

# Data for Rural Communities

Building innovative approaches for rural data in Canada

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Centre for Special Business Projects

February 21, 2023



A better Canada driven by our agency's leadership in expanding knowledge and insights.



Statistics  
Canada

Statistique  
Canada

Canada



# Overview

## 1. Background

Characterizing rural data disaggregation

## 2. Taking Stock

Current pillars of work and business trends

New and exploratory projects to expand rural data

## 3. Looking Forward

Opportunities for geographic disaggregation in statistical programs

# What is Rural?

Rurality is typically defined along 3 dimensions

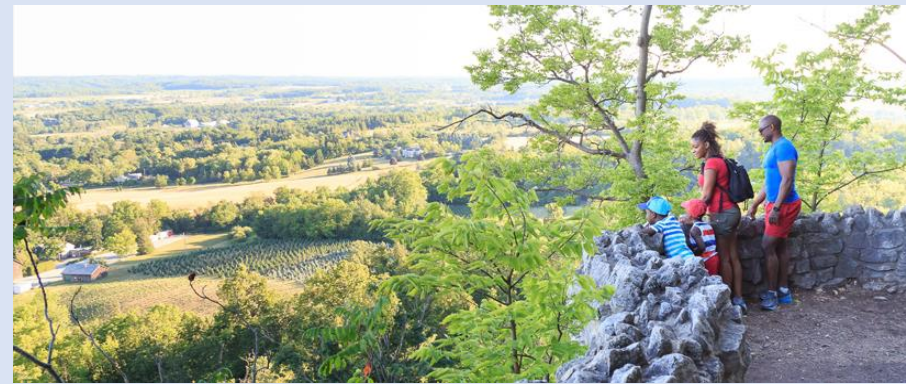
1. (Small) **population size**
2. (Low) **population density**
3. (Large) **distance to agglomerations**

Combinations of these 3 dimensions result in

- **different rural landscapes**
- **diverse rural opportunities and challenges**



Twillingate, Newfoundland and Labrador



Milton, Ontario



Town of Elrose, Saskatchewan



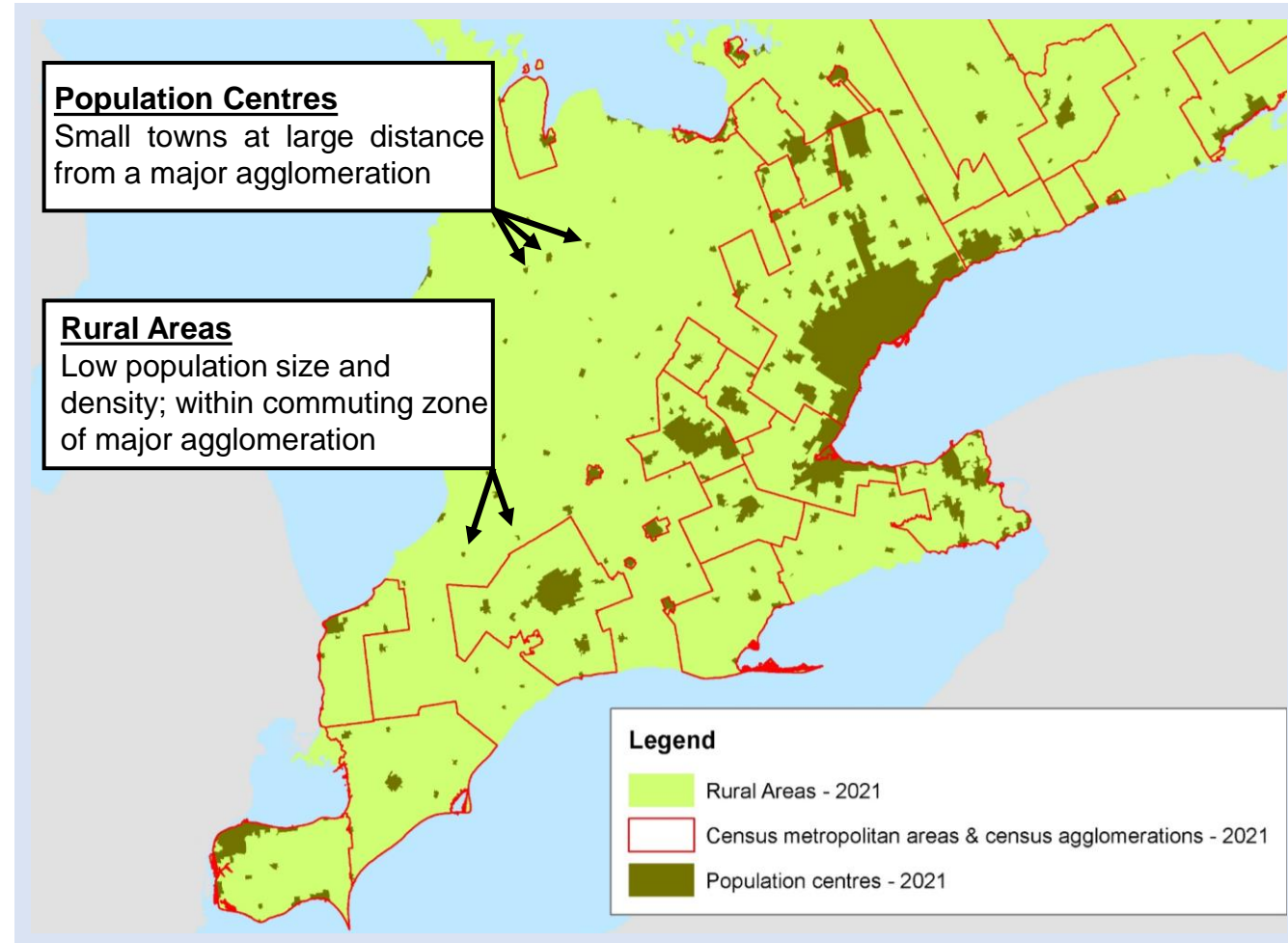
# Two Prevailing Definitions of Rural used by Statistics Canada

