

# Comparing Median Employment Incomes in Canada's Census Metropolitan Areas

by Joel Emes and Ben Eisen

## SUMMARY

■ This research bulletin compares median employment income levels in Canada's largest metropolitan areas, which Statistics Canada designates as Census Metropolitan Areas (CMAs).

■ Median employment income in Canada's 41 CMAs ranged from a low of \$31,540 in St. Catharines, Ontario, to a high of \$45,500 in Ottawa-Gatineau.

■ CMAs containing capital cities are heavily concentrated at the top of the list of higher income CMAs. Of the ten highest income CMAs, five include either a federal or provincial capital. None of the CMAs in which there is

a provincial or federal capital have median employment incomes substantially below the national average.

■ The CMAs in Alberta and Saskatchewan generally perform well on this indicator. All CMAs in these two provinces were in the top third of Canadian CMAs for median employment income.

■ The CMAs in Quebec and Atlantic Canada are clustered towards the bottom of the national rankings.

■ The performance of Ontario's CMAs varied greatly on this indicator. Several of that province's CMAs were in the top half of the national rankings while several others were in the bottom half.

## Introduction

Several recent Fraser Institute studies compare various jurisdictions in terms of median employment income. These include analyses between provinces (Eisen and Li, 2023) and between provinces and nearby US states (Whalen and Emes, 2022). This short research bulletin zooms in to the local level, comparing Canada's Census Metropolitan Areas (CMAs) with respect to levels of median employment income.

The bulletin begins by presenting data on median employment income by CMA in 2019, the last year that was not affected by the COVID-19 pandemic. Without advancing an overarching argument, the paper identifies several relevant potential takeaways from the data that might present avenues for future research.

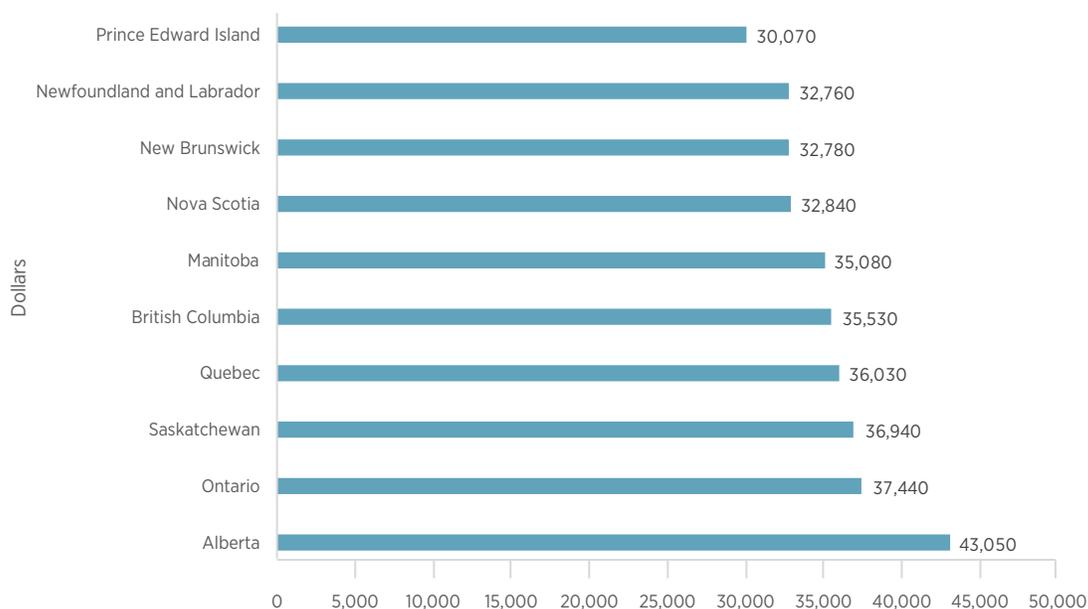
## Comparing Canada's CMAs in Terms of Median Employment Income

This bulletin compares Canada's 41 CMAs in terms of median employment income. A CMA is defined as one or more adjacent municipalities with a population of at least 100,000 people, of which there must be at least 50,000 residents in the core (Statistics Canada, 2022a).

