Winnipeg

Estimating GDP for Manitoba's Economic Regions - Methodology Paper

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Economic Development and Policy

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Introduction

This paper provides an overview of the methodology developed to estimate gross domestic product (GDP) by industry for Manitoba's economic regions (ERs). The primary goal of this work is to have a GDP estimate for the economic region of Winnipeg (City of Winnipeg and the RM of Headingley). This provides a more geographically refined estimate of GDP for the City of Winnipeg than current estimates for the Census Metropolitan Area (CMA) of Winnipeg. The Manitoba Bureau of Statistics has been a supporting partner in this project and as such GDP for all economic regions for Manitoba have been produced. There are also gains in accuracy for Winnipeg's GDP by estimating all economic regions. This is the only known current GDP estimates for all of Manitoba's ERs. These estimates will continue to be refined as new data becomes available and as methodologies are improved. These estimates will be revised as Statistics Canada or other data sources revise their published data.

This paper is organized into the following sections:

1. Current GDP estimates for Canadian municipalities
2. Defining Manitoba's economic regions
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1. Current GDP estimates for Canadian municipalities

As of summer 2024 Statistics Canada publishes aggregate nominal GDP at basic prices for numerous Canadian CMAs up to the most current year of published Supply and Use Tables (SUTs). This results in a nearly four year lag between the release date and the reference year of the data (e.g. 2020 CMA GDP was released in November 2023). Statistics Canada does not produce real GDP for the CMAs or provide industry details of nominal GDP for the CMAs.

Various private sector forecasters (e.g. Conference Board of Canada and Oxford Economics) produce their own estimates of real GDP by industry at two digit North American Industry Classification System (NAICS) for CMAs. Two downsides to the private sector estimates are they do not publish their methodologies and users must purchase the data.

2. Manitoba's economic regions

Statistics Canada splits Manitoba into 8 economic regions: Southeast; South Central; Southwest; North Central; Winnipeg; Interlake; Parklands; and North). However, in their Labour Force Survey (LFS), labour market data is reported for 6 economic regions, with South Central and North Central, and Parklands and North each combined into their respective economic regions. As will be discussed in more detail,

employment by industry by economic region from the LFS is an integral part of estimating GDP by economic region. Therefore, Manitoba's GDP is estimated for 6 economic regions.

3. Methods for estimating Manitoba's economic region GDP

The starting point for estimating GDP for Manitoba's 6 economic regions is Statistics Canada's nominal and real GDP (chained dollars) at basic prices by industry for Manitoba. Typically four digit NAICS GDP level data is used. This is to align as close as possible to the detailed level of the SUTs. Using nominal and real GDP, we can calculate GDP implicit price indexes (IPIs) at the four digit NAICS level. These IPIs are later used to calculate two digit NAICS GDP and all industry GDP for each economic region. This is discussed in further in the aggregation section.

Various publically available data sources along with custom census tables from Statistics Canada are used to prepare these estimates. The methodologies are inferior to those used for official estimates prepared by Statistics Canada as they are not supported by the various confidential data sources available to the agency (e.g. tax data from Canada Revenue Agency and unsuppressed survey data collected by Statistics Canada). However, due to certain methodologies applied for certain industries that require more care to prepare accurate estimates, it is reasonable to assume the methodologies are more advanced that those used by private sector forecasters.

These estimates should be considered the best available information at the time and not final. This is due to revisions to data made by Statistics Canada and new methodologies may be developed in the future to further refine the estimates.

Given the starting point for these estimates is provincial GDP by industry from Statistics Canada's data, we need a methodology that estimates industry GDP shares for the economic regions. Any methodology is constrained by what data is available to estimate those shares. The main high frequency data source to produce these estimates is employment by industry (two digit NAICS) for Manitoba's economic regions from LFS. Alternative data is used when employment data is not a reasonable proxy for estimating the location of production for a good/service.

One assumption applied to all methods is relative prices among the regions for a given index are always unity, thus inflation for a given industry is equal across economic regions. This only applies at the detailed industry level.

