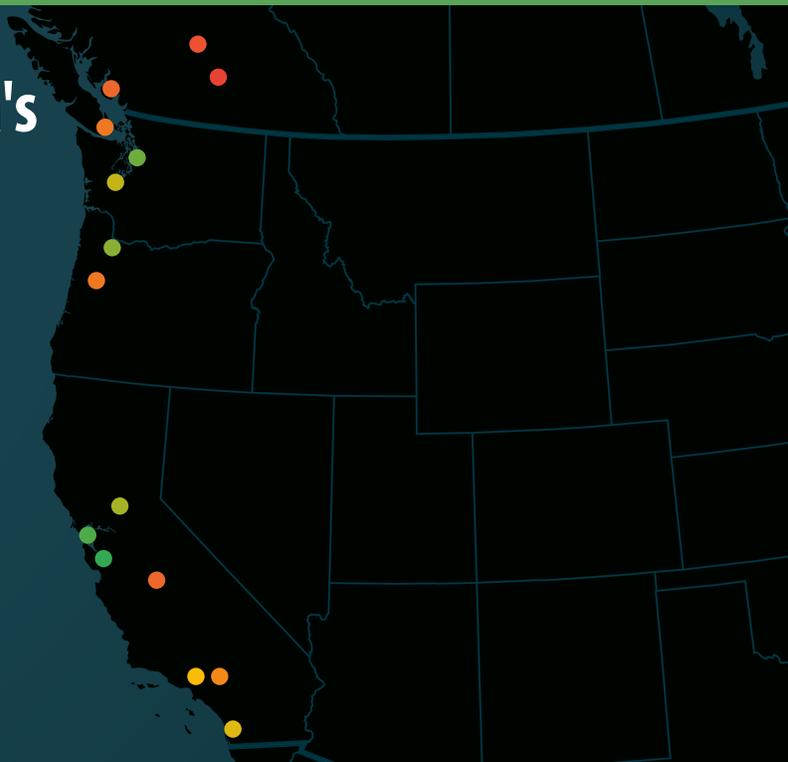


Measuring British Columbia's Prosperity Gap at the Metropolitan Level

Ben Eisen, Nathaniel Li, and Joel Emes



Summary

- A recent study published by the Fraser Institute found that a “prosperity gap” exists between British Columbia and nearby Canadian and American jurisdictions.
- Specifically, British Columbia is an economic laggard with respect to key measures of income, with the relevant gaps widening in recent years.
- This new research bulletin provides further analysis of these indicators by examining median employment income in 59 large metropolitan areas in Western Canada (CMAs) and nearby American states (MSAs).
- We find that for this important indicator of labour market and overall economic health, British Columbia’s metro areas are clustered near the bottom of the overall rankings. Five of the worst eight performers are in British Columbia. All seven of British Columbia’s metro areas are in the bottom half of the league.
- This study also measures growth in median employment earnings during the 2010s. On this indicator, British Columbia CMAs perform somewhat better. Six of the province’s seven CMAs were found in the middle third of the rankings.
- Taken together, these analyses show that British Columbia’s metropolitan areas face a substantial “prosperity gap” compared to regional neighbours. Further, this gap did not meaningfully close over the course of the 2010s, and in many cases grew.

Measuring British Columbia's Prosperity Gap at the Metropolitan Level

Introduction

In January 2023, the Fraser Institute published a study (Eisen and Li, 2023) comparing key economic indicators in British Columbia to Alberta and a selection of nearby US states. That study concluded that there exists a “prosperity gap” between British Columbia and most of its neighbours. This suggests the province is an economic laggard with respect to key measures of income. Further, that report found that the gap between British Columbia and its neighbours has generally been growing in recent years.

This new study expands that analysis by zooming in to examine economic performance in large population centres in these same jurisdictions. Specifically, we compare median employment income in all of British Columbia’s and Alberta’s Census Metropolitan Areas (CMAs) to large American metro areas known as Metropolitan Statistical Areas (MSAs) in the same comparator US states.

Specifically, this study seeks to measure the prosperity gap between large metropolitan areas in British Columbia and those in nearby jurisdictions by comparing median employment income as well as considering the change in this important measure of labour market health and prosperity over time.