Many possible variables could be used to compare the CMAs. In this study, we focus on median<sup>1</sup> employment income. This represents "all income received as wages, salaries, and commissions from paid employment and net self-employment income from farm or

1 The median is the value in the middle of a dataset, meaning that 50 percent of data points have a value smaller than or equal to the median and 50 percent of data points have a value higher than or equal to the median (Statistics Canada, 2021: 114).

Figure 1: Median Employment Income, by province, 2019



Source: Statistics Canada (2022c).

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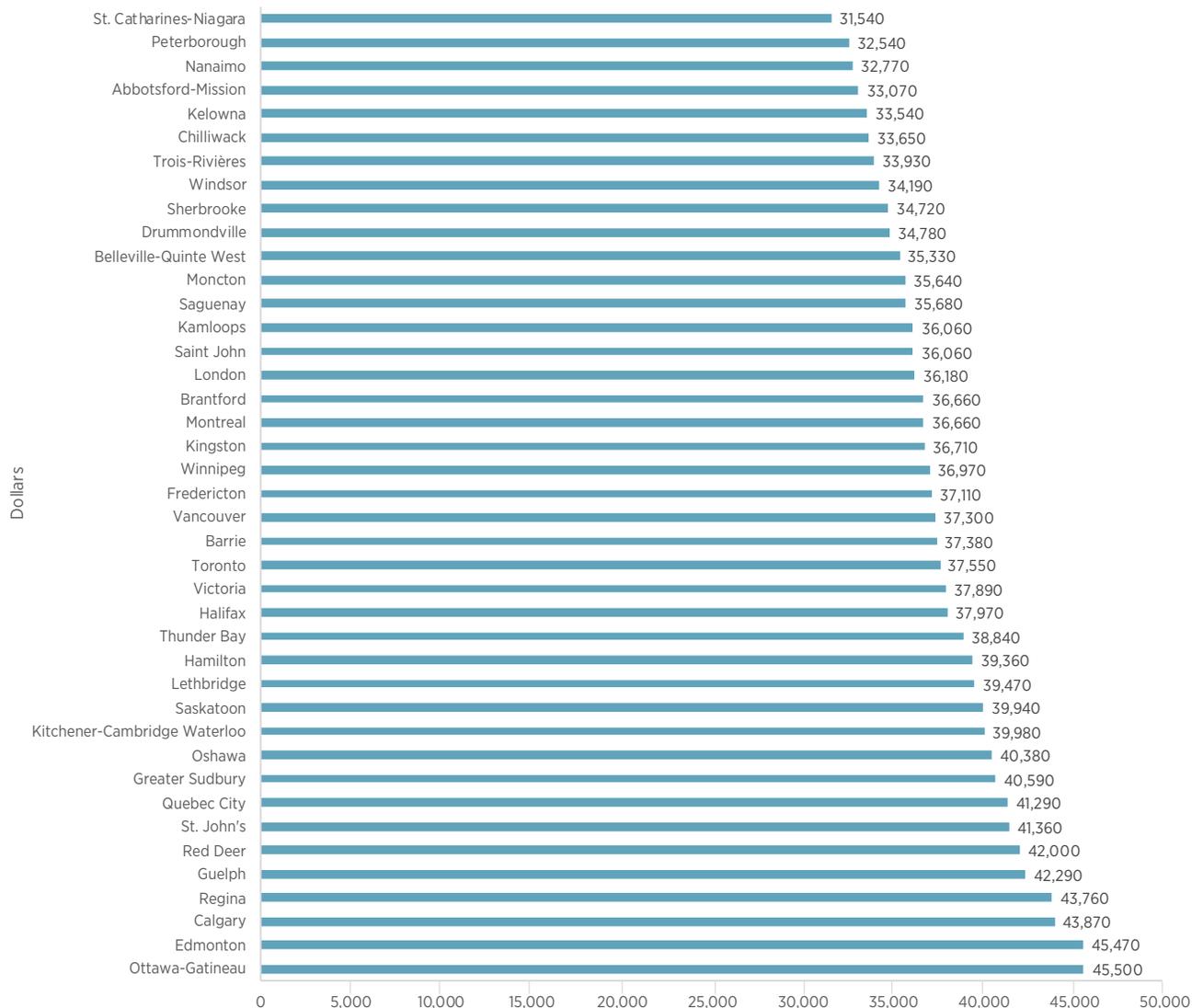
non-farm unincorporated business and/or professional practice” (Statistics Canada, 2022b).

