

Impact of COVID-19 on Census 2021

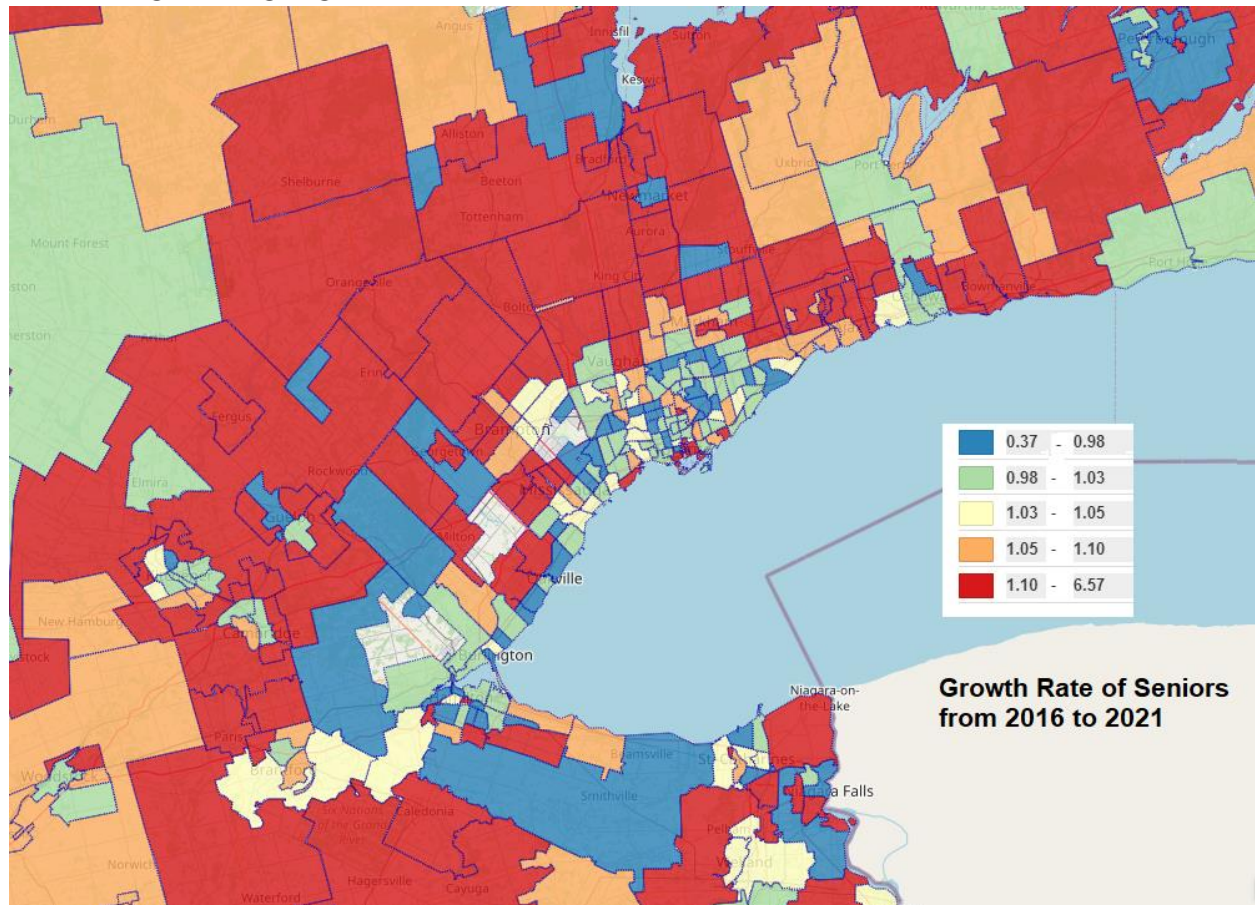
Manifold Data Mining Inc.

We have been analyzing the published Census 2021 data and comparing them with historical trends, recent labour force surveys, post-census surveys from Statistics Canada, and surveys from leading market research firms and consulting companies.

The 2021 Census is a snapshot of the Canadian population on May 11, 2021, conducted during the 3rd wave of the COVID-19 pandemic outbreak. At this time, the majority of Canadians had not yet received their first COVID-19 vaccine dose, and only 4% had received their second dose. Approximately 80% of the Census questionnaires were completed online. COVID-19 significantly impacted Census 2021, as people adjusted their behaviour and spending to new circumstances. Some impacts will likely be long-lasting, such as commuting to work and the increased prevalence of working from home, while others, like government income subsidies, and rent subsidies, were short-lived. Below, we summarize several key impacted statistics to highlight the importance of exercising caution when comparing Census 2021 data with historical trends or our estimates. While many statistics are expected to return to their trendline, there may be a long-tail effect to consider.

1) Impact of COVID on Total Population Count.