## RURAL AREAS (standard)

- Standard definition of the Census of Population (population and density driven)
- Areas outside population centres (population  $\geq 1000$  and density of  $\geq 400$  people per km<sup>2</sup>)
- Includes area in the commuting zones of metropolitan regions

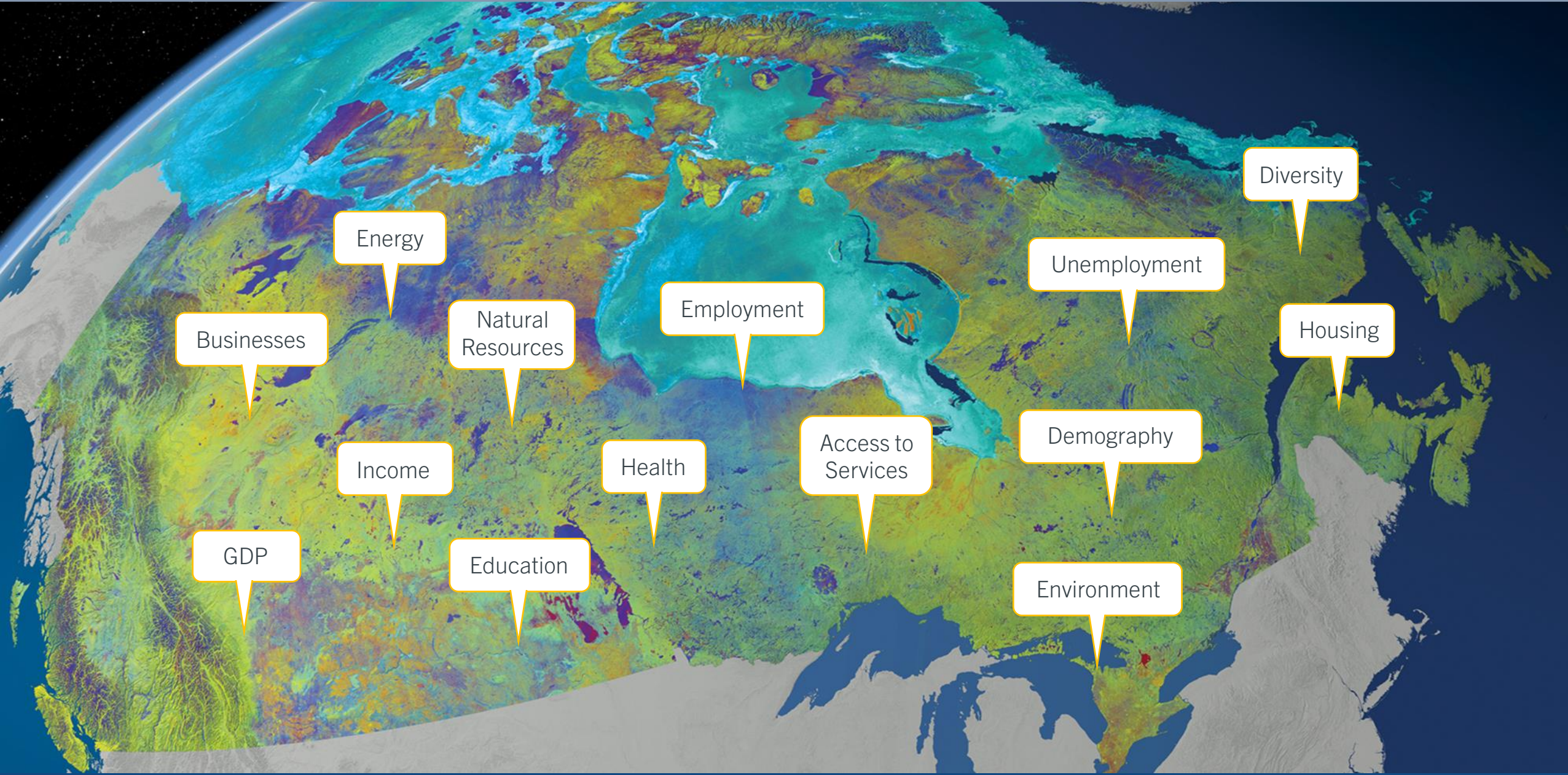
## RURAL AND SMALL TOWN

- Definition with greater emphasis on distance from metropolitan areas
- Areas outside Census Metropolitan Areas (CMA) and Census Agglomerations (CA) [non-CMA/CA]
- Includes small population centres outside the commuting zones of metropolitan areas
- Excludes rural areas inside CMAs/CAs





# What are the data needs of rural Canadians?





# Sharpening the rural focus | Rural Canada Statistics Portal

The Rural Canada Statistics portal was launched in August 2021 and is updated on a regular basis

The portal will increasingly become a single-window approach for rural data and analyses

## Examples of Outputs | Fiscal Year 2021/22

- Quarterly analysis of rural business conditions
- Rural Databases
  - Rural Canada Business Profiles
- Data visualizations
  - Rural Employment
- Outreach and Communication
  - Rural data workshop: *Open Data for Rural Communities: Measuring Access to Services*

The screenshot shows the Rural Canada Statistics Portal interface. At the top, there is a navigation bar with the 'RURAL CANADA STATISTICS' logo and social media icons. Below the navigation bar, there is a main content area with several sections:

- Features:** A carousel slide titled 'A profile of businesses in rural Canada, 2020' with navigation arrows and a 'Play' button.
- Rural and Small Town Canada Analysis Bulletin:** A section describing a series of analytical articles on socio-economic conditions in rural communities.
- Key indicators:** A table showing:
 

<a href="#">Rural employment</a> (2022)	2,526.8 thousand persons
<a href="#">Rural unemployment rate</a> (2022)	5.3%
<a href="#">Rural population</a> (2021 Census of Population)	5,957,695 persons
- Data Visualizations:** A banner for interactive rural data visualizations.
- Find data on:** A grid of icons and links for:
  - Business performance and ownership
  - Health
  - Information and communications technology
  - Labour, income and spending
  - Population and demography
  - Society and community
- Rural Data Viewer:** A section for an interactive mapping application.
- COVID-19 and Rural Canada:** A section for articles on the impact of the COVID-19 pandemic.