Employment based method is discussed next, followed by special cases. General notation used throughout the document are:

- r: economic region
- ind2: two digit NAICS industry
- ind4: four digit NAICS industry

3. a) Employment method

The employment method is the main method used to estimate GDP shares. This method begins with employment by industry (two digit NAICS) by economic region from LFS. For a given region, shares of employment by industry are calculated. However, this requires an adjustment as the LFS data captures

where workers live and not where they work[1]. GDP for a region is based on where the production takes place, thus the employment data needs to be adjusted to capture where workers work.

The place of residency to place of work adjustment is done using census data for each census division aggregated up to the economic regions for years 2006, 2011, 2016 and 2021. For a given census year, shares of employment by industry for each economic region are calculated for both place of residency (equation 1) and place of work data (equation 2). The share for a given industry of employment by place of work is divided by place of residency, generating a place of work to place of residency ratio (equation 3). For non-census years the ratios are linearly interpolated when between two census years and otherwise held constant. These ratios are then multiplied onto the LFS industry data to estimate LFS employment by industry (two digit NAICS) by place of work by economic region (equation 4).

1. $spor^{r}_{ind2,t} = \frac{empcensuspor^{r}_{ind2,t}}{\sum_{r=1}^{n} empcensuspor^{r}_{ind\ ,t}}$

2. $spow^{r}_{ind2,t} = \frac{empcensuspow^{r}_{ind2,t}}{\sum_{r=1}^{n} empcensuspow^{r}_{ind2,t}}$

3. $rpowpor^{r}_{ind2,t} = \frac{spow^{r}_{ind2,t}}{spor^{r}_{ind2,t}}$

4. $emppow^{r}_{ind2,t} = rpowpor^{r}_{ind2,t} \times empppor^{r}_{ind2,t}$

5. $spow^{r}_{ind4,t} = \frac{empcensuspow^{r}_{ind4,t}}{empcensuspow^{r}_{ind2,t}}$

6. $emppow^{r}_{ind4,t} = spow^{r}_{ind4,t} \times emppow^{r}_{ind2,t}$

7. $gdp^{r}_{ind4,t} = \frac{emppow^{r}_{ind4,t}}{\sum_{r=1}^{n} empp\,o\ ^{r}_{ind4,t}} \times gdp_{ind4,t}$

Next shares of employment by place of work at four digit NAICS of the respective two digit NAICS industries are estimated (equation 5). The same non-census years' estimation previously discussed is applied here to build a full time-series. These shares are applied to the adjusted LFS by place of work at two digit NAICS to estimate the corresponding 4 digit NAICS employment levels (equation 6).

Finally, GDP at four digit NAICS by economic regions (equation 7) are estimated by applying regional employment shares for a given industry to the corresponding Manitoba nominal GDP level. This approach assumes labour productivity for a given industry is equal across the economic regions.

[1] See section "Estimates by province" in Statistics Canada's *Guide to the Labour Force Survey 2020*

3. b) Special cases

Currently there are 10 special cases where an alternative approach has been developed due to employment shares not being a reasonable proxy as a location of production[2]. Each will be discussed in detail.

Crop production (except cannabis) [111X], Cannabis production [111C], Animal production and aquaculture [112] and Support activities for crop and animal production [115A] ($ag4$): Farm counts ($fc_{i,t}^{r}$) by respective type *(i)* (crop production and animal production), by economic region *(r)*, from the censuses of agriculture are used to estimate shares of total farm counts by economic region. Combined farm counts for crop production and animal production are used for estimating regional shares of support activities for crop and animal production. For non-census years farm counts are linearly interpolated between censuses and held constant otherwise, with shares calculated thereafter. The distributional shares of farm counts by economic region are applied to their corresponding nominal GDP estimates to obtain economic region GDP estimates (equation 8).

8. $$gdp_{ag4,t}^{r} = \frac{fc_{i,t}^{r}}{\sum_{r=1}^{n} fc_{i,t}^{r}} \times gdp_{ag4,t}$$

Cannabis production is distributed across the economic regions based on market intelligence of known or capable production (e.g. new articles and corporate statements). The methodology for cannabis production has further room for development.

