provincial Government Revenues (million)</b>			
	<b>In AB</b>	<b>Other Canada</b>	<b>Total</b>
<b>Total Personal Income Taxes</b>	<b>\$255.91</b>	<b>\$42.65</b>	<b>\$298.57</b>
Provincial PIT	\$81.48	\$27.37	\$108.84
Federal PIT	\$174.44	\$15.29	\$189.73
<b>Total Corporate Income Taxes</b>	<b>\$95.97</b>	<b>\$28.49</b>	<b>\$124.46</b>
Provincial CIT	\$27.71	\$11.24	\$38.96
Federal CIT	\$68.25	\$17.25	\$85.51
<b>Indirect Taxes</b>	<b>\$122.35</b>	<b>\$32.98</b>	<b>\$155.33</b>
Taxes on Products	\$15.58	\$10.65	\$26.23
Taxes on Production	\$106.77	\$22.33	\$129.10
<b>Total Tax Revenues</b>	<b>\$474.23</b>	<b>\$104.13</b>	<b>\$578.36</b>

*Source: The Conference Board of Canada, Alberta public accounts and budgetary data*

Table A15  
**Key Indicators, Calgary**

**Downtown Office Market**

Class A Vacancy Rate	21.2%
Average Class A Net Rent (\$/sq. ft.)	\$16.28

**Suburban Office Market**

Class A Vacancy Rate	23.0%
Average Class A Net Rent (\$/sq. ft.)	\$19.02

**Industrial Market**

Overall Availability Rate	7.0%
Average Net Rent (\$/sq. ft.)	\$7.34

*Source: CBRE*

Table A16: Detailed Impact Results, Ottawa-Gatineau

Ottawa-Gatineau		Initial Investment (million)	Total GDP (million)	Direct GDP	Indirect GDP	Induced GDP
<b>Total Impact</b>	Ottawa-Gatineau	\$1,476.30	\$721.19	\$574.70	\$62.68	\$83.81
	Outside City	N/A	\$803.83	\$178.24	\$356.60	\$269.00
	<b>Total</b>	\$1,476.30	\$1,525.02	\$752.94	\$419.28	\$352.80
<b>Construction Costs</b>	Ottawa-Gatineau	\$944.54	\$577.56	\$481.04	\$41.61	\$54.90
	Outside City	N/A	\$399.55	\$0.00	\$224.06	\$175.50
	<b>Total</b>	\$944.54	\$977.11	\$481.04	\$265.67	\$230.39
<b>Soft Costs</b>	Ottawa-Gatineau	\$202.55	\$63.65	\$42.36	\$7.96	\$13.34
	Outside City	N/A	\$175.41	\$90.60	\$42.68	\$42.13
	<b>Total</b>	\$202.55	\$239.06	\$132.96	\$50.64	\$55.47
<b>Interior Buildout and Tenant Improvement Costs</b>	Ottawa-Gatineau	\$188.52	\$48.17	\$32.48	\$6.47	\$9.22
	Outside City	N/A	\$125.13	\$47.39	\$47.64	\$30.10
	<b>Total</b>	\$188.52	\$173.30	\$79.87	\$54.10	\$39.33
<b>Site &amp; Infrastructure Costs</b>	Ottawa-Gatineau	\$140.69	\$31.81	\$18.81	\$6.65	\$6.35
	Outside City	N/A	\$103.74	\$40.25	\$42.22	\$21.26
	<b>Total</b>	\$140.69	\$135.55	\$59.07	\$48.87	\$27.61