# Business Trends | New Insights on Rural Businesses

## Canadian Survey on Business Conditions

provides timely and detailed information on the environment in which businesses are operating and their expectations over the short and medium term

A new analysis of business tax returns, filed with the Canada Revenue Agency to profile businesses across rural and urban regions

Includes information such as

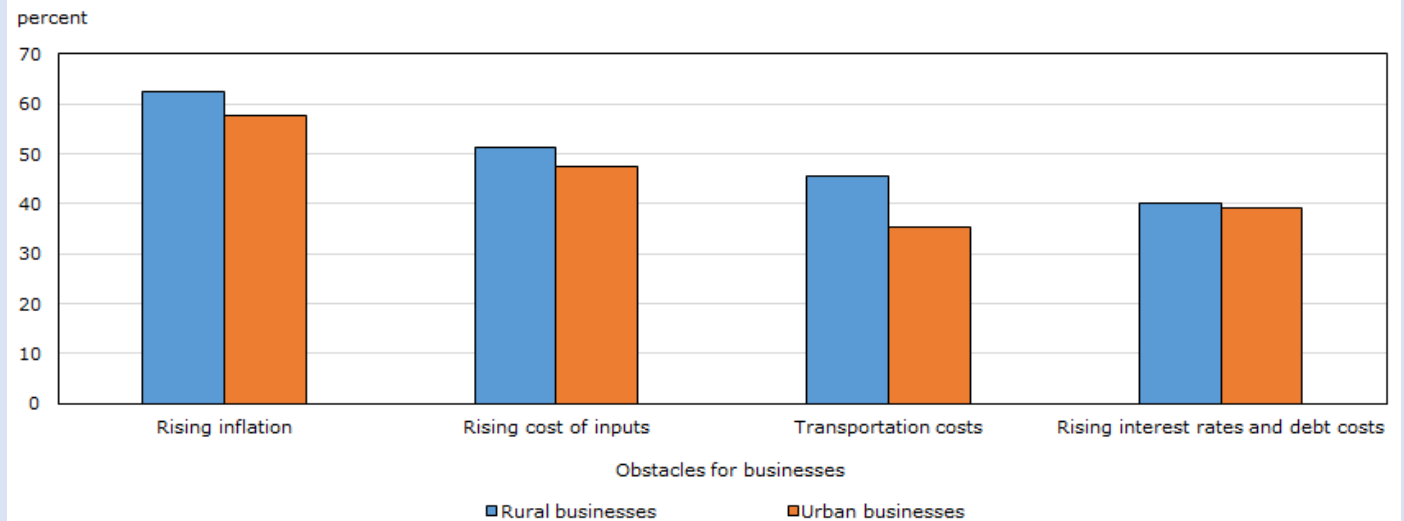
- Business adaptation and adjustment
- Business performance
- Labour
- Revenue and expenditures
- Wages, salaries and other earnings

## QUARTERLY OUTLOOK ON RURAL BUSINESSES

### Key Insights from Fiscal Year Q4 2022

Over three-fifths (62.4%) of rural businesses expected rising inflation to be an obstacle over the next three months. Other common short-term obstacles included the rising cost of inputs (51.4%), transportation costs (45.6%), and rising interest rates and debt costs (40.2%).

#### Top four obstacles for rural businesses over the next three months



**Note:** Figures for urban businesses are provided for comparison only. They do not have the same top four obstacles as rural businesses.  
**Source:** Canadian Survey on Business Conditions, fourth quarter of 2022.

# Business Trends | New Insights on Rural Businesses

## Rural Canada Business Profiles

provides financial information on small and medium-size businesses across Canada

Produces more than 30 business performance benchmarks including distribution of total revenue, business counts, profit margin, financial ratios etc.

Grouped by profitable and non-profitable businesses and NAICS

## A profile of businesses in rural Canada, 2020

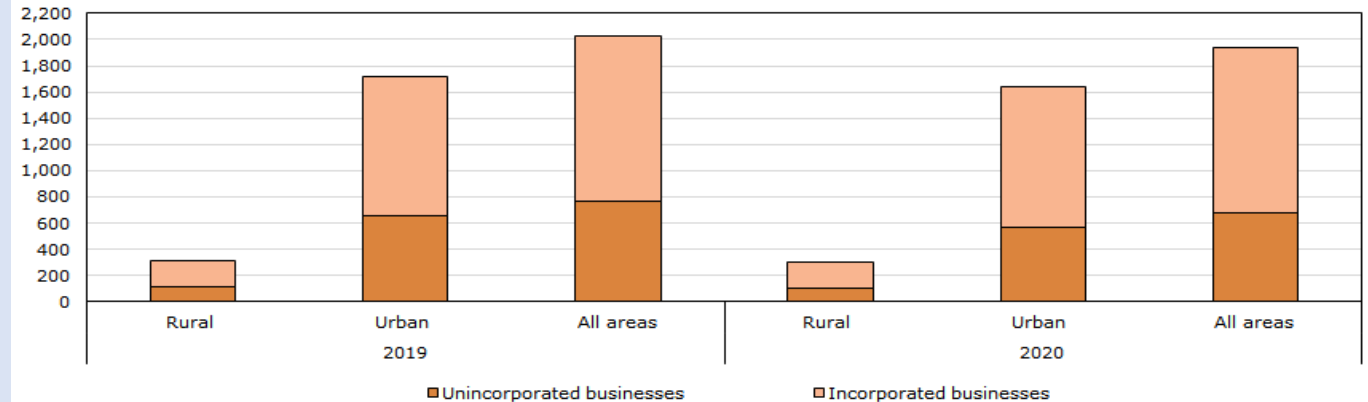
### Key Insights from 2020

In 2020, there were nearly 300,000 small businesses located in rural areas, comprising 15.5% of all small businesses in Canada. Medium-sized businesses located in rural areas were just above 7,500 units, making up 15.1% of all medium-sized businesses in Canada.