Oil and gas extraction [211] (oge): Annual income GDP components for this industry from the Manitoba SUTs are weighted by different indicators and aggregated to nominal GDP for each economic region. The employment method discussed in the previous section is applied to wages and salaries, and employers' social contributions (equation 9). Oil production by well data from Government of Manitoba Petroleum Branch is used to allocate gross operating surplus and gross mixed income (equation 10)[3]. Finally, the four income components are aggregated by economic region to estimate net taxes on production (equation 11) for each economic region.

9. $$ws_{oge,t}^{r} + esc_{oge,t}^{r} = \frac{emppow_{oge,t}^{r}}{\sum_{r=1}^{n} emppow_{oge,t}^{r}} \times \left(ws_{oge,t} + esc_{oge,t}\right)$$

10. $$gmi_{oge,t}^{r} + gos_{oge,t}^{r} = \frac{oilprod_{t}^{r}}{\sum_{r=1}^{n} oilprod_{t}^{r}} \times \left(gmi_{oge,t} + gos_{oge,t}\right)$$

11. $$ntaxprod_{oge,t}^{r} = \frac{ws_{oge,t}^{r} + esc_{oge,t}^{r} + gmi_{oge,t}^{r} + gos_{oge,t}^{r}}{\sum_{r=1}^{n}\left(ws_{oge,t}^{r} + esc_{oge,t}^{r} + gmi_{oge,t}^{r} + gos_{oge,t}^{r}\right)} \times ntaxprod_{oge,t}$$

For years beyond available SUTs, nominal GDP is estimated first by estimating the GDP deflator and using the published real GDP estimate. Next the income GDP shares from the most recent SUT (2019 may be

[2]All of the methods in the special cases are based on applying concepts in sections 4.12, 4.13 and 7.2 of *System of National Accounts 2008*.

[3]Oil production is highly concentrated in the South West economic region

used instead of 2020 to avoid introducing COVID-19 biases) are applied to the nominal GDP level to estimate the income GDP components for post-SUT years. Finally, the same regional estimate process is done as was for SUT years.

Electric power generation, transmission and distribution [2211] ($epgtd$): Annual income GDP components for this industry from the Manitoba SUTs are weighted by different indicators and aggregated to nominal GDP for each economic region. The employment method discussed in the previous section is applied to wages and salaries and employers' social contributions (equation 12). Sources of electrical energy generated and purchased (measured in kilowatt hours) ($\boldsymbol{kWh_t^r}$) published in annual Manitoba Hydro reports is used to allocate gross operating surplus and gross mixed income (equation 13) based on the location of energy production. Finally, the four income components are aggregated by economic region to estimate net taxes on production (equation 14) for each economic region.

12. $ws_{epgtd,t}^{r} + esc_{epgtd,t}^{r} = \frac{emppow_{epgtd,t}^{r}}{\sum_{r=1}^{n} emppow_{epgtd,t}^{r}} \times \left(ws_{epgtd,t} + esc_{epgtd,t}\right)$

13. $gmi_{epgtd,t}^{r} + gos_{epgtd,t}^{r} = \frac{kWh_t^r}{\sum_{r=1}^{n} kWh_t^r} \times \left(gmi_{epgtd,t} + gos_{epgtd,t}\right)$

14. $ntaxprod_{epgtd,t}^{r} = \frac{ws_{epgtd,t}^{r} + esc_{epgtd,t}^{r} + gmi_{epgtd,t}^{r} + gos_{epgtd,t}^{r}}{\sum_{r=1}^{n}\left(ws_{epgtd,t}^{r} + esc_{epgtd,t}^{r} + gmi_{epgtd,t}^{r} + go\ _{epgtd,t}^{r}\right)} \times ntaxprod_{epgtd,t}$

15. $gdp_{epgtd,t}^{r} = ws_{epgtd,t}^{r} + esc_{epgtd,t}^{r} + gmi_{epgtd,t}^{r} + gos_{epgtd,t}^{r} + ntaxprod_{epgtd,t}^{r}$

For years beyond available SUTs, nominal GDP is estimated first by estimating the GDP deflator and using the published real GDP estimate. Next the income GDP shares from the most recent SUT (2019 may be used instead of 2020 to avoid introducing COVID-19 biases) are applied to the nominal GDP level to estimate the income GDP components for post-SUT years. Finally, the same regional estimate process is done as was for SUT years.