Ottawa-Gatineau		Initial Investment (million)	Total Employment	Direct Employment	Indirect Employment	Induced Employment
<b>Total Impact</b>	Ottawa-Gatineau	\$1,476.30	7,660	6,498	744	419
	Outside City	N/A	8,472	1,641	3,668	3,163
	<b>Total</b>	\$1,476.30	16,132	8,139	4,411	3,581
<b>Construction Costs</b>	Ottawa-Gatineau	\$944.54	5,916	5,148	494	274
	Outside City	N/A	4,498	0	2,432	2,065
	<b>Total</b>	\$944.54	10,413	5,148	2,926	2,340
<b>Soft Costs</b>	Ottawa-Gatineau	\$202.55	785	617	101	67
	Outside City	N/A	1,657	712	449	496
	<b>Total</b>	\$202.55	2,442	1,329	549	563
<b>Interior Buildout and Tenant Improvement Costs</b>	Ottawa-Gatineau	\$188.52	618	497	75	46
	Outside City	N/A	1,448	657	438	353
	<b>Total</b>	\$188.52	2,066	1,155	513	399
<b>Site &amp; Infrastructure Costs</b>	Ottawa-Gatineau	\$140.69	341	235	74	32
	Outside City	N/A	869	272	349	248
	<b>Total</b>	\$140.69	1,210	507	423	280

Ottawa-Gatineau		Initial Investment (million)	Total Labour Income (million)	Direct Labour Income	Indirect Labour Income	Induced Labour Income
<b>Total Impact</b>	Ottawa-Gatineau	\$1,476.30	\$633.91	\$432.94	\$132.27	\$68.70
	Outside City	N/A	\$344.81	\$116.91	\$130.68	\$97.22
	<b>Total</b>	\$1,476.30	\$978.72	\$549.85	\$262.95	\$165.92
<b>Construction Costs</b>	Ottawa-Gatineau	\$944.54	\$534.95	\$363.12	\$112.58	\$59.26
	Outside City	N/A	\$110.23	\$0.00	\$61.11	\$49.11
	<b>Total</b>	\$944.54	\$645.18	\$363.12	\$173.69	\$108.37
<b>Soft Costs</b>	Ottawa-Gatineau	\$202.55	\$29.01	\$22.27	\$3.88	\$2.86
	Outside City	N/A	\$122.98	\$72.22	\$27.53	\$23.23
	<b>Total</b>	\$202.55	\$151.99	\$94.48	\$31.41	\$26.09
<b>Interior Buildout and Tenant Improvement Costs</b>	Ottawa-Gatineau	\$188.52	\$26.87	\$21.70	\$3.15	\$2.01
	Outside City	N/A	\$78.00	\$33.84	\$27.68	\$16.47
	<b>Total</b>	\$188.52	\$104.86	\$55.54	\$30.84	\$18.49
<b>Site &amp; Infrastructure Costs</b>	Ottawa-Gatineau	\$140.69	\$43.09	\$25.86	\$12.66	\$4.57
	Outside City	N/A	\$33.61	\$10.86	\$14.35	\$8.40
	<b>Total</b>	\$140.69	\$76.70	\$36.71	\$27.01	\$12.97

Source: The Conference Board of Canada; Statistics Canada

Table A17 Detailed Government Revenues, Ottawa-Gatineau			
Total Impact on Federal and Provincial Government Revenues (million)			
	In ON	Other Canada	Total
<b>Total Personal Income Taxes</b>	<b>\$174.59</b>	<b>\$9.98</b>	<b>\$184.57</b>
Provincial PIT	\$60.31	\$6.40	\$66.71
Federal PIT	\$114.28	\$3.58	\$117.86
<b>Total Corporate Income Taxes</b>	<b>\$66.65</b>	<b>\$8.41</b>	<b>\$75.06</b>
Provincial CIT	\$31.87	\$3.32	\$35.19
Federal CIT	\$34.78	\$5.09	\$39.87
<b>Indirect Taxes</b>	<b>\$111.50</b>	<b>\$7.58</b>	<b>\$119.08</b>
Taxes on Products	\$14.35	\$2.05	\$16.41
Taxes on Production	\$97.14	\$5.53	\$102.67
<b>Total Tax Revenues</b>	<b>\$352.74</b>	<b>\$25.97</b>	<b>\$378.71</b>