Identifying British Columbia’s Peer Group

This report compares the performance of British Columbia’s CMAs, with respect to median employment income, to large metro areas in Alberta and nearby states. Specifically, the comparison group consists of:

- Alberta
- Washington
- Alaska

- California
- Oregon
- Montana
- Idaho

Several of these jurisdictions have sectoral similarities to British Columbia’s economy and have extensive supply chain links between them. Further, British Columbia competes with three nearby jurisdictions for talent and capital investment. Of course, there are defensible rationales for choosing other sets of comparators. While recognizing that no comparator group is perfect and that many other choices would be reasonable, focusing on next-door Alberta and nearby US jurisdictions, several of which are resource intensive, provides a straightforward way to select important trading partners and competitors for investment.

The Indicator and Methodological Notes

This study compares the median employment income of major metropolitan areas in British Columbia to several nearby jurisdictions. Many possible variables could be used to compare the urban areas discussed here. Employment income differs from other measures in that it excludes some forms of income such as government transfers and investment and pension income. We use it to focus on what people earn in the labour market after stripping away the effects of passive income and government transfers. For economy of words and clarity we sometimes use the word “income” to refer to “median employment income” reported in Canada and “median earnings” reported in the United States.

The choice to focus on median incomes is borne out of the objective to analyze the health of labour-markets for middle income residents. Other indicators would

Measuring British Columbia's Prosperity Gap at the Metropolitan Level

shed light on other important dimensions of labour market performance. A focus on average incomes, or average incomes within the top ten percent, for instance, would shed more light on outcomes for high-earners which is important for attraction of mobile human capital. We have chosen to focus on labour market performance for middle income individuals, but many other alternatives such as those discussed above are interesting options for future research products.

We present data for the year 2019, as well as data on the rate of change up to 2019, because this is the last year of comparable data in both jurisdictions that is clearly not distorted by potentially short-term effects of the COVID-19 pandemic and recession. Our analysis of the rate of change can therefore be understood as a comparison of the growth rate in median employment income in the decade from 2010–19.

We focus on large metropolitan areas, which are defined similarly in the United States and Canada. A Canadian CMA must have a population of at least 100,000 people with at least 50,000 residents in the core. Similarly, in the United States, the concept of an MSA is that of a core area containing a large population nucleus together with adjacent communities with a high degree of economic and social integration with that core (US Census Bureau, 2023).

While the terminology differs slightly and there are small definitional differences, the focus is the same in the collection of these indicators. More information about the minor differences in definitions as well as our approach to currency comparability (we rely on a Purchasing Power Parity (PPP) exchange rate) is available in Eisen and Emes (2023), where much of this data is first presented and a more detailed methodological section is included.

Results

Reviewing Provincial/State Level Findings

As noted, Eisen and Li (2023) compared provincial and state level statistics for this group of comparator jurisdictions with respect to GDP per person as well as median employment income. That study found that British Columbia was a laggard for both indicators. It showed that with respect to GDP per capita, British Columbia ranked 6th out of the 8 jurisdictions considered, far behind the top five and only very slightly ahead of Montana and Idaho. Oregon, the 5th ranked jurisdiction, enjoyed a GDP per capita that was 19.5 percent higher than British Columbia.

With respect to median employment income, British Columbia's performance was even worse. Eisen and Li (2023) showed that British Columbia had the lowest median employment income of the eight jurisdictions under analysis. It also showed a large gap between Alberta and all six American states. The smallest was the gap with Idaho, which still had a median income that was \$4,783 (14.1 percent) higher than in British Columbia.

Further, Eisen and Li (2023) analyzed growth in median employment income at the provincial/state level from 2010–2019. It found that of the 8 jurisdictions considered only one (Alberta), had a worse growth record over this period. All US states exceeded British Columbia in terms of growth. The study concluded that British Columbia faces a prosperity gap with respect to median employment income compared to its US neighbours, and further that this gap grew in the 2010s.

Comparing Employment Income at the CMA/MSA Level

This section presents the key results of our study, comparing median employment income in the CMAs and MSAs located in the 8 jurisdictions that were studied at the provincial/state level in the previous analysis.

Figure 1 presents one of the two main results of the study, comparing median income in British Columbia CMAs to Alberta CMAs and MSAs in nearby US states.

Figure 1 shows that a provincial level prosperity gap is borne out at the metropolitan area level, as British Columbia's metros are clustered near the bottom of the rankings and entirely absent from the top.