Residential building construction [23A] ($rescon$): The methodology for estimating GDP for this industry is broken into two periods due to data availability. For 2018 forward residential investment by CSD is aggregated to the economic regions to estimate regional shares of nominal residential investment and applied to nominal GDP (equation 17). For 2007 to 2017 the distribution of the average of housing starts/completions ($\boldsymbol{hsc_t^r}$) by economic region from CMHC are estimated. The regional shares for 2018 to 2022 from both data sources are used to estimate regional adjustment factors to adjust the CMHC data, linking it to the current residential investment by CSD series. These regional shares are applied to nominal residential construction GDP (equation 16).

2007-2017

16. $gdp_{rescon,t}^{r} = \frac{hsc_t^r}{\sum_{r=1}^{n} hsc_t^r} \times \frac{\sum_{t=2018}^{2022} \frac{resinv_t^r}{\sum_{r=1}^{n} resinv_t^r}}{\sum_{t=201}^{2022} \frac{hsc_t^r}{\sum_{r=1}^{n} hsc_t^r}} \times gdp_{rescon,t}$

2018-forward

17. $gdp^{r}_{rescon,t} = \frac{resinv^{r}_{t}}{\sum^{n}_{r=1} resinv^{r}_{t}} \times gdp_{rescon,t}$

Oil and gas engineering construction [23C2]: One year ahead oil production by well data (equation 18), by economic region shares from Government of Manitoba Petroleum Branch is used to allocate nominal GDP. One year ahead production data is assumed to be a reasonable proxy for where investment took place be it to increase or maintain production.

18. $gdp^{r}_{o\&gcon,t} = \frac{oilprod^{r}_{t+1}}{\sum^{n}_{r=1} oilprod^{r}_{t+1}} \times gdp_{o\&gcon,t}$

Electric power engineering construction [23C3] ($epecon$): Nominal GDP is split using capital expenditures ($mhinv^{r}_{t}$) reported in Manitoba Hydro annual reports capital expenditure forecasts submitted to the Public Utilities Board[4] to estimate economic region investment shares and applied to nominal GDP (equation 19). For Bi-Pole 3 the linear length of the line was calculated for each economic region and the investment was allocated accordingly.

19. $gdp^{r}_{epecon,t} = \frac{mhinv^{r}_{t}}{\sum^{n}_{r=1} mhinv^{r}_{t}} \times gdp_{epecon,t}$

Pipeline transportation of natural gas [4862] ($ptng$): Nominal GDP is split in three stages. First, using the total use by industry (intermediate consumption), household consumption, international and interprovincial exports from the SUTs, shares for each of those sectors are calculated and applied to nominal GDP (equation 20). Nominal GDP for the industry use (equation 21) is allocated to each economic region based on the use demand by industry, where the use of the product to nominal GDP ratios are applied to GDP for industry by region. Nominal GDP for the household use (equation 22) is allocated by population shares by economic region. Pipeline length estimates, by economic region, from Canada Energy Regulator ($pipelenng^{r,xip}_{t}, pipelenng^{r,xip}_{t}$) are used to allocate international (equation 23) and interprovincial (equation 24) exports based on their entry/exit locations on the Manitoba border. Finally, total nominal GDP for this industry by economic region (equation 25) is calculated by aggregating the use driven subcomponents.