The number of small businesses declined since 2019 by 4.1% in rural areas and 4.9% in urban areas.

### Counts of small businesses, all industries, Canada, by rural and urban areas and incorporation status, 2019-2020

count of businesses (x 1,000)



**Note:** All industries refers to all industries except: finance and insurance; and, public administration.

**Sources:** Statistics Canada, Rural Canada Business Profiles, 2017 to 2019, and Rural Canada Business Profiles, 2020.



# Business Trends | New Insights on Rural Businesses

## Rural Employment – Interactive Dashboard

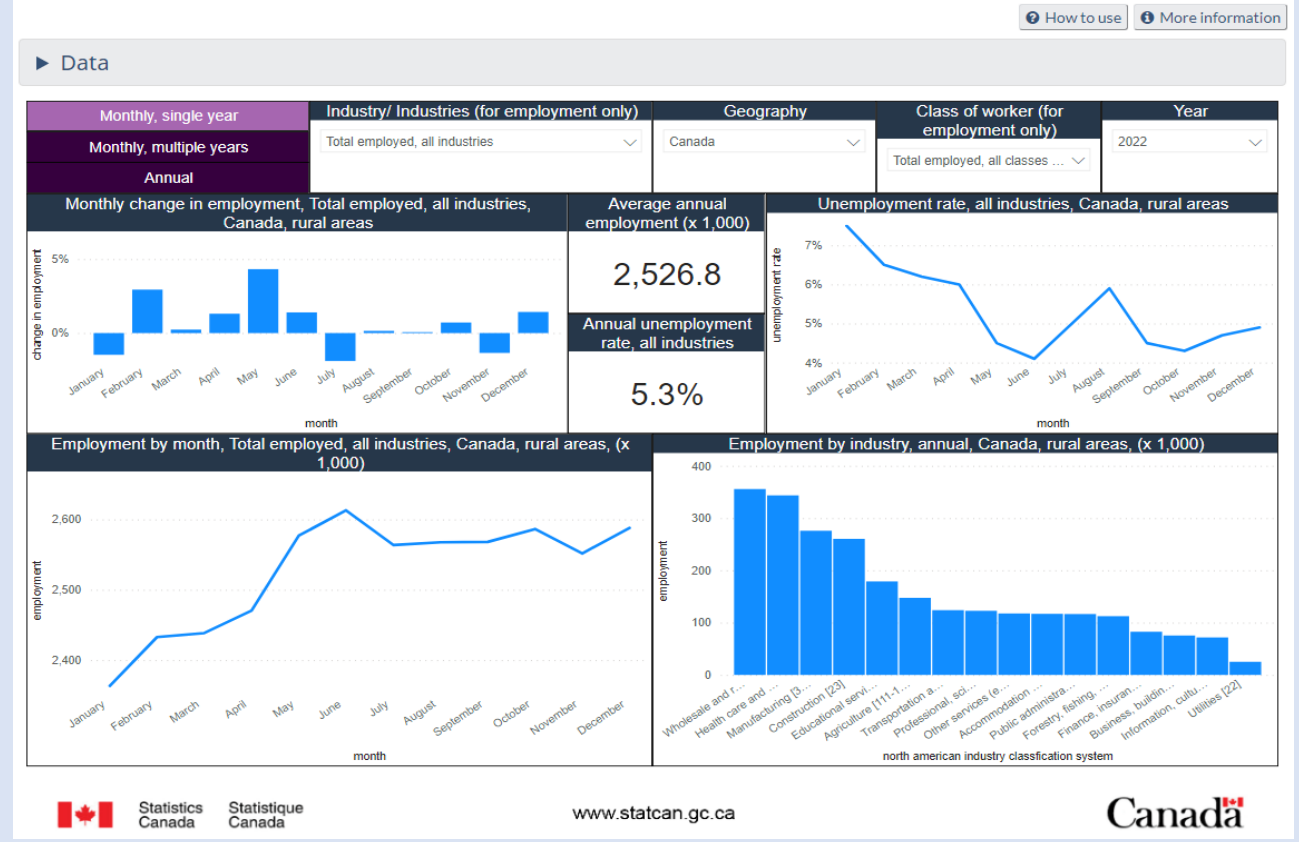
provides employment and unemployment rates in rural areas of Canada

Derived from the Labour Force Survey to produce unemployment rate and other labour market indicators (i.e., employment rate, participation rate)

Monthly and annual data available from 2011 to current released year

Grouped by geography and NAICS

## Employment by industry in rural Canada: Interactive dashboard





# Pillars for the Current Fiscal Year

## BUSINESS TRENDS

Ongoing quarterly analysis of rural business trends using the Canadian Survey on Business Conditions

Outlook on rural business expectations in the short and medium term

## QUALITY OF LIFE

Developing rural proximity measures aligned with Statistics Canada Quality of Life Framework

Key dimensions of quality of life including spatial accessibility to services and amenities (e.g., schools, healthcare, public transit)

## RURAL SNAPSHOT

Reporting on key economic and social indicators with monthly and/or annual data

Covering basic indicators of demography, employment, housing, economics etc.

## OUTREACH, COMMUNICATION, AND CAPACITY BUILDING

- Continuous development of the Rural Canada Statistics portal
- Seminars and workshops targeted to rural stakeholders, national rural research networks, and federal departments



# Quality of Life | Proximity to services and amenities for rural lifestyles

Building the **Proximity Measure Database (PMD) v2.0** to better reflect the variation in the lifestyles of Canadians in rural and remote areas

- PMD v1.0 was released in 2020 (in partnership with CMHC)
- Guided by the concept of walkable neighbourhoods - services and amenities within a short walking distance

Different types of amenity intensity reflects different regional contexts:

- **Amenity dense:** 1.0 - 1.5 km walking
- **Amenity sparse:** <30 km driving
- **Amenity scarce:** >30 km driving

**Anticipated Release Date:** Spring 2023

## PROXIMITY MEASURES 2.0

Nearly 20% of Canadians live in an **Amenity Dense Neighbourhood** - predominantly located in metropolitan areas or agglomerations