In total, we consider 59 large urban areas in this study. Of these, 7 are found in British Columbia. Of the eight lowest ranked urban areas considered in this report, five are in British Columbia. These are Kamloops, Chilliwack, Kelowna, Abbotsford-Mission and Nanaimo.

The remaining two British Columbia CMAs are the province's two largest—Vancouver and Victoria. Both of these large urban areas also fall near the bottom of the rankings. Victoria is the top ranked CMA in British Columbia with median employment income of \$37,890. This places the provincial capital in 42nd place out of the 59 urban areas. Vancouver, by far the largest CMA in the province ranks 48th, with median employment income of \$37,300.

The three highest ranked urban areas for median income are the San Jose area (\$73,895), the San Francisco Area (\$70,315), and the greater Seattle area (\$61,056).

These data show that as of 2019 a large prosperity gap existed between British Columbia's CMAs and the vast majority of urban areas in Alberta and nearby US states. Figure 2 presents the second main finding of this report, comparing annualized growth rates for the 59

metro areas examined here. Although British Columbia's CMAs perform relatively better on this indicator in comparison to the other urban areas examined, we see that British Columbia has no representation in the top of the league table and most urban areas fall near the middle in terms of growth from 2010–2019.

Figure 2 shows that the smallest annualized gain in median employment income in British Columbia occurred in Kamloops at 0.7 percent. This placed that CMA in 46th place out of the 59 considered.

The remaining 6 CMAs in the province are clustered between 0.9 percent annually in Vancouver and 1.3 percent in Nanaimo and Chilliwack. All six are in the middle third of the rankings and Vancouver ranks 37th out of the 59 urban areas for median employment income growth during the analysis period.

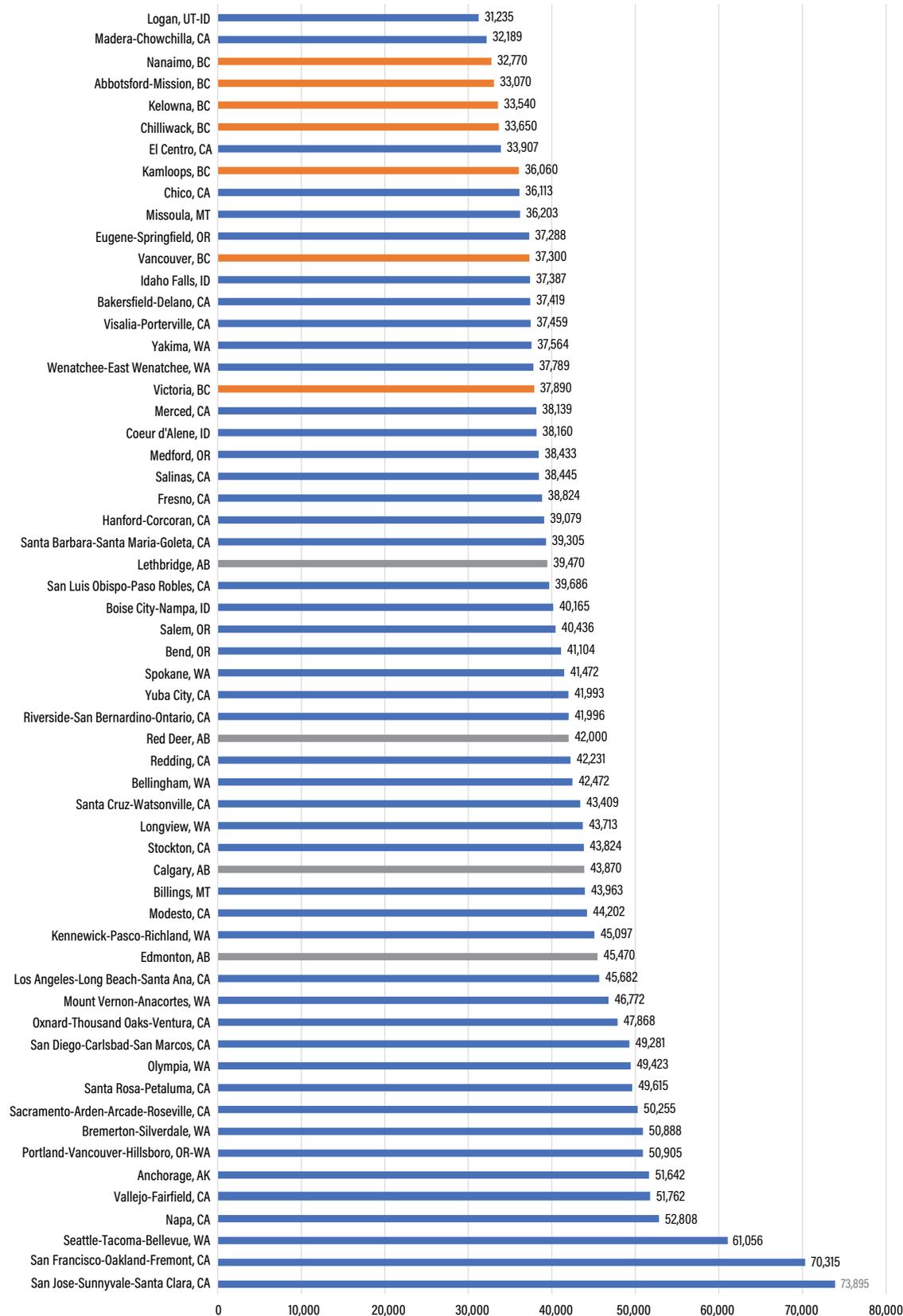
Although the growth performance of British Columbia's CMAs is not as consistently weak compared to the other urban areas in this analysis, none are found near the top of the rankings. Rather, the majority—including by far the largest, Vancouver—are found in the bottom half of the rankings. Our first set of key results showed that there is a large prosperity gap between British Columbia's CMAs and other urban areas considered here. The second key conclusion of the report that we can draw is that, for most CMAs, this gap grew over time with respect to a majority of the comparator urban areas shown here in the 2010s.