Employment income differs from other measures in that it excludes various forms of income such as government transfers and investment and pension income. We use it to focus on what people currently earn in the labour market after stripping away the effects of bequests or previous behaviour (inheritances or savings that generate investment

and pension income) and government policy attempts at smoothing income distribution. For economy of words, we sometimes use the word “income” as a short form of “median employment income” throughout the rest of this paper.

Figure 1 presents the data from our previous analysis at the provincial level. It shows that, in 2019, median employment income ranged from a low of \$30,070 in Prince Edward Island to a high of \$43,050 in Alberta.

**Figure 2: Median Employment Income, 2019**



Source: Statistics Canada (2022c).

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Figure 2 provides the data that are the primary focus of this paper, showing median employment income at the CMA level for Canada's 41 major urban agglomerations. The figure shows that median employment income in 2019 ranged from a low of \$31,540 in St. Catharines-Niagara to a high of \$45,500 in Ottawa-Gatineau. That is, median employment income

in Canada's highest-income CMA was 44.3 per cent higher than in the lowest-income CMA.

## Additional Observations

We do not offer an overarching argument or narrative about these data, but we do present analysis on several points related to the

**Table 1: Median employment income, relative to national employment income and rank, national and provincial capitals, 2019**

	Median employment income	Relative to Canada (Canada=100)	Rank (of 41)
St. John's	\$41,360	112	7
Halifax	\$37,970	103	16
Fredericton	\$37,110	100	21
Quebec City	\$41,290	112	8
Ottawa-Gatineau	\$45,500	123	1
Toronto	\$37,550	102	18
Winnipeg	\$36,970	100	22
Regina	\$43,760	118	4
Edmonton	\$45,470	123	2
Victoria	\$37,890	103	17

Note: Any city with a value above 100 had median employment income above that of Canada as a whole.

Source: Statistics Canada (2022c).

**Table 2: Median employment income, relative to national employment income and rank, Canada's three largest CMAs, 2019**

	Median employment income	Relative to Canada (Canada=100)	Rank (of 41)
Montreal	\$36,660	99	24
Toronto	\$37,550	102	18
Vancouver	\$37,300	101	20

Note: Any city with a value above 100 had median employment income above that of Canada as a whole.

Source: Statistics Canada (2022c).

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performance of different CMAs grouped together using various criteria based on their size, geography, and presence of provincial or national governments.

### *CMAs with capitals are among the highest earning*

The capital CMAs of the provinces and the national capital region of Ottawa-Gatineau have higher income levels than most other urban areas. Of the ten CMAs with the highest income, five include capital cities. The highest-income CMA is the national capital of Ottawa-Gatineau. Also in the top ten are the CMAs that include the provincial capitals of Edmonton, Regina, St. John's, and Quebec City.

Only two (Fredericton and Winnipeg) of the 11 CMAs that include capital cities are not in the top half of CMAs by median employment income. And incomes in these two CMAs are almost exactly the same as the national median income for Canada taken as a whole.

### **Canada's largest CMAs are not the highest earning**

Large urban areas are often considered to be drivers of growth and productivity, and for those reasons generate high levels of employment income. Table 2, however, shows that, in 2019, Canada's three largest CMAs — Toronto, Montreal, and Vancouver — had employment

Table 3: Median employment income, relative to national employment income and rank, Ontario CMAs, 2019

	Median employment income	Relative to Canada (Canada=100)	Rank (of 41)
Ottawa-Gatineau	\$45,500	123	1
Kingston	\$36,710	99	23
Belleville-Quinte West	\$35,330	96	31
Peterborough	\$32,540	88	40
Oshawa	\$40,380	109	10
Toronto	\$37,550	102	18
Hamilton	\$39,360	106	14
St. Catharines-Niagara	\$31,540	85	41
Kitchener-Cambridge-Waterloo	\$39,980	108	11
Brantford	\$36,660	99	24
Guelph	\$42,290	114	5
London	\$36,180	98	26
Windsor	\$34,190	93	34
Barrie	\$37,380	101	19
Greater Sudbury	\$40,590	110	9
Thunder Bay	\$38,840	105	15

Source: Statistics Canada (2022c).