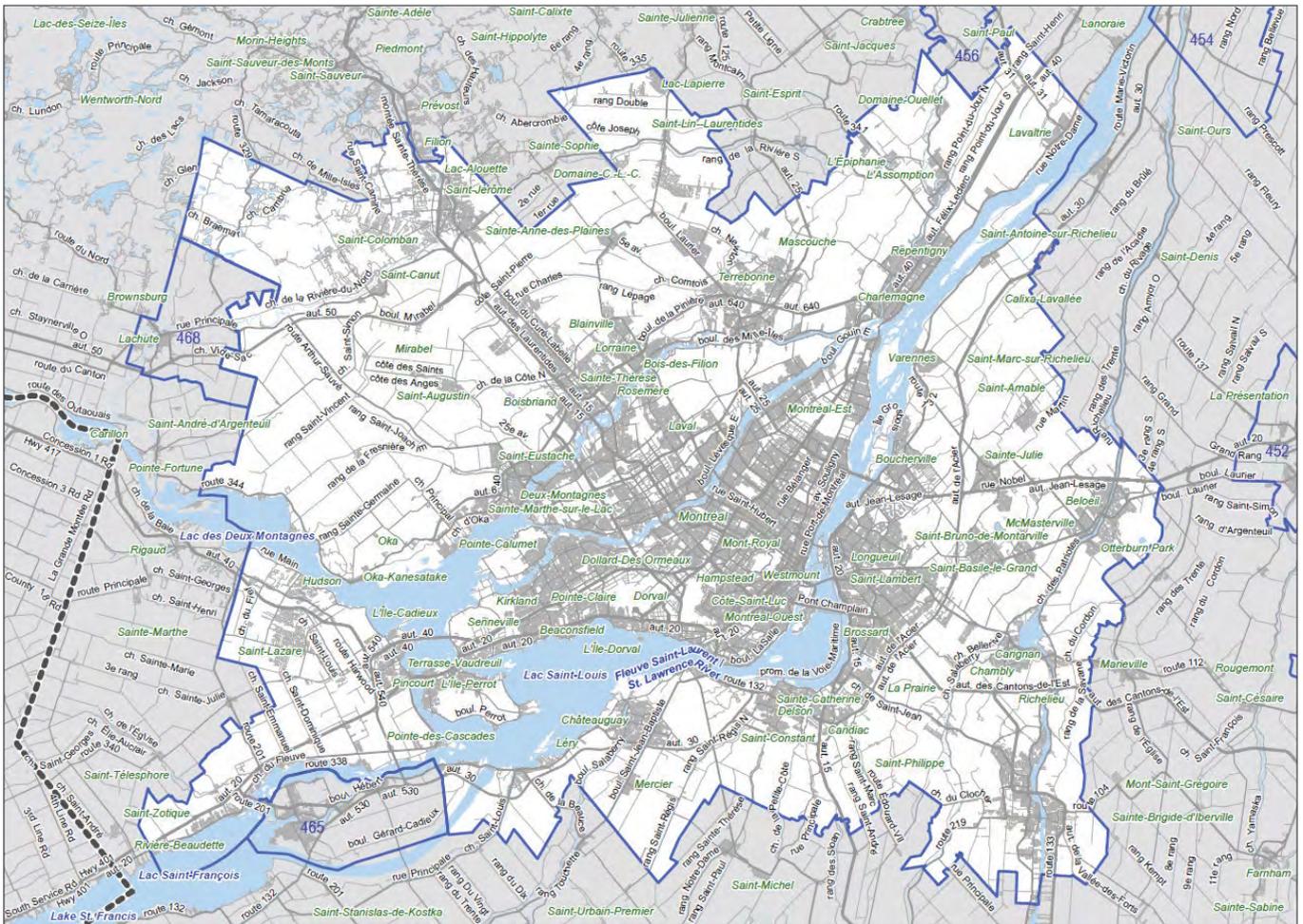
Source: The Conference Board of Canada, Ontario public accounts and budgetary data

Table A18 Key Indicators, Ottawa-Gatineau	
<b>Downtown Office Market</b>	
Class A Vacancy Rate	4.2%
Average Class A Net Rent (\$/sq. ft.)	\$23.83
<b>Suburban Office Market</b>	
Class A Vacancy Rate	10.0%
Average Class A Net Rent (\$/sq. ft.)	\$16.25
<b>Industrial Market</b>	
Overall Availability Rate	3.4%
Average Net Rent (\$/sq. ft.)	\$9.40