Additional Notes on Vancouver

Vancouver is by far the largest urban area in British Columbia and its commercial centre. Given the importance of this metropolitan area to the province's economic well-being, a short specific examination of its performance is useful. Although Vancouver had the second highest median employment income in British Columbia, it was near the bottom of the overall rankings

Measuring British Columbia's Prosperity Gap at the Metropolitan Level

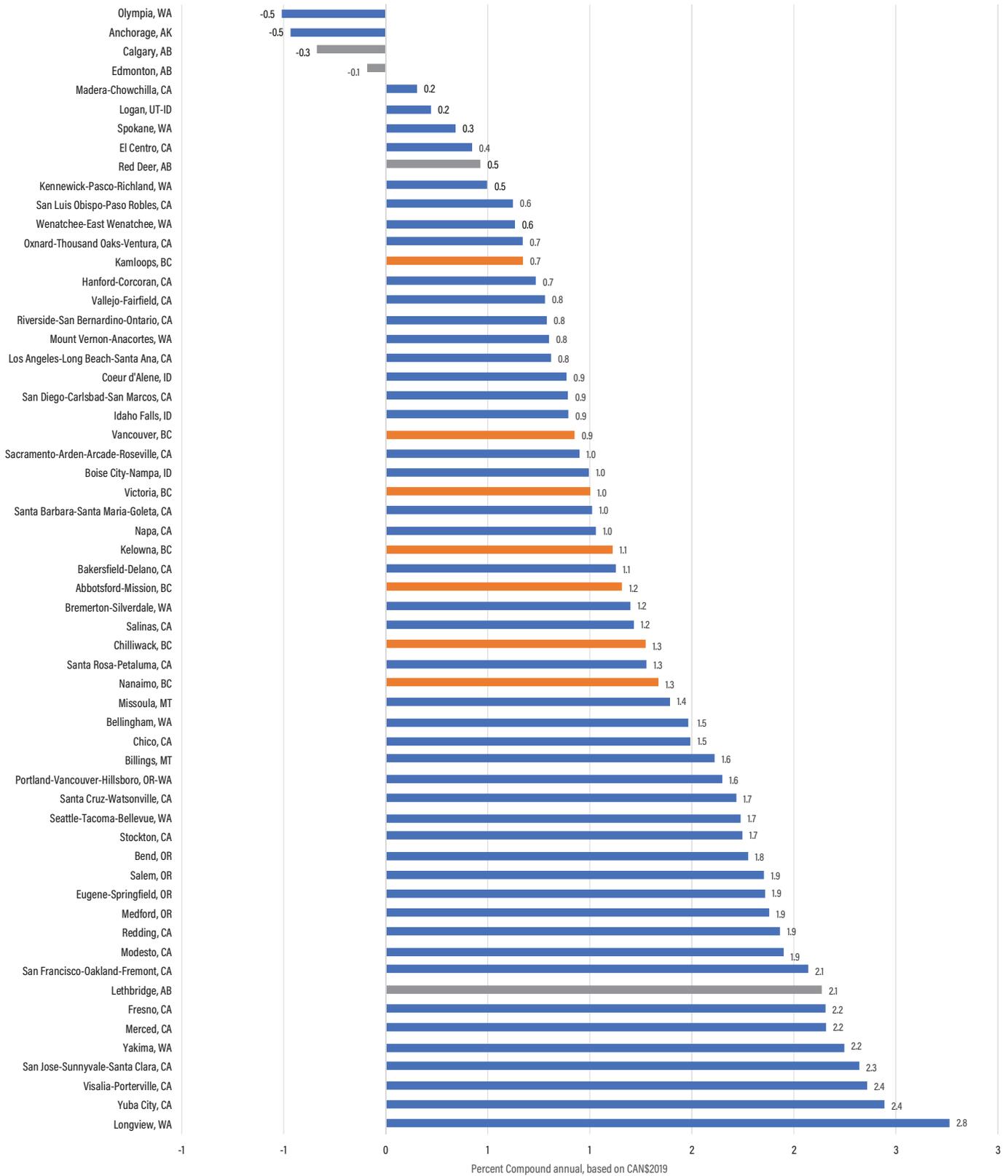
Figure 1: Median Employment Income, Selected Canadian CMAs and American MSAs, 2019 (CAN\$)