Rural Areas do not typically provide short-distance access to the **8 services** defining amenity dense areas







# New and Exploratory Projects to Expand Rural Data | Business and Socio-economic Trends

## FOR-PROFIT VS. NON-PROFIT BUSINESSES IN RURAL AREAS

Provides counts, revenue, and employment of for-profit and non-profit businesses in both rural and urban areas of Canada

Various classifications - geographic levels (i.e., Canada, province/territory); NAICS; and ICNPO (International Classification of Non-profit Organization)

**Next Release:** March 2023

## SMALL AREA ESTIMATION OF BUSINESS INDICATORS

Exploring **small area estimation (SAE) techniques** for rural areas and select business indicators from the Canadian Survey on Business Conditions

Geographic disaggregation of selected business indicators by Self-contained Labour Areas (SLA)

**Released: February 10, 2023**

## COMMUNITY AND REGIONAL DATABASE (beta)

Database comprising census of population year from 1981 onwards

Consisting of ~ 300 census variables at constant geographic boundaries for Census consolidated subdivision (CCS), and census divisions (CDs) by province

Supports research and analysis of socio-economic conditions of Canadian communities

# Business Trends | New Insights on Rural Businesses

## RURAL CANADA NON-PROFITS Key Insights from 2019

In 2019, there were over 130,000 active non-profits in Canada, of which nearly a quarter (22.5%) were located in rural Canada

Rural non-profit organizations employed just over one-tenth (11.6%) of all non-profit employees and were responsible for 7.3% of revenues generated

Over half of all rural NPOs were located in Quebec, Ontario, and Alberta

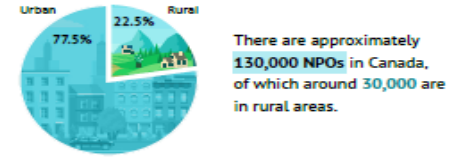
Next Release: March 2023

### NON-PROFIT ORGANIZATIONS: A RURAL PERSPECTIVE, 2019

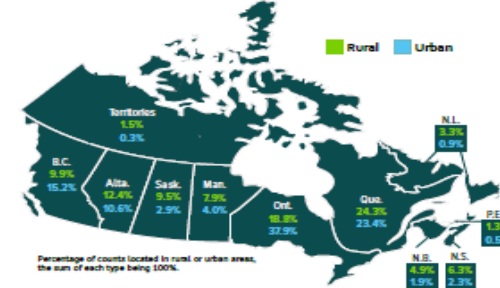
Non-profit organizations (NPOs) contribute to the well-being and development of rural communities in Canada.



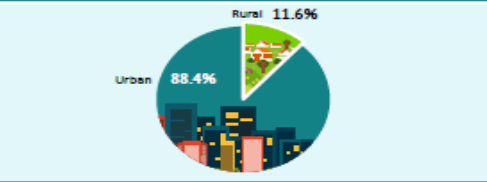
#### PROPORTION OF RURAL AND URBAN NPOs IN CANADA



#### DISTRIBUTION OF RURAL AND URBAN NPOs IN CANADA, BY PROVINCE AND TERRITORY



#### RURAL AND URBAN DISTRIBUTION OF NPO EMPLOYMENT IN CANADA

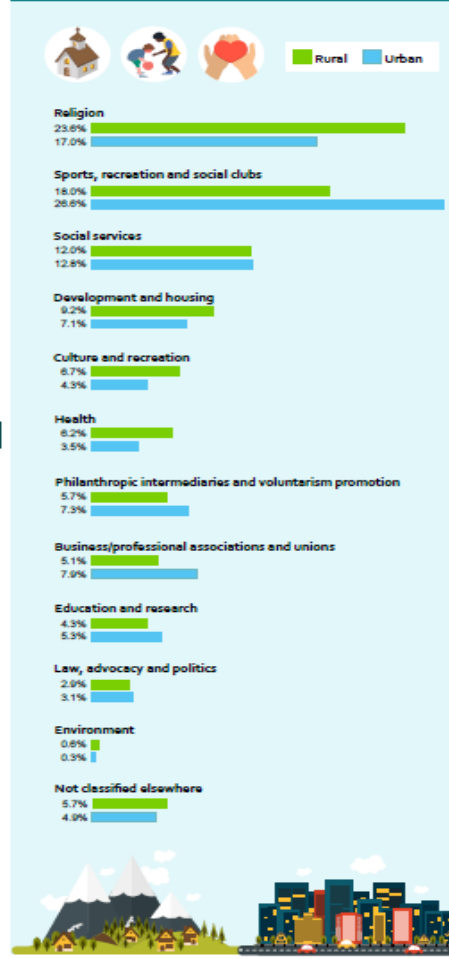


#### RURAL AND URBAN DISTRIBUTION OF NPO REVENUES IN CANADA



Note: The definition of rural areas used in the Rural Canada Non-Profits Database is all areas outside census metropolitan areas and census agglomerations.