20. $gdp^{j}_{ptng,t} = \frac{use^{j}_{ptng,t}}{\sum^{n}_{j=1} use^{j}_{ptng,t}} \times gdp_{ptng,t}$

j = (intermediate consumption, household consumption, interprovincial exports, international exports)

21. $gdp^{r,ic}_{ptng,t} = \frac{pipelenng^{r,ic}_{t}}{\sum^{n}_{r=1} pipelenng^{r,ic}_{t}} \times gdp^{ic}_{ptng,t}$

22. $gdp^{r,hc}_{ptng,t} = \frac{pop^{r}_{t}}{\sum^{n}_{r=1} pop^{r}_{t}} \times gdp^{hc}_{ptng,t}$

[4] Where possible only one or two year ahead capital expenditure forecasts are used, aiming to keep the forecast as close as possible to actuals.

23. $gdp^{r,xin}_{ptng,t} = \frac{pipelenng^{r,xin}_t}{\sum_{r=1}^{n} pipelenng^{r,xin}_t} \times gdp^{xin}_{ptng,t}$

24. $gdp^{r,xip}_{ptng,t} = \frac{pipelenng^{r,xip}_t}{\sum_{r=1}^{n} pipelenng^{r,xip}_t} \times gdp^{xip}_{ptng,t}$

25. $gdp^{r}_{ptng,t} = gdp^{r,ic}_{ptng,t} + gdp^{r,hc}_{ptng,t} + gdp^{r,xin}_{ptng,t} + gdp^{r,xip}_{ptng,t}$

Crude oil and other pipeline transportation [486A] ($ptoiloth$): Nominal GDP is split in two stages. First, using the total use by industry (intermediate consumption), household consumption, international and interprovincial exports from the SUTs, shares for each of those sectors are calculated and applied to nominal GDP (equation 26). Next the shares of the lengths by economic region for each of the main uses are applied to the corresponding dollar estimates from the SUTs to obtain use by economic region (equations 27 – 30). Finally, the uses by economic region are summed to estimate use shares by economic regions which are applied to nominal GDP. The pipeline data comes from the Canada Energy Regulator. For pipelines that only move the good from one border of the province to another, the length of the pipeline is allocated to either international or interprovincial exports. For pipelines that bring products to Manitoba for use within province those lengths are allocated to household and industry use.

26. $gdp^{j}_{ptoiloth,t} = \frac{use^{j}_{ptoiloth,t}}{\sum_{j=1}^{n} use^{j}_{ptoiloth,t}} \times gdp_{ptoiloth,t}$

j = (intermediate consumption, household consumption, interprovincial exports, international exports)

27. $gdp^{r,ic}_{ptoiloth,t} = \frac{pipelenoilo\ ^{r,ic}_t}{\sum_{r=1}^{n} pipelenoilo\ ^{r,ic}_t} \times gdp^{ic}_{ptoiloth,t}$

28. $gdp^{r,hc}_{ptoiloth,t} = \frac{pipelenoilot\ ^{r,hc}_t}{\sum_{r=1}^{n} pipelenoilot\ ^{r,hc}_t} \times gdp^{hc}_{ptoiloth,t}$

29. $gdp^{r,xin}_{ptoiloth,t} = \frac{pipelenoiloth^{r,xin}_t}{\sum_{r=1}^{n} pipelenoiloth^{r,xin}_t} \times gdp^{xin}_{ptoiloth,t}$

30. $gdp^{r,xip}_{ptoiloth,t} = \frac{pipelenoilo\ ^{r,xip}_t}{\sum_{r=1}^{n} pipelenoiloth^{r,xip}_t} \times gdp^{xip}_{ptoiloth,t}$

31. $gdp^{r}_{ptoiloth,t} = gdp^{r,ic}_{ptoiloth,t} + gdp^{r,hc}_{ptoiloth,t} + gdp^{r,xin}_{ptoiloth,t} + gdp^{r,xip}_{ptoilot\ ,t}$

Lessors of real estate [5311] (lrs): This industry's GDP is split into lessors of residential and non-residential real estate using the product supply shares for this industry from the SUTs. For years beyond the SUT year the most recent SUT shares are applied. The residential component is further split using the renter variable within the tenure category from the censuses, by CSD, to estimate regional shares of lessors of residential real estate and applied to nominal GDP to obtain economic region estimates (equation 32). For non-census years regional shares are linearly interpolated or held constant as in other cases in the model. It is assumed the quality of leased residential real estate is consistent across economic regions.

