Labour Reference Guide

Census of Population, 2021

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Definitions and concepts

The 2021 Census of Population long-form questionnaire provides information on the labour market activities of the Canadian population aged 15 and older living in private households. Excluded are persons living in institutional collective dwellings such as hospitals, nursing homes and penitentiaries; Canadian citizens living in other countries; and full-time members of the Canadian Armed Forces stationed outside Canada. Also excluded are individuals living in non-institutional collective dwellings such as work camps, hotels and motels, and student residences.

Labour data can be divided into three groups:

- labour force status data for the reference week of Sunday, May 2, to Saturday, May 8, 2021 (for example, data on individuals who were employed, unemployed or not in the labour force, and data on the unemployment rate, participation rate and employment rate)
- job characteristics describing a person's current position or the position of the longest duration since January 1, 2020 (for example, industry, occupation and class of worker)
- data relating to work activity in the 2020 calendar year (for example, number of weeks worked and whether a person worked mostly full time or mostly part time).

The following variables, as defined in the *Dictionary, Census of Population, 2021*, Statistics Canada Catalogue no. 98-301-X, have been created from the labour questions:

- labour force status
- labour force status (based on 1971 concepts)
- hours worked for pay or in self-employment
- on temporary lay-off or absent from job or business
- new job to start in four weeks or less from reference week
- looked for paid work in past four weeks (full- or part-time work)
- reasons unable to start a job
- when last worked for pay or in self-employment
- industry (based on the North American Industry Classification System [NAICS] 2017)
- occupation (based on the National Occupational Classification [NOC] 2021)
- class of worker
- job permanency
- work activity during the reference year
- weeks worked during the reference year
- full-time or part-time weeks worked during the reference year
- main reason for not working the full year
- main reason for working mostly part-time.

Users should be careful when comparing these data with data from other sources, as there may be differences in the definitions used and how the data are collected. Please see comparability with other data sources in the Comparability over time section for additional information.

Questions

The 2021 Census of Population data on labour were obtained from questions 38 to 50 and questions 54 and 55 of the 2021 Census Form 2A-L. For the 2021 Census, the 2A short-form questionnaire was used to enumerate all usual residents of 75% of private dwellings. The 2A-L long-form questionnaire, which also includes the questions

from the 2A short-form questionnaire, was used to enumerate a 25% sample of private households in Canada. For private households in First Nations communities, Métis settlements, Inuit regions and other remote areas, the 2A-R questionnaire was used to enumerate 100% of the population.

The questions in the 2021 Census Form 2A-R were the same as those in Form 2A-L, but the examples (where provided for write-in responses) included industries or occupations more commonly found in the north.

While some labour variables were created directly from the response provided to one question, others—including the following—were derived from information collected from two or more questions:

- labour force status: derived from the questions on hours worked for pay or in self-employment (Question 38), on temporary lay-off or absent from job or business (Question 39), whether the person had a new job to start in four weeks or less from reference week (Question 40), whether the person looked for paid work in past four weeks (full- or part-time work) (Question 41), the reasons unable to start a job (Question 42), and when last worked for pay or in self-employment (Question 43)
- class of worker: derived from the questions on class of worker (Question 48) and incorporation status (Question 49)
- work activity during the reference year: derived from the questions on weeks worked during the reference year (Question 54), and full-time or part-time weeks worked during the reference year (Question 55).

Four variables—industry, occupation, main reason for not working the full year in 2020 and main reason for working mostly part time in 2020—are coded variables. Coders assigned a code from the write-in responses to the following questions:

- industry: coded from the questions on whom this person worked for (Question 44) and type of business (Question 45)
- occupation: coded from the questions on work or occupation (Question 46), and main work activities (Question 47)
- main reason for not working the full year: coding of the write-in response provided in the “Other reason – Specify” field (Question 54b)
- main reason for working mostly part time: coding of the write-in response provided in the “Other reason – Specify” field (Question 55b).

For more information on the reasons why the census questions are asked, please refer to the five fact sheets found on The road to the 2021 Census web page.

Classifications

The classification for most labour variables is presented in the Definitions and concepts section in the form of response categories.