#### NPO COUNTS BY INTERNATIONAL CLASSIFICATION OF NON-PROFIT ORGANIZATIONS ACTIVITY GROUP



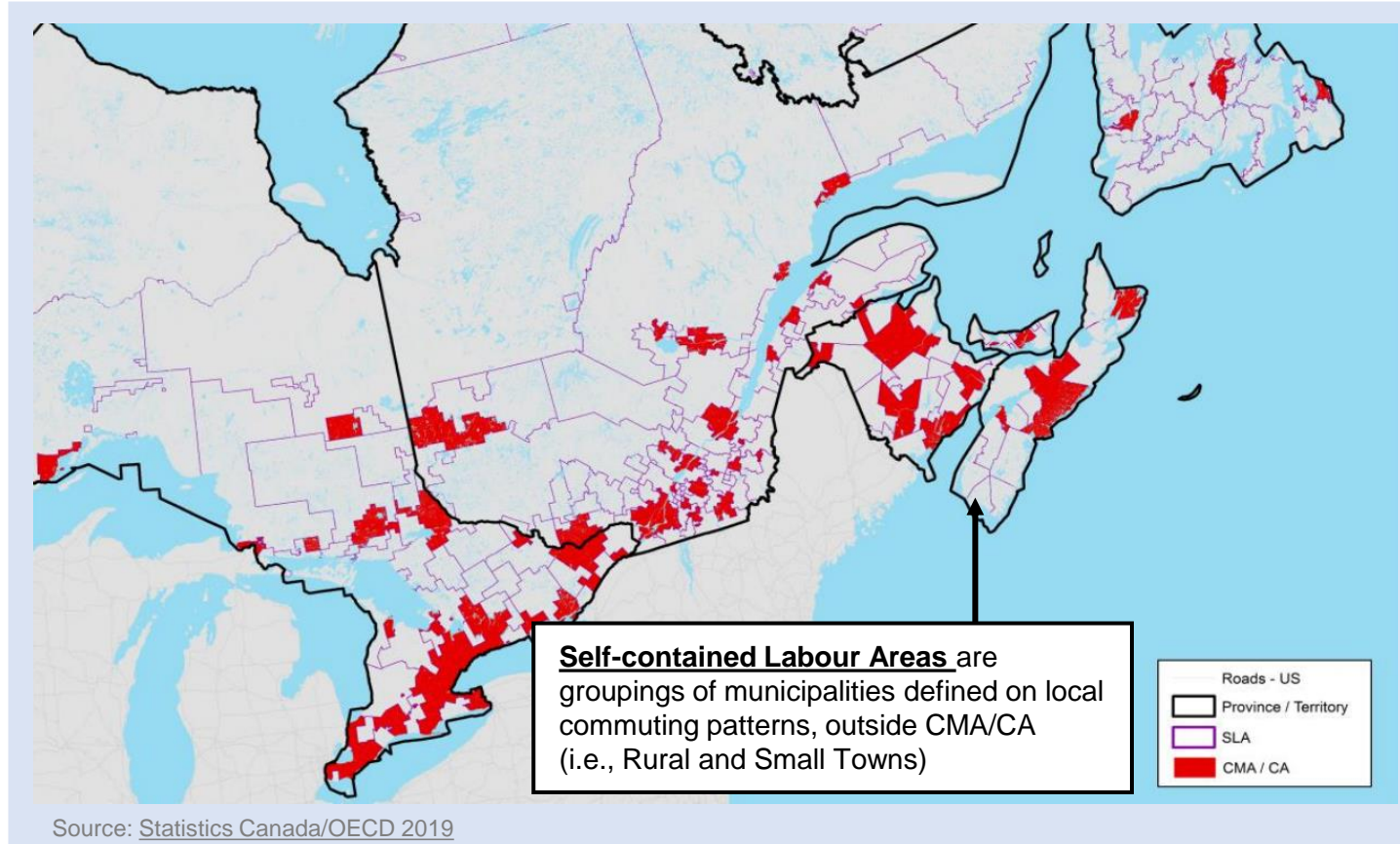
# New and Exploratory Projects to Expand Rural Data | Labour Market Indicators

## RURAL LABOUR MARKETS

Developing labour market indicators according to **Self-contained Labour Areas** - geographic regions which are defined on local commuting patterns rather than administrative boundaries

Complements existing indicators which are based on CMA/CA boundaries, and includes all areas of Canada

These new rural labour market indicators reflect local conditions, as opposed to a rural average value for an entire province





# New and Exploratory Projects to Expand Rural Data | Small Area Estimation (SAE)

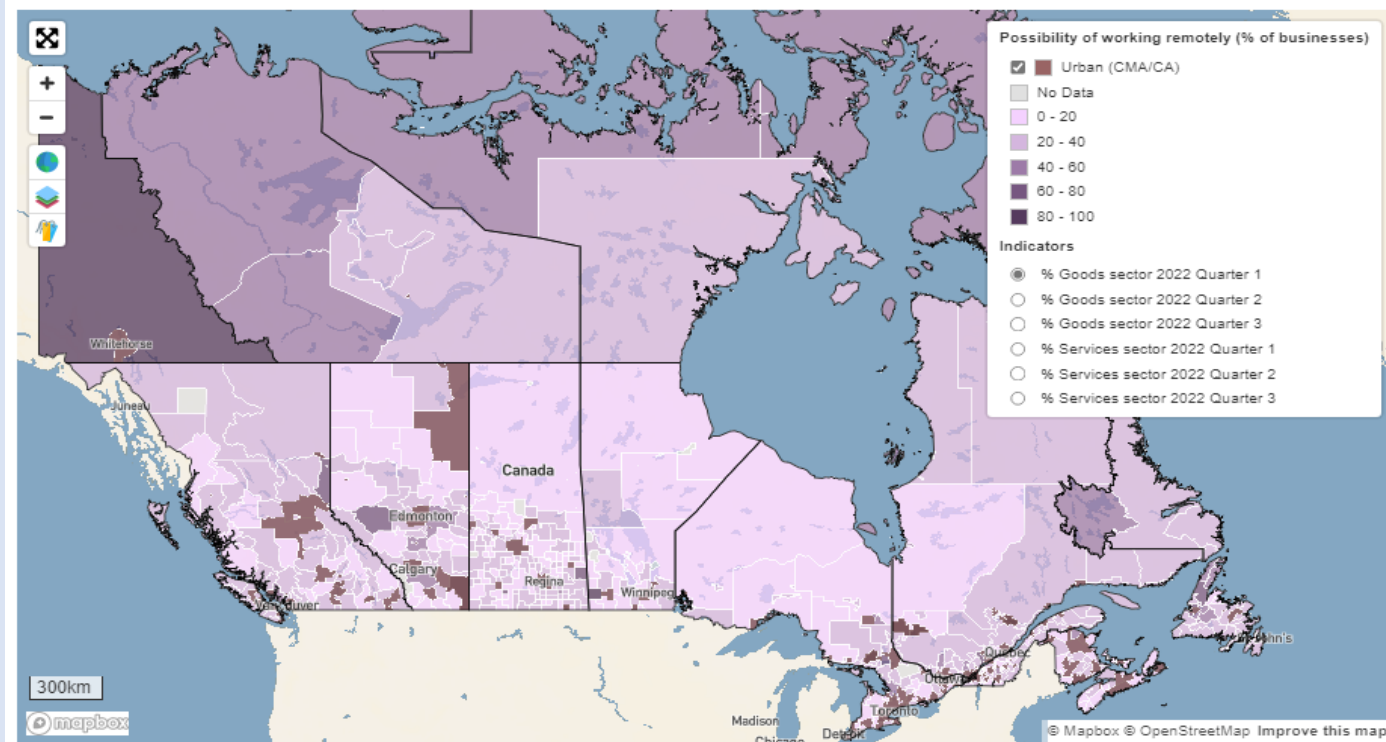
A statistical technique used to estimate population characteristics for small geographic areas, where sample sizes are too small to generate reliable estimates