Note: US data is converted to Canadian dollars using the PPP conversion rate. Metropolitan statistical areas (MSAs) with a population of less than 100,000 people (in 2020) were excluded from the analysis. Sources: Statistics Canada, 2023a; US Census Bureau, 2019; US Census Bureau 2023; OECD 2023; calculations by authors.

Measuring British Columbia's Prosperity Gap at the Metropolitan Level

Figure 2: Compound Annual Percent Change in Median Employment Income, Selected Canadian CMAs and American CMAs, 2010-2019



Note: US data is converted to Canadian dollars using the PPP conversion rate. Metropolitan statistical areas (MSAs) with a population of less than 100,000 people (in 2020) were excluded from the analysis. Sources: Statistics Canada, 2023a; 2023b; US Census Bureau, multiple years; US Census Bureau, 2023; US Bureau of Labor Statistics, 2023; OECD, 2023; calculations by authors.

Measuring British Columbia's Prosperity Gap at the Metropolitan Level

of the CMAs and MSAs examined in this study. Vancouver ranked 48th out of the CMAs evaluated.

A comparison of Vancouver to the other largest metro areas examined here is also instructive. Table 1 compared Vancouver to the other 11 CMAs and MSAs in this analysis with populations over 1,000,000. It shows that amongst these largest regional metros, Vancouver had the lowest level of median employment income.

The gap between Vancouver and certain other large metro areas is shown in column three, rendered as an index with Vancouver's median employment income level set at 100. This shows that the gap ranges from four percent in Fresno, California to a high of 98 percent in the San Jose area.

With respect to growth over the 2010s, Vancouver performed somewhat better but still fell in the bottom half of the rankings. Vancouver's growth rate of 0.8 percent placed it 37th out of 59 metros. This means that a

small majority of the CMAs and MSAs grew at a faster pace than Vancouver during this time.

In summary, Vancouver faces a prosperity gap with most of the CMAs and MSAs considered in this study and all of the largest metro areas (population greater than 1,000,000). Further, it shows that generally these gaps are not closing as Vancouver ranks in the bottom half for growth among CMAs and MSAs discussed in this study.

Conclusion

Past research (Eisen and Li, 2023) has shown that with respect to a very broad measure of income—GDP per capita—British Columbia faces a significant “prosperity gap” relative to neighbouring Alberta and nearby jurisdictions in the United States. Further, we showed the gap to be growing rather than shrinking over time.