A sizable portion of the population moved from their urban residences to cottage/vacation/second residence homes around Census time. On Census Day, May 11, 2021, many of the 11% of Canadians who owned a vacation home or cottage identified these dwellings as their usual place of residence. Canadians with second homes were primarily aged 55 and older. There was also a migration of older people to cottages, small towns, and satellite cities of larger CMAs (e.g., from Toronto to Hamilton, Brantford, Peterborough, etc.). Thus, Census 2021 reflected a systematic decrease in the older population in major cities across Canada. However, this effect was largely temporary. Most of these older Canadians had lived in urban residences where access to healthcare and amenities was better than in rural regions. With the rapid development of senior homes in urban areas, the easing of COVID restrictions, and the increased access to and uptake of vaccines, many of these individuals are returning to their urban residences. We anticipate a continuing trend of more seniors returning to these urban areas for better accessibility to hospitals, retailers, public transit, and other amenities.



Similarly, during COVID, most college and university students were forced to leave campus and return home to their parents. Even in 2021, many classes were primarily online, prompting students to stay at home. In the 2021/2022 school year, campus residences reopened, classes returned to be in-person or hybrid, and fully remote classes set up during COVID almost completely disappeared as students returned to campus. At the same time, many companies asked employees to return to their offices at least 2 days a week. People who moved outside of the cities where they work and attend school now face longer commutes to their workplaces and educational centres. Consequently, many individuals now choose second residences near their workplaces and schools for the weekdays, returning to their primary homes on weekends or when they do not need to be in the office. All these factors contribute to variations in the population count from the Census 2021.

In short, the 2021 Census population count may not reflect the current situation, and anyone relying on this data will need to make the necessary adjustments to bring the 2021 data up to date. At Manifold, we capture long-term trends, and our data products closely describe the current population statistics.

2) Undercoverage of Population in Major Cities

In each Census, a significant portion of the population is inevitably omitted due to various factors. These may include individuals travelling, residences being challenging to locate, and some people opting not to participate. The City of Toronto estimates that the 2021 Census has a 6% net undercoverage for the Toronto CMA, which is double the net undercoverage from 2016. Further details are available on page 3 of this [document](#).

Upon analyzing trends in historical Censuses, we found evidence of a systematic undercount of the population in urban centres of major cities across Canada and a moderate increase in population in peripheral communities and cottage countries.

Statistics Canada does not expect the net undercoverage results to be ready before September 2023.

3) Return of Overseas Canadians

A sizable number of older Canadians and immigrants living overseas (e.g., snowbirds in Florida, the Caribbean, Hong Kong, South Asia, and Europe, among others) have been returning to Canada due to COVID, environmental, war and geo-political issues. This contributes to the increase in the proportion of seniors among the total population. This trend is unlikely to fade soon.

4) Changes in the Census 2021 Geography

There were changes in geography from Census 2016 to Census 2021. For example, 58 CMAs/CAs changed their definitions or coverage (i.e., nearly 40% of CMAs/CAs needed adjustment when compared with Census 2016).

In the Census 2016, Canada had a total of 966 census subdivisions. In the 2021 Census, 93 CSDs were added and 47 CSDs were removed. Overall, with the increase in CSDs, CMAs or CAs, Canada's geography changed from 966 CSDs to 1,012 in 2021.

For details, please refer to this Statistics Canada publication:

<https://www150.statcan.gc.ca/n1/pub/92f0138m/92f0138m2019002-eng.htm>

Manifold delivers data products updated to the 2021 Census Geography. Here are some of the geographic changes:

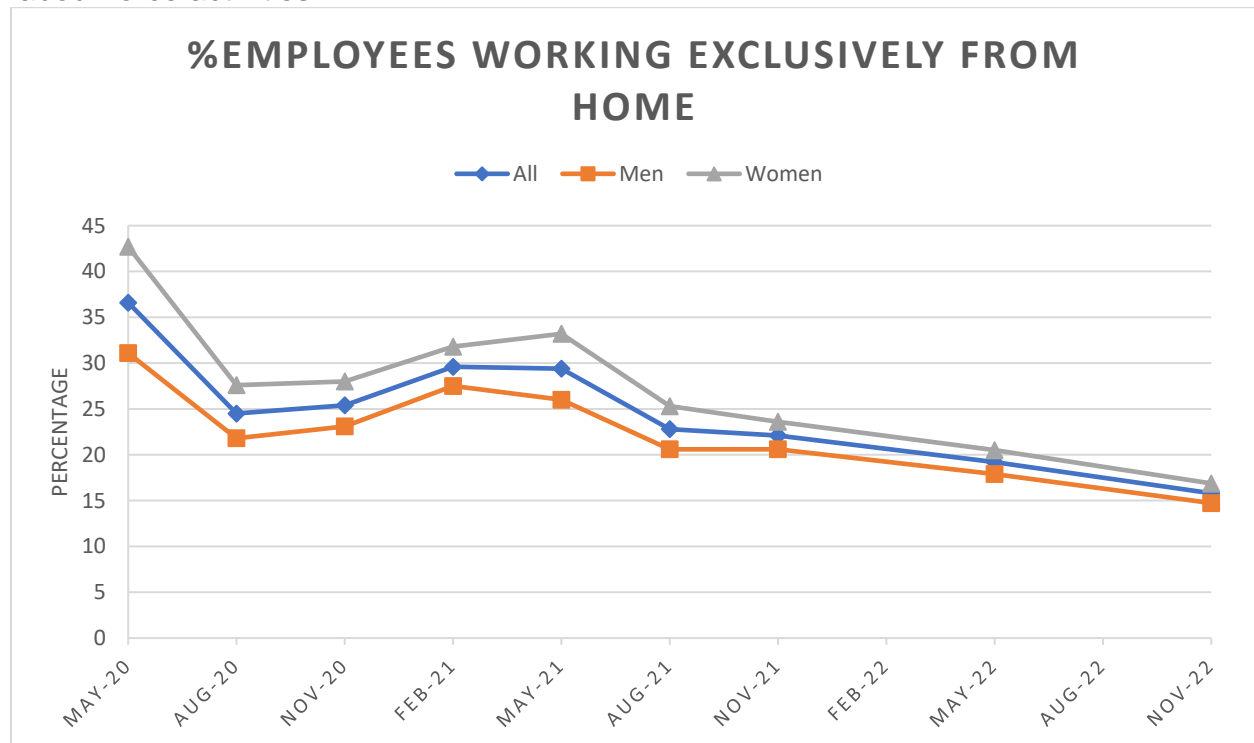
- Windsor CMA gained 3 CSDs, comprising 20% of the population of Windsor CMA.
- Ottawa CMA gained 6 CSDs and 2 CAs (Arnprior and Carleton Place), comprising 5% of the population of Ottawa CMA.
- Halifax CMA now includes the Municipal District of East Hants and the Indian Reserve of Indian Brook 14

- Six former CAs are now recognized as CMAs: Fredericton (N.B), Drummondville (Que.), Red Deer (Alta), Kamloops (B.C.) and Nanaimo (B.C.).
- Five new CAs were created based on their largest municipality (census subdivisions): Sainte-Agathe-des-Monts (Que.), Amos (Que.), Essa (Ont.), Trail (B.C.) and Ladysmith (B.C.)
- Bay Roberts (N.L.), and Cold Lake (Alta.) are now retired due to the core population dropping below 100,000.
- Numerous CSDs changed definitions in 2021: <https://www150.statcan.gc.ca/n1/pub/92f0009x/tbl/tbl01-eng.htm>

Upon request, we may deliver data products from previous Census Geographies.

5) Work from Home and Commute to Workplace

The number of people working from home spiked significantly in the first stage of the COVID-19 pandemic. According to [Statistics Canada](#), on the 2021 Census Day, the percentage of employees working from home was still highly elevated at 30%. However, it has gradually decreased. As of November 2022, the percentage of employees working from home has dropped by half to 16%. Therefore, Census 2021 data on Place of Work and Commute to Work need to be adjusted and updated to reflect current labour force activities.



In addition, factors such as the re-opening of businesses, a surge in early retirement, re-entry into the labour market due to the deteriorating economic situation, and high inflation are all playing complex roles in labour force activities. To minimize biases and outliers in Census 2021, we have been following the most recent labour force surveys from Statistics Canada, as well as Bank of Canada research reports on consumer financial behaviours, and incorporating new trends into our estimates.

6) Government Financial Support to People during Covid

Both federal and provincial governments provided many income supports to Canadians, such as CERB, CRB, CRSB, CWLB, extended EI, mortgage payment deferrals, interest waivers for student loans and others. These income supports made a significant impact on many low-income Canadians. In 2020, 68.4% or 20.7 million people received support from at least one pandemic relief program.

However, after 2021, many of these income supports were removed. The income statistics reports from Census 2021 paint a rosier picture than the current reality for vulnerable consumers, especially in light of rapidly rising inflation and interest rates. Income from the pandemic relief programs skewed the median after-tax income for the Census. After-tax income, used to measure how much money Canadians have to support their consumption, investment, and saving needs, was \$32,900. Benefits accounted for a much higher share of the median after-tax income among recipients with lower income.

On the other hand, travel restrictions and lockdowns affecting catering and hospitality businesses have enabled Canadians in the top income quintiles to save significantly more than others. Many of these top earners chose to upgrade or improve their homes. Consequently, data on homeowners' major expenses in Census 2021 will not correctly reflect the current situation.

Summary

COVID-19 has caused one-time biases in Census 2021. We candidly advise our clients to use Census 2021 with caution. We recommend using our data products which already incorporate the appropriate adjustments. Our team is always happy to discuss your needs with you.

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