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income levels that were very close to the national average and the middle of the pack of the 41 CMAs. On this indicator, Toronto ranked eighteenth and Vancouver twentieth, while Montreal was in the bottom half of the group at twenty-fourth.

## Ontario CMAs vary greatly

Not surprisingly, given the province's size and the differences among its regions, Ontario's CMAs vary greatly in income (Table 3). Both the highest income (Ottawa-Gatineau) and the lowest (St. Catharines-Niagara) of Canada's 41 CMAs are in Ontario.

Table 3 also helps illustrate the ongoing economic challenges in southwestern Ontario, a region that, until relatively recently, was one of the richest in Canada (Eisen and Emes, 2020). The table shows, however, that, with respect to income, many of the region's CMAs remain in the bottom half of the national pack. These include the two largest CMAs in the region:

London, which ranked twenty-sixth in 2019, and Windsor, which ranked thirty-fourth. Kitchener-Cambridge-Waterloo was, however, a significant exception.

## CMAs in Alberta and Saskatchewan have high median employment income

The CMAs in Alberta and Saskatchewan are all in the top third of Canada's 41 CMAs in terms of income (Table 4). Edmonton was the CMA with the second-highest income in Canada in 2019, at \$45,470, or 23 percent higher than the Canadian median. The CMAs including Calgary, Regina, and Red Deer were also in the top six, while Saskatoon and Lethbridge ranked twelfth and thirteenth, respectively. Even the lowest-income CMA in Alberta, Lethbridge, had median employment incomes that were 7 percent higher than the national median. Despite recent recessions and many years with relatively low energy prices, as of 2019 Alberta and Saskatchewan were still home to many CMAs with incomes among the highest in Canada.

Table 4: Median employment income, relative to national employment income and rank, Alberta and Saskatchewan CMAs, 2019

	Median employment income	Relative to Canada (Canada=100)	Rank (of 41)
Regina	\$43,760	118	4
Saskatoon	\$39,940	108	12
Lethbridge	\$39,470	107	13
Calgary	\$43,870	119	3
Red Deer	\$42,000	114	6
Edmonton	\$45,470	123	2

Note: Any city with a value above 100 had median employment income above that of Canada as a whole.

Source: Statistics Canada (2022c)

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## *CMA's in Quebec and Atlantic Canada generally have relatively low median employment income*

Although there is significant variation, Table 5 shows that most of the CMA's in Atlantic Canada and Quebec are in the bottom half of Canada's 41 CMA's. Only those CMA's including Halifax (sixteenth), St. John's (seventh), and Quebec City (eighth) are in the top half, and all three are provincial capitals.

## Conclusion

Previous analysis by the Fraser Institute has compared Canadian provinces to each other and Canadian provinces to nearby US states with respect to median employment income.

In this short paper, the analysis has been extended to the local level by comparing median employment income in 2019 in Canada's 41 Census Metropolitan Areas in 2019. We found that median employment incomes were highest in Ottawa-Gatineau and lowest in St. Catharines-Niagara.

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Table 5: Median employment income, relative to national employment income and rank, Quebec and Atlantic Canada CMA's, 2019

	Median employment income	Relative to Canada (Canada=100)	Rank (of 41)
St. John's	\$41,360	112	7
Halifax	\$37,970	103	16
Moncton	\$35,640	96	30
Saint John	\$36,060	98	27
Fredericton	\$37,110	100	21
Saguenay	\$35,680	97	29
Quebec City	\$41,290	112	8
Sherbrooke	\$34,720	94	33
Trois-Rivières	\$33,930	92	35
Drummondville	\$34,780	94	32
Montreal	\$36,660	99	24

Note: Any city with a value above 100 had median employment income above that of Canada as a whole.

Source: Statistics Canada (2022c).

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