Combines data from a survey sample with auxiliary data from other sources to build a statistical model and estimate population characteristics for the small area

An innovative method to uncover diverse rural conditions, as opposed a single estimate encompassing all rural regions

Available on the [Statistics Canada Rural Data Viewer](#)

## Rural Data Viewer





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## Experimental Case Study

*Survey:* Canadian Survey on Business Conditions FY 2022; Quarters 1, 2, 3

*Auxiliary Data:* Business Register; Census of Population 2021; Linkable File Environment

*Geographic Level:* Self-contained Labour Areas (SLA)

*Sector:* Goods and Services

# New and Exploratory Projects to Expand Rural Data | Small Area Estimation (SAE)

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**Over the next three months, what percentage of the employees of this business or organization is anticipated to do each of the following**

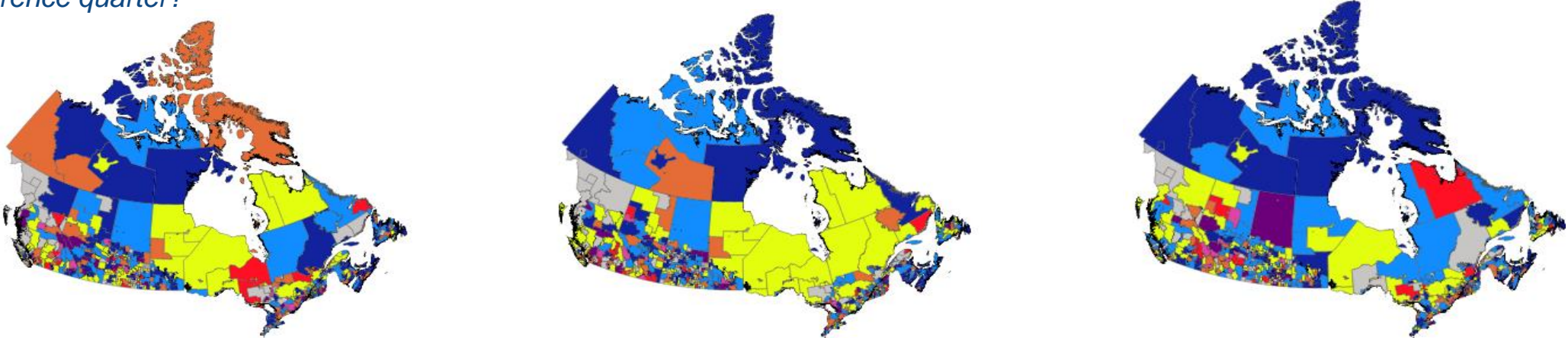
Response Options	Response options re-coded to binary type of question
A. Work on-site exclusively	If A=100% or B=100% or A+B =100% then <b>NO</b>
B. Work on-site most hours	<i>Remote working <u>is not</u> a possibility for this business</i>
C. Work the same amount of hours on-site and remotely	Otherwise <b>YES</b>
D. Work remotely most hours	<i>Remote working <u>is</u> a possibility</i>
E. Work remotely exclusively	



# Results | Small Area Estimation (SAE) – Services Sector

**Experimental Question:** *What is the percent of businesses that would primarily offer teleworking opportunities to their workforce, over the next three months for the reference quarter?*