Source: CBRE

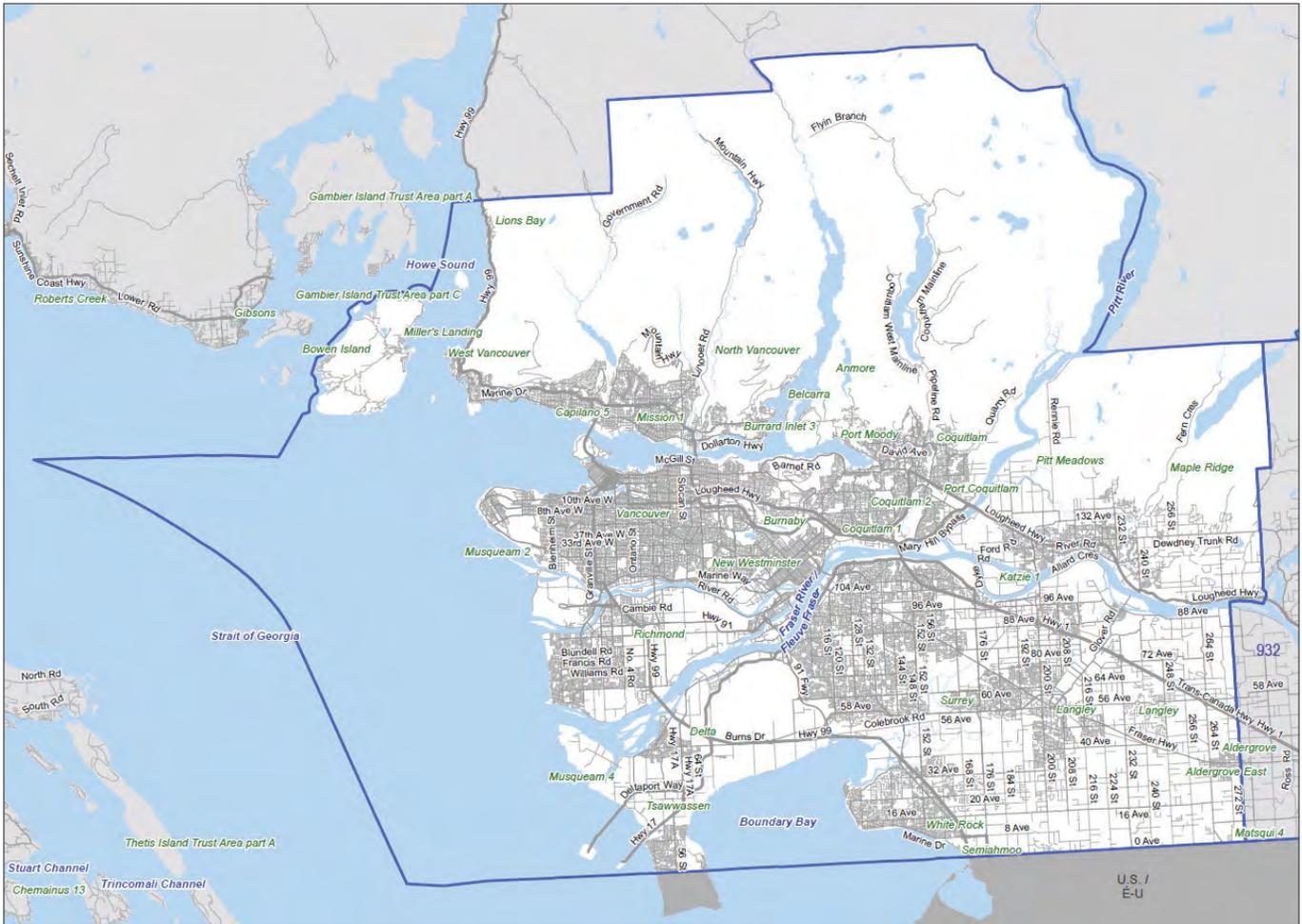


# Montreal



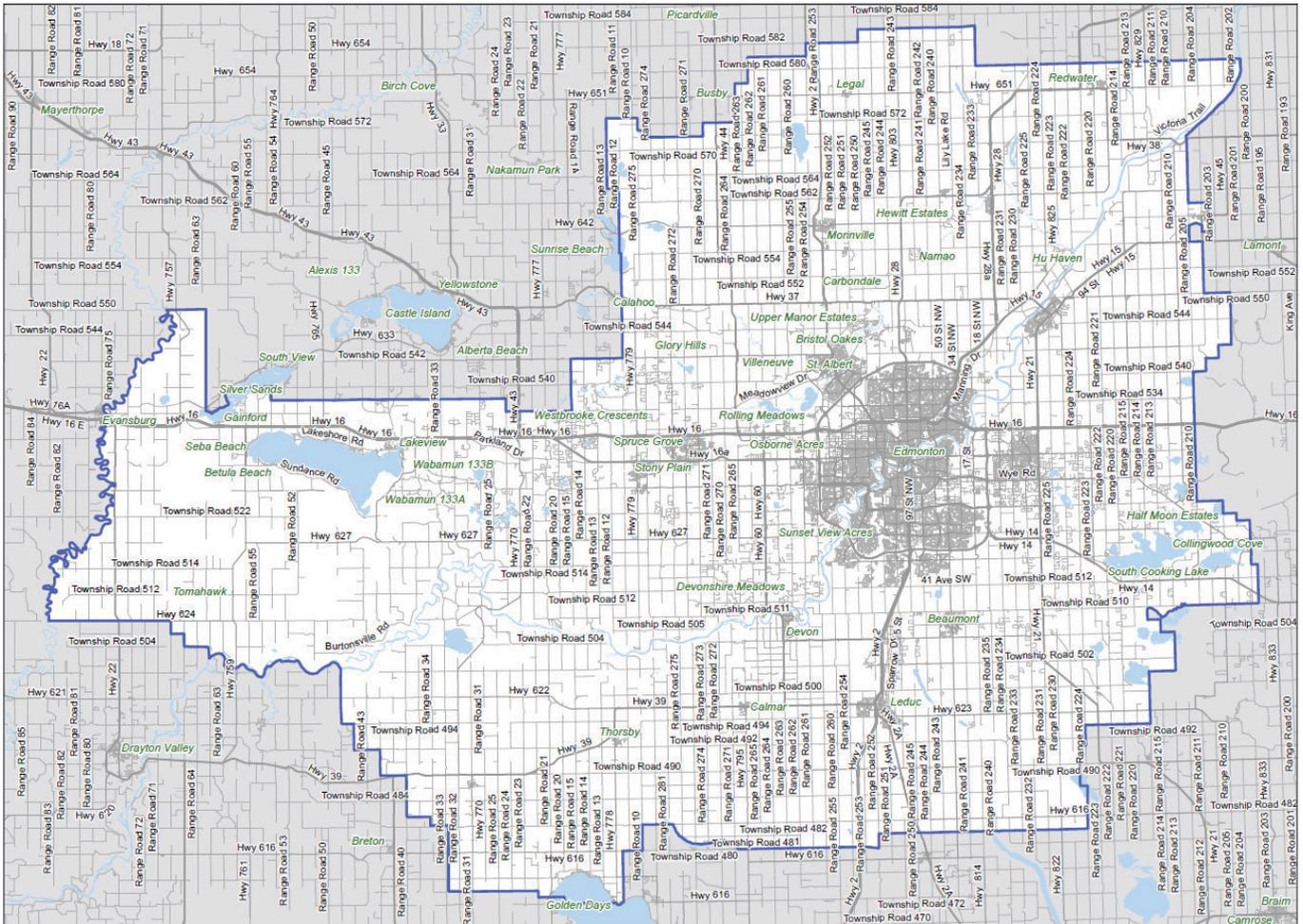
Source: Statistics Canada

# Vancouver



Source: Statistics Canada

# Edmonton



Source: Statistics Canada





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