32. $$gdp^{r}_{lrsres,t} = \frac{sply_{lsrres,t}}{sply_{lsrres,t}+sply_{lsrnonres,t}} \times \frac{rent^{r}_{t}}{\sum_{r=1}^{n} rent^{r}_{t}} \times gdp_{lsr,t}$$

The non-residential component is endogenously derived, using the use of the product relative to GDP for each industry from the SUTs, multiplied by GDP for each industry by economic region. The distributional shares of the total use is applied to total nominal GDP for the industry to obtain GDP of lessors of non-residential real estate by economic region (equation 33). Total lessors of real estate nominal GDP are the sum of residential and non-residential lessor of real estate estimates (equation 34).

33. $$gdp^{r}_{lrsnonres,t} = \frac{sply_{lsrnonres,t}}{sply_{lsr\ \ ,t}+sply_{lsrnonres,t}} \times \frac{\frac{ic_{lrsnonres,ind\ \ ,t}}{gdp_{ind4,t}} \times gdp^{r}_{ind4,t}}{\sum_{r=1}^{n}\left(\frac{ic_{lrsnonres,ind4,t}}{gdp_{ind4,t}} \times gdp^{r}_{ind4,t}\right)} \times gdp_{lsr,t}$$

34. $$gdp^{r}_{lr\ \ ,t} = gdp^{r}_{lrsres,t} + gdp^{r}_{lrsnonres,t}$$

Owner-occupied dwellings [5311A]: To estimate owner-occupied dwellings by economic region, the owner variable within the tenure category from the censuses, by CSD, are used to estimate regional shares of owned dwellings and applied to nominal GDP to obtain economic region estimates (equation 35). For non-census years regional shares are linearly interpolated or held constant as in other cases in the model. It is assumed the quality of owner occupied dwellings quality is consistent across economic regions.

35. $$gdp^{r}_{ood,t} = \frac{o^{r}_{i,t}}{\sum_{r=1}^{n} o^{r}_{i,t}} \times gdp_{ood,t}$$

4. Data Adjustments

In some cases data must be adjusted either due to missing data or nonsensical observations in census data. In published LFS employment data for economic regions some observations are not published either being due to the figure being too small or another reason for suppression. In this case monthly data that is available before and after the periods of unpublished data as well as data from other industries and total employment is used to help impute missing data. Given the available and imputed data are both small, this does not create material risk in distorting the GDP estimates.

Some census data (mainly 2016 figures) for some of the smaller economic regions had employment for some industries decline to zero, while in the censuses before and after the relevant year showed employment. We suspect this is an issue within the census itself and not an actual economic outcome. To correct for this a linear shift is applied between the pre and post census years around the census at issue.

5. Prices for post-SUT years

GDP deflators beyond the SUT years are estimated using various data sources. Statistics Canada documentation on output deflators for the SUTs is the primary guide on what data for these estimates. In

some cases the data recommended in the documentation is no longer available and alternative sources must be used. The growth rate from price index from a given data source is applied to the GDP deflator.

6. Aggregation

Following Statistics Canada's approach, total GDP and two digit NAICS estimates are aggregated using the Fisher volume index approach. For details on the Fisher volume index methodology please see Statistics Canada's *User Guide: Canadian System of Macroeconomic Accounts, Chapter 7 Price and volume measures.*

7. Revisions

The GDP estimates are subject to four sources of revision:

1. Statistics Canada revising Manitoba's GDP estimates. Typically Manitoba's GDP is not "locked in" until the Supply & Use Tables are published. SUTs are typically published in November three years after the reference year. For example, Manitoba's 2021 SUT will be published in November 2024. Until then, Statistics Canada revises GDP estimates each November for the previous years that do not yet have a finalized SUT. Revised GDP estimates will impact the estimates for all industries and new SUT data will impact the reference year for industry estimates that utilize this data source.
2. On occasion Statistics Canada makes methodological changes and revises historical GDP going back in history beyond the most recently published SUT.
3. Any monthly series of data, such as the Labour Force Survey, are subject to revisions by Statistics Canada.
4. Due to the use of census data for benchmarking detailed industry estimates via the employment method, estimates produced beyond the most recent census are subject to revisions when the new census is released. For example, estimates beyond 2021 use the 2021 census employment data, which are held constant. When the 2026 census data is available, data for 2022 to 2025 will be linearly interpolated. This change is likely to cause some changes for GDP estimates that use the employment method.