However, industry data were classified according to NAICS Canada 2017. For information on NAICS, please see North American Industry Classification System (NAICS) Canada 2017 Version 3.0, Statistics Canada Catalogue no. 12-501-X.

Occupation data were classified according to NOC 2021. For information on NOC, please see National Occupational Classification (NOC) 2021 Version 1.0, Statistics Canada Catalogue no. 12-583-X.

Concepts over time

Most labour variables can be compared over time, although with some caveats described below under each concept heading.

For more information on comparability between the 2021 and 2016 censuses, please refer to the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X.

Labour force status

The labour force status variable has remained relatively stable since the 1981 Census. The concept is derived based on response patterns to various questions. It classifies persons as "employed," "unemployed" or "not in the labour force," and this allows for the calculation of employment rates, unemployment rates and participation rates.

Among the questions from which the variable is derived, only school attendance has undergone changes. This affects the comparability of the concept somewhat. Specifically, the full-time and part-time status of school attendance was removed in 1986 and from 2006 onward, resulting in slightly different estimates and rates, especially for individuals aged 15 to 19.

Industry

The industry and occupation variables are created from classifications that are subject to revision every five years. Some revisions are minor updates, while some are major structural changes.

For the 2021 Census, the industry information was classified based on NAICS 2017. The most detailed information available for census industry data is at the four-digit code level. Comparison with data from the 2016 Census (classified using NAICS 2012) and the 2011 National Household Survey (NHS) (based on NAICS 2007) is possible, keeping in mind the caveats presented earlier for such comparison.

For more information on comparability between classifications, consult the Concordances between classifications.

Occupation

The occupation variable was classified based on NOC 2021. The most detailed information available for census occupational data is at the five-digit code level. Comparison with data from the 2016 Census (based on NOC 2016) and the 2011 NHS (based on NOC 2011) is possible using concordance tables. While NOC 2016 was a minor revision of NOC 2011, the NOC 2021 revision was major.

In 2021, NOC coding strategies were revised to harmonize the coding process with other surveys, similar to what was done in 2016. However, NOC 2021 underwent a major revision, including the addition of new and emerging job titles. The revision reflects changes in the Canadian economy and is in line with the Standard Occupational Classification used by the U.S. Bureau of Labor Statistics.

The NOC redesign for 2021 moved away from the four existing NOC skill-level categories to an innovative six-grouping categorization representing the degree of training, education, experience and responsibilities (TEER) required for an occupation. This change is necessary for several reasons. First, the skill-level terminology is often misleading for many stakeholders. Therefore, this change will reduce confusion. Second, some NOC users artificially create or infer a low-skill and high-skill categorization. This redesign moves away from a high-skill and low-skill categorization, as the TEER captures differences in occupational requirements more accurately. This—in turn—will aid in the analysis of occupations.

For example, police occupations were defined primarily by two main categories within NOC 2016, but they have now been split into three in NOC 2021.

NOC 2016:

0431 – Commissioned police officers
4311 – Police officers (except commissioned)

NOC 2021:

40040 – Commissioned police officers (equivalent to 0431 in NOC 2016)
41310 – Police investigators and other investigative occupations (which were sometimes included under 0431 or 4311 in NOC 2016, depending on their level of responsibility)
42100 – Police officers (equivalent to 4311 in NOC 2016)

The second digit represents TEER — 0 is management; 1 is the completion of a university degree or previous experience and expertise in subject-matter knowledge from a related occupation found in TEER 2; 2 is the completion of a postsecondary education program of two to three years at a community college, institute of technology or CEGEP. As a result, NOC 2021 provides a better picture of the various policing-related occupations, as well as the TEER required.

As with NAICS, data users are advised to consult NOC concordance tables when comparing classifications. Please consult the Concordances between classifications.

Class of worker and incorporation status

The class of worker and incorporation status variables have remained relatively stable since the 1981 Census. The concepts classify respondents as “employees,” “unpaid workers” or “self-employed.” The last category can be further classified in terms of whether paid help was used and whether the business owned has been incorporated.

As part of the 2021 Census, information was also collected to allow for the classification of paid jobs occupied by employees as either temporary or permanent. The addition of the job permanency concept allows for more detailed information to be collected without affecting the core concept of employees.