**BEFORE  
SAE**



0.0 1.0 > 0.0 to 0.2 0.2 to 0.4 0.4 to 0.6 0.6 to 0.8 0.8 to <1.0

2022 Q1

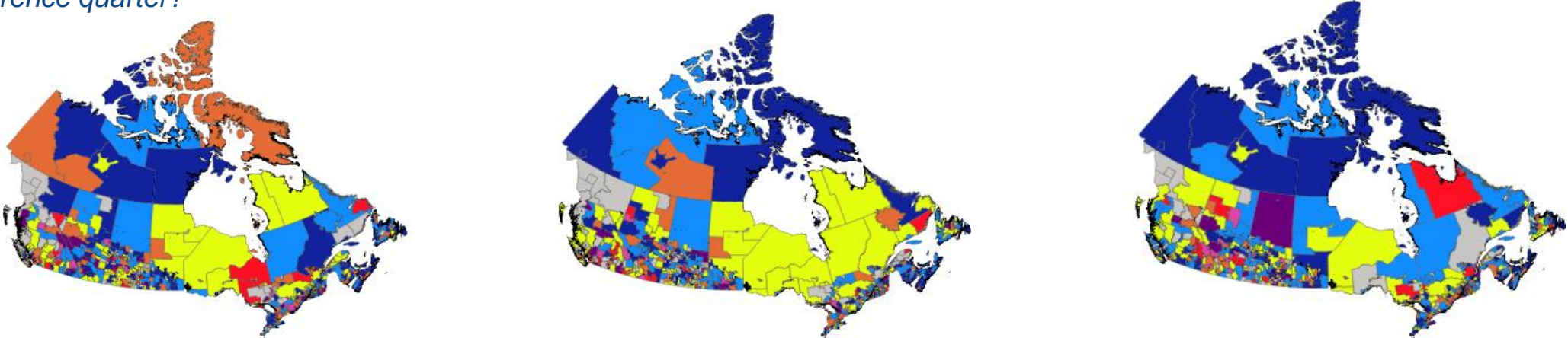
2022 Q2

2022 Q3

# Results | Small Area Estimation (SAE) – Services Sector

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**BEFORE  
SAE**

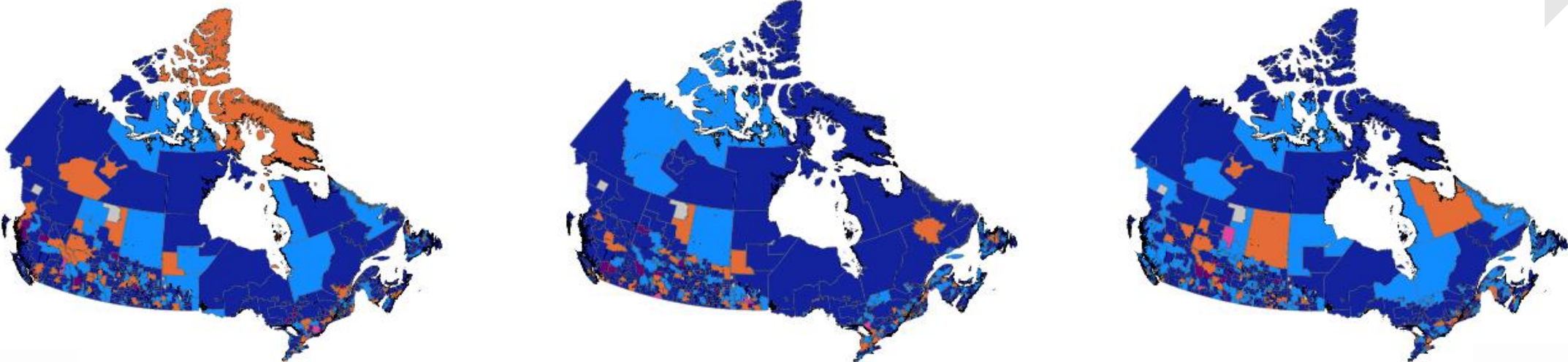


2022 Q1

2022 Q2

2022 Q3

**AFTER  
SAE**



# Expanding the use of existing resources

Several data from the **2021 Census of Population and Census of Agriculture** have been released during 2022

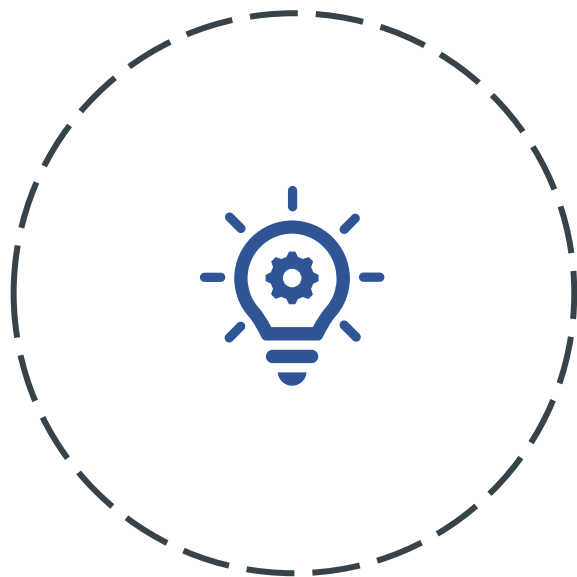
Increased data availability and use of **geographically referenced data** are providing new opportunities for rural data including possibilities for geographic disaggregation in many statistical programs

## Examples of geographic disaggregation in statistical programs

<b>Canadian Housing Statistics</b>	Ownership type and property use (CMA/CA and non-CMA/CA)	<b>Employment insurance</b>	Beneficiaries receiving regular benefits (CMA/CA and non-CMA/CA)
<b>Construction statistics</b>	Building permits (CMA and non-CMA/CA)	<b>Indigenous statistics</b>	School-age population with Aboriginal identity (CMA/CA and non-CMA/CA)
<b>Business statistics</b>	Canadian Business Counts (by Census Subdivision)	<b>Health statistics</b>	Birth-related indicators (CMA/CA and non-CMA/CA)
<b>Labour market conditions</b>	Indicators of employment, unemployment, labour force participation and job vacancies (CMA/CA and non-CMA/CA)	<b>Income statistics</b>	Income of families and individuals (CMA/CA and non-CMA/CA)
<b>Demographic statistics</b>	Annual Demographic Estimates (CMA/CA and non-CMA/CA)	<b>Charitable donations</b>	Tax filers with charitable donations (CMA/CA and non-CMA/CA)



# Looking Forward



**Extend rural disaggregation to statistical programs**



**Facilitate dialogue with rural stakeholders**



**Implement a shared rural data strategy**



# Opportunities | Centre for Special Business Projects Rural Data Initiatives Team

## Connect & Collaborate!

To learn more about [Rural Data Initiatives](#) and/or [Professional Opportunities](#) please contact

**Rural Client Services | [fe-ruralclientservic@statcan.gc.ca](mailto:fe-ruralclientservic@statcan.gc.ca)**



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# Additional Resources

[Rural Canada Statistics](#)

[Rural and Small Town Canada Analysis Bulletin](#)

[Rural Data Viewer](#)

[Index of Remoteness](#)

[Proximity Measures Data Viewer](#)

[Measuring proximity to services and amenities: An experimental set of indicators for neighbourhoods and localities](#)

[The Linkable File Environment](#)

[The Linkable Open Data Environment](#)

[Linkable Open Data Environment Viewer](#)





# About the Data Service Centre

The Data Service Centre (DSC) offers to data users a complete range of services. The DSC assists data users:

- With simple and free data requests, technical and methodological questions;
- With complex requests requiring research, extraction or customization of data from multiple sources;
- By producing customized reports, analyses and maps;
- By offering standard and customized workshops for data users of all levels of expertise;
- Through various outreach activities such as webinars, newsletters, presentations, information sessions and open houses.

For any questions, contact us:

- 1-800-263-1136
- [STATCAN.infostats-infostats.STATCAN@canada.ca](mailto:STATCAN.infostats-infostats.STATCAN@canada.ca)



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