Table 1: Median Employment Income, Relative to Employment Income of Vancouver and Rank, Selected Canadian CMAs and American MSAs with Population above 1,000,000, 2019 (CAN\$)

NAME	2019 (CAN\$)	Relative to Vancouver (Vancouver=100)	Rank (of 59)	2020 Total Population
Calgary, AB	43,870	118	20	1,482,050
Edmonton, AB	45,470	122	16	1,396,110
Vancouver, BC	37,300	100	48	2,605,120
Los Angeles-Long Beach-Santa Ana, CA	45,682	122	15	12,997,353
Riverside-San Bernardino-Ontario, CA	41,996	113	27	4,653,105
San Francisco-Oakland-Fremont, CA	70,315	189	2	4,623,264
San Diego-Carlsbad-San Marcos, CA	49,281	132	12	3,286,069
Sacramento-Arden-Arcade-Roseville, CA	50,255	135	9	2,411,428
San Jose-Sunnyvale-Santa Clara, CA	73,895	198	1	1,952,185
Fresno, CA	38,824	104	37	1,013,581
Seattle-Tacoma-Bellevue, WA	61,056	164	3	4,011,553
Portland-Vancouver-Hillsboro, OR-WA	50,905	136	7	2,510,696

Note: US data is converted to Canadian dollars using the PPP conversion rate.

Sources: Statistics Canada, 2023a; 2023b; US Census Bureau, 2019; US Census Bureau, 2023; OECD, 2023; US Bureau of Labor Statistics, 2023; calculations by authors.

Measuring British Columbia's Prosperity Gap at the Metropolitan Level

This new analysis of the prosperity gap zooms in at the level of major urban areas to assess the extent of variation across British Columbia's large metropolitan areas compared to large jurisdictions in Alberta and nearby US states. Rather than GDP per capita, this analysis focused primarily on median employment income in order to shed additional light on labour market performance and to focus on outcomes for middle-income individuals.

Although there is some variation both with respect to median employment income levels and rates of

growth, the data presented here shows that the problem of a prosperity gap is widespread across British Columbia metros. British Columbia's CMAs are generally clustered near the bottom of the regional rankings in terms of their median employment income levels in 2019. Further, the evidence presented here suggests that the gaps on the whole did not meaningfully close between British Columbia's CMAs and neighbouring metros, and in many cases grew.

References

- Eisen, Ben, and Joel Emes (2023). *The End of Spending Restraint in British Columbia*. Fraser Institute. <<https://www.fraserinstitute.org/studies/end-of-spending-restraint-in-british-columbia>>, as of October 27, 2023.
- Eisen, Ben, and Nathaniel Li (2023). *Measuring British Columbia's Prosperity Gap*. Fraser Institute. <<https://www.fraserinstitute.org/studies/measuring-british-columbias-prosperity-gap>>, as of October 27, 2023.
- Organization for Economic Co-operation and Development [OECD] (2023). Purchasing Power Parities (PPP) (indicator). OECD. <<https://data.oecd.org/conversion/purchasing-power-parities-ppp.htm>>, as of October 27, 2023.
- Statistics Canada (2023a). Table 11-10-0004-01: Selected Characteristics of Tax Filers and Dependents, Income and Demographics (final T1 Family File). <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110000401>>
- Statistics Canada (2023b). Table 18-10-0005-01. Consumer Price Index, Annual Average, Not Seasonally Adjusted. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000501>>, as of October 27, 2023.
- United States, Bureau of Economic Analysis [BEA] (2023). Regional Data: GDP and Personal Income. Government of the United States. <<https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1&acrdn=2>>, as of October 27, 2023.
- United States, Bureau of Labor Statistics (2023). Consumer Price Index. Government of the United States. <<https://www.bls.gov/cpi/research-series/r-cpi-u-rs-home.htm>>, as of October 27, 2023.
- United States, Census Bureau (multiple years). S2001: Earnings in the Past 12 Months. *American Community Survey*. Government of the United States. <<https://data.census.gov/table?q=S2001&tid=ACSST1Y2021.S2002>>, as of October 27, 2023.
- United States, Census Bureau (2023). Metro Area History. *Historical Delineation Files*. Government of the United States. <<https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/historical-delineation-files.html>>, as of October 27, 2023.



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Acknowledgments

The authors extend their thanks to the Lotte and John Hecht Memorial Foundation for supporting this project. They also wish to thank the anonymous reviewers for their suggestions and feedback. Any remaining errors or omissions are the sole responsibility of the authors. As the researchers have worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, and its supporters.

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ISSN 2291-8620

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