Convenient access to public transport in Canada, 2023

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Convenient access to public transport is generally lower in smaller metropolitan areas

In 2023, Canada's three largest census metropolitan areas (CMAs) (Toronto, Montréal and Vancouver) had higher rates of convenient access to public transit, each with over 82% of residents living within 500 metres of a public transit stop.

CMAs with fewer than 500,000 residents tended to have lower rates of convenient access to public transportation, generally ranging from 37% to 79%, with a few notable exceptions. Residents of Victoria, Regina and Red Deer, for example, had relatively higher rates of convenient access (ranging from 84% to 93%) compared with other CMAs. In contrast, residents of Oshawa (62%) and Windsor (50%) had lower rates of convenient access to public transit for cities of their size.

Sustainable Development Goals

On January 1, 2016, the world officially began implementation of the 2030 Agenda for Sustainable Development—United Nations' transformative plan of action that addresses urgent global challenges over the next 15 years. The plan is based on 17 specific sustainable development goals.

The publication "Proportion of population having convenient access to public transportation in Canada's census metropolitan areas" is an example of how Statistics Canada supports the reporting on the Global Goals for Sustainable Development. This release will be used in helping to measure the following goal:



Note to readers

The role of transport in sustainable development was first recognized at the 1992 United Nations (UN) Conference on Environment and Development, also known as the Earth Summit, and reinforced in its outcome document—Agenda 21.

The data in this release provide information for Indicator 11.2.1, proportion of population that has convenient access to public transport, by sex, age and persons with disabilities, which is included as part of the Sustainable Development Goal (SDG) 11 – Sustainable cities and communities. This indicator was adopted under the Canadian Indicator Framework as Indicator 11.4.1, percentage of the population living within 500 metres of a public transport stop.

The UN-recommended standard to measure convenient access to public transportation (living within 500-metre walking distance, along the street network, of a public transport access point [United Nations Sustainable Development Goal 11.2.1 metadata]) was applied.

Sustainable Development Goal 11.2.1 for Canada

Data on the location of public transportation used to calculate this indicator were obtained from municipal websites or local transit authorities during winter 2023. The data included information on public transportation, which, within the scope of this project, was considered a regularly scheduled transport service with assigned physical stop locations and excluded on-demand or on-call services like taxis, taxi buses or Uber.

Based on the data for 1,111 municipalities for which public transit data were available, the national value for SDG 11.2.1 in 2023 was 75.1%.

Sustainable Development Goals

This release is Statistics Canada's second official dissemination of this indicator for Canada but is the first release to use road network data to calculate the walking distance to a public transit stop. This is also the first release where the counts of population living within 500 meters of a transit bus stop were disaggregated by the following dimensions, as proposed by the United Nations:

- mode that could be used to reach public transport (walking and cycling)
- type of public transport system (low-capacity and high-capacity systems)
- location (urban and rural)
- sex (women+ and men+)
- age group (0 to 14, 15 to 64, and 65 and older)
- income group (after-tax income groups in 2020 for the population aged 15 years and older in private households).

The first release of SDG 11.2.1 in 2020 included estimates produced using straight-line or Euclidean distances. These estimates were recalculated applying the street network approach and replace the previously released values. The table published as part of this product, Proximity to Public Transportation in Canada's Metropolitan Cities, and Related Commuting Data, has been replaced with Table 23-10-0311-01, which contains the recalculated estimates.

Data sources, methodology, and limitations

The summary data presented in this release rely on the census metropolitan area (CMA) and census agglomeration (CA) concepts (see 2021 Census of Population Dictionary for the full definition). For reference year 2023, the data on public transportation was obtained for 1,111 municipalities, which were collectively covering 889 census subdivisions (CSDs) in all 41 CMAs and 70 of the 111 CAs in the Standard Geographical Classification of the 2021 Census of Population and 222 of the 4,272 CSDs outside CMAs and CAs. Based on the 2021 Census population counts, the coverage rate is estimated at 97% of the population in CMAs and CAs, and 84% of the total population in Canada.

The following method was used to estimate the percentage of Canadians living within 500 metres of a public transport access point:

- 1. Locations of public transport stops of all kinds (bus, trolley, surface and underground rail) were obtained from the General Transit Feed Specification (GTFS) and other data formats from cities' websites or local transit authorities, where readily available.
- 2. Public transit stop locations were integrated with counts data from Statistics Canada's 2021 Census of Population at the blockface geographic level. The proportion of a census blockface that was within a service area that is 500-metre walking distance, along the street network (i.e., convenient access area), of public transit stops was calculated. Based on these estimates, the population with convenient access to public transit was estimated for each municipality and was disaggregated by various characteristics based on census profile data at the dissemination area level.

3. In the final step, the total population with convenient access to public transport was divided by the total population to obtain the proportion. These values were then aggregated by CMA or CA, where applicable, to produce Indicator 11.2.1, following the UNSDG quidelines.

For the areas not covered by the data on public transportation, either the data was not readily available in a standard geospatial format, or such data did not exist due to the lack of public transit service. Therefore, the SDG indicator 11.2.1 could overestimate convenient access to public transportation at the higher levels of aggregation (national, provincial, and territorial levels). The results by CMAs and CAs are not affected.

Available tables: 23-10-0309-01 and 23-10-0311-01.

Definitions, data sources and methods: survey number 3901.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).