Work activity during the reference year

The work activity variable has remained relatively stable since the 1981 Census. The variable is derived based on questions on the number of weeks worked during the year preceding the census and whether these weeks were mostly worked on a full-time or part-time basis.

It is important to note that the number of hours used to define full-time and part-time status has been on the questionnaire only since 1991. Before then, no operational definition of what constituted part-time work was provided. It is likely that respondents were answering based on their interpretation, unless they consulted the census guide. However the latter provided no guidance in 1981 and only the following statement in 1986: “Part-time work is that work which is less than the normally scheduled weekly hours of work performed by persons doing similar work.”

Collection and processing methods

The COVID-19 pandemic emerged in Canada in early 2020 and affected all steps of the 2021 Census process, from data collection to dissemination. Please refer to the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X, for more detailed information on this topic.

Data quality

The 2021 Census of Population underwent a thorough data quality assessment. The different certification activities conducted to evaluate the quality of the 2021 Census data are described in Chapter 9 of the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X.

The data quality assessment was conducted in addition to the regular verifications and quality checks completed at key stages of the census. For example, throughout data collection and processing, the accuracy of specific steps

such as data capture and coding was measured, the consistency of the responses provided was checked, and the non-response rates for each question were analyzed. As well, the quality of imputed responses was assessed during data editing and imputation.

During the data quality assessment, a number of data quality indicators were produced and used to evaluate the quality of the data. These indicators are briefly described below. Finally, resulting census counts were compared with other data sources and certified for final release.

The main highlights of this assessment of the data pertaining to labour are presented below.

Variability due to sampling and total non-response

The objective of the long-form census questionnaire is to produce estimates on various topics for a wide variety of geographies, ranging from very large areas (such as provinces and census metropolitan areas) to very small areas (such as neighbourhoods and municipalities), and for various populations (such as Indigenous peoples and immigrants) that are generally referred to in this document as “populations of interest”. In order to reduce response burden, the long-form census questionnaire is administered to a random sample of households.

This sampling approach and total non-response introduce variability into the estimates that needs to be accounted for. This variability also depends on the population size and the variability of the characteristics being measured. Furthermore, the precision of estimates may vary considerably depending on the domain or geography of interest, in particular because of the variation in response rates. For more information on variability due to sampling and total non-response in long-form census questionnaire estimates, please refer to the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X.

Non-response bias

Non-response bias is a potential source of error for all surveys, including the long-form census questionnaire. Non-response bias arises when the characteristics of those who participate in a survey are different from those who do not.

In general, the risk of non-response bias increases as the response rate declines. For the 2021 long-form census questionnaire, Statistics Canada adapted its collection and estimation procedures to mitigate the effect of non-response bias to the extent possible. For more information on these mitigation strategies, please refer to the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X.

Data quality indicators

A number of quality indicators were produced and analyzed during the 2021 Census of Population data quality assessment. Four indicators are available to data users for long-form content: the total non-response (TNR) rate; the confidence interval; as well as the non-response rate and the imputation rate per question.

The **total non-response (TNR) rate** is the primary quality indicator that accompanies each disseminated 2021 Census of Population product, and is calculated for each geographic area. It measures total non-response at the dwelling level. Non-response is said to be total when no questionnaire is returned from a dwelling or when a returned questionnaire does not meet the minimum content. More information on the TNR rate is available in Chapter 9 of the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X.

The confidence interval was selected as a variance-based quality indicator to accompany the 2021 Census of Population long-form estimates because it helps users easily make a statistical inference. This indicator provides a measure of the accuracy of the long-form estimates. Using a science-based approach, research and simulations were done to ensure that confidence intervals are constructed using adequate statistical methods for the Census of Population data and areas of interest.

A confidence interval is associated with a confidence level, generally set at 95%. A 95% confidence interval is an interval constructed around the estimate so that, if the process that generated the sample were repeated many times, the value of the interest parameter in the population would be contained in 95% of these intervals. The confidence interval consists of a lower bound and an upper bound. These two bounds accompany the long-form estimates in most data tables.

Further details on the different methods used to construct confidence intervals and their assumptions are provided in the *Sampling and Weighting Technical Report, Census of Population, 2021*, Statistics Canada Catalogue no. 98-306-X.