8. Data Sources

The table below shows which data series are used for estimating each industry.

Industries	Data	Source
All	Manitoba GDP by Industry	Statistics Canada
All	Census of Population	Statistics Canada
All	Labour Force Survey	Statistics Canada
Agriculture	Census of Agriculture	Statistics Canada
Agriculture, Utilities, Construction, Forestry,	Manitoba Supply & Use Tables	Statistics Canada

Industries	Data	Source
fishing, mining, quarrying, oil & gas and Transportation & Warehousing		
Agriculture	Total value of greenhouse products	Statistics Canada
Agriculture	Farm cash receipts	Statistics Canada
Agriculture	Estimated areas, yield, production, average farm price and total farm value of principal field crops	Statistics Canada
Agriculture	Area, production and farm gate value of marketed fruits	Statistics Canada
Agriculture	Area, production and farm gate value of marketed vegetables	Statistics Canada
Agriculture	Area, production and farm value of potatoes	Statistics Canada
Agriculture	Value of inventory change (agricultural commodities)	Statistics Canada
Agriculture	Farm income in kind in Canada	Statistics Canada
Agriculture	Farm product price index	Statistics Canada
Agriculture	Production and sale of greenhouse flowers and plants	Statistics Canada
Agriculture	Licensed cannabis producers/production	Health Canada
Forestry, fishing, mining, quarrying, oil & gas	Raw Materials Price Index	Statistics Canada
Forestry, fishing, mining, quarrying, oil & gas and Construction	Oil Production by Well, Manitoba	Government of Manitoba Petroleum Branch
Utilities	Sources of Electricity Generated and Purchased	Manitoba Hydro Annual Reports
Construction	Infrastructure Economic Accounts, investment and net stock by asset, industry, and asset function	Statistics Canada
Construction	Flows and stocks of fixed non-residential capital, by industry and type of asset, Canada, provinces and territories	Statistics Canada
Construction	Residential Investment by Census Division	Statistics Canada
Construction	Housing Starts and Completions	Canadian Mortgage and Housing Corporation
Construction	Manitoba Hydro Capital Expenditures Forecasts	Manitoba Hydro Capital Expenditure Forecast Appendix,

Industries	Data	Source
		Public Utility Board Submissions (various years)
Manufacturing	Manufacturers' sales, inventories, orders and inventory to sales ratios, by industry	Statistics Canada
Wholesale Trade	Wholesale services price index	Statistics Canada
Retail Trade, Transportation & Warehousing, Information, Culture and Recreation, Finance, Insurance & Real Estate, Professional, Technical & Scientific Services and Other Services	Consumer Price Index	Statistics Canada
Retail Trade and Transportation & Warehousing	Detailed household final consumption expenditure	Statistics Canada
Retail Trade	Retail services price index	Statistics Canada
Transportation & Warehousing	Population by Economic Region, Annual	Statistics Canada
Transportation & Warehousing, Information & Culture, Finance & Insurance, Finance, Insurance & Real Estate, Professional, Scientific & Technical Services, Business, building and other support services, Educational Services, Health care and social assistance, Information, Culture and Recreation, Other Services	Survey of Employment, Payroll and Hours	Statistics Canada
Transportation & Warehousing	Household Consumption	Statistics Canada
Transportation & Warehousing	Natural Gas Pipelines	Canada Energy Regulator
Transportation & Warehousing	Crude Oil and Other Products Pipelines	Canada Energy Regulator
Transportation & Warehousing	Supply and disposition of crude oil and equivalent	Statistics Canada
Transportation & Warehousing	Supply and disposition of natural gas	Statistics Canada
Public Administration	Wages, salaries and employers' social contributions	Statistics Canada

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