

Opportunities of working remotely in rural labour markets: Small area estimation from the Canadian Survey on Business Conditions, fourth quarter 2022 and first quarter 2023

Released at 8:30 a.m. Eastern time in *The Daily*, Tuesday, July 4, 2023

The data related to remote work opportunities in rural labour markets are now available. The data are generated using small area estimation methods applied to the Canadian Survey on Business Conditions. New statistics are available for the fourth quarter of 2022 and the first quarter of 2023, by sector (goods and services) and for all rural labour markets across Canada, using a geographical concept called the Self-contained Labour Area.

Note to readers

Rural regions present a diversity of economic and social conditions; nevertheless, it is widely recognized that timely and geographically granular information on these regions is often lacking. To respond to a growing demand for rural data, Statistics Canada is using innovative approaches.

This experimental release looks at remote work opportunities in rural labour markets. This analysis expands on the quarterly Canadian Survey on Business Conditions by applying new estimation methods to these data and using a geographic concept, particularly relevant for rural communities.

Estimates of remote work opportunities are generated using small area estimation (SAE) methods and are produced by Self-contained Labour Areas (SLAs), a geographic concept that defines functional rural areas based on commuting flows; hence, a comparable concept to that used for metropolitan areas. Rural SLAs cover all Canadian municipalities outside census metropolitan areas (CMA) and census agglomerations (CA). Each SLA consists of a self-contained grouping of areas where the majority of residents both work and live. Rural SLAs thus include only commuting flows among non-CMA/CA municipalities. The SLAs use census subdivisions as building blocks, and the version used in this analysis is based on 2016 Census of Population data. For more information on the methods used to delineate SLAs, see [Organisation for Economic Co-operation and Development \(2020\)](#).

SAE methods are statistical techniques used to estimate population characteristics for small areas, such as neighbourhoods or rural areas, where sample sizes are typically too small to generate reliable estimates. SAE works by combining data from a survey sample with data from other sources to build a statistical model that can be used to estimate population characteristics for the small area. This innovative approach enables estimates for relatively small rural areas, highlighting the diversity of rural conditions as opposed to having a single estimate encompassing all rural regions.

For this analysis, sample data are from the Canadian Survey on Business Conditions, the fourth quarter of 2022 and the first quarter of 2023. Other sources of data include Generic Survey Universe File created from Statistics Canada's Business Register system and the 2021 Census of Population. Using the auxiliary information, the SAE model estimates the proportions of businesses, classified by general industrial sector (service providers and goods producers defined by [Variant of NAICS 2017 Version 3.0 - Goods and services producing industries](#)), that would primarily offer remote work opportunities to their workforce over the next three months for the reference quarter.

The final estimates are prepared by combining three sources of results. For CMAs, because they have a relatively larger sample size, the direct estimates are adopted. Otherwise, the SAE model estimates are used. For the SAE model estimates where the survey sample is available, the final estimate is called "composite estimate" and combines the direct estimate and the model result; for the non-sampled area, the final estimate is "synthetic estimate" because it is derived from the model only.



Definitions, data sources and methods: survey number [5318](#).

The product "[Rural Data Viewer](#)," part of *Statistics Canada - Data Visualization Products (71-607-X)*, is now available. The complete dataset is available upon request.

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).