The **non-response rate per question** is a measure of missing information due to non-response to a question. It measures only the non-response that is resolved through imputation during data processing (as opposed to weighting when a sample is used). For the long-form questionnaire, the non-response rate per question includes only partial non-response to the question, except for First Nations communities, Métis settlements, Inuit regions and other remote areas where both partial and total non-response are taken into account. Partial non-response is when answers to certain questions are not provided for a respondent household.

The non-response rate per question for a question on the long-form questionnaire is defined as the sum of the weights of in-scope units in the population of interest who did not respond to the question divided by the sum of the weights of in-scope units in the population of interest. Here “units” refers to the statistical units for which data are collected or derived (e.g., persons or households, depending on whether the question is about a person-level characteristic or a household-level characteristic). A unit is considered to be in scope for a given question if the question is applicable to that unit and the unit belongs to the population of interest related to the question.

The **imputation rate per question** measures the extent to which responses to a given question were imputed. Imputation is used to replace missing data in the event of non-response or when a response is found to be invalid (e.g., multiple answers are provided when a single answer is expected). Imputation is conducted to eliminate data gaps and to reduce bias introduced by non-response. Imputation is generally done by identifying persons or households in the same geographical area with similar characteristics to the incomplete record and copying their values to fill in the missing or invalid responses.

The imputation rate for a question on the long-form questionnaire is defined as the sum of the weights of in-scope units in the population of interest for which the response to the question was imputed divided by the sum of the weights of in-scope units in the population of interest (see the definition of “units” provided in the above section on the non-response rate per question).

For long-form content, imputation for most areas is done to resolve partial non-response—not total non-response, which instead is treated by weighting. However, in First Nations communities, Métis settlements, Inuit regions and other remote areas, whole household imputation (WHI) is used to resolve total non-response. It first imputes the occupancy status of non-respondent dwellings and further imputes all the data for those dwellings resolved as occupied in the first step. WHI is included in the imputation rate per question, including the use of administrative data to impute non-responding households in areas with low response rates; see Appendix 1.7 of the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X. As with the non-response rate, a unit is considered to be in scope if the question is applicable to that unit and the unit belongs to the population of interest related to the question.

The non-response and imputation rates per question can be interpreted as the proportion of in-scope units in the population of interest for which information was not reported or was imputed, respectively. The long-form rates are weighted to reflect the fact that the long-form questionnaire is only distributed to a sample of the population, so in this case, the proportion is estimated.

The non-response and imputation rates for a question are often similar, but some differences can be observed for a given question because of additional data processing steps that may have been required. These rates were regularly checked during data assessment, and a detailed analysis was done if there was a difference between the two rates for a question, to ensure the appropriateness of the processing steps taken and the quality of the data.

A difference between the non-response rate and the imputation rate for a question can generally be explained by one of the following two factors:

- Some responses were considered invalid or inconsistent during the edit stage and imputation was needed, which is why the imputation rate is higher than the non-response rate for a question.
- Some non-responses were resolved in a straightforward manner early during data processing because a single resolution was possible based on the answers provided to other questions, making imputation unnecessary. This may explain why the non-response rate is higher than the imputation rate for a question.

The *2021 Census Data Quality Guidelines*, Statistics Canada Catalogue no. 98-26-0006, provides all the information required to understand and interpret the data quality indicators for the 2021 Census, along with guidelines to enable their proper usage. Data quality indicators are provided so that users are informed about the quality of the statistical information and can determine the relevance and the limitations of the data relative to their needs. In general, the quality of the 2021 Census of Population data is very good, but in some cases, data have to be used with caution. It is strongly recommended that users consult all available data quality indicators to get a better sense of the quality of the data products they are interested in.

Certification of final counts

Once data editing and imputation were completed, the data were weighted to ensure that estimates represent the total Canadian population living in private dwellings. Certification of the final weighted estimates was the last step in the validation process, which led to the recommendation to release the data for each level of geography and domain of interest. Based on the analysis of the data quality indicators and the comparison of long-form census questionnaire estimates with other data sources, the recommendation is for unconditional release, conditional release, or non-release (for quality reasons on rare occasions). For conditional release or non-release, appropriate notes and warnings are included in the products and provided to users. Moreover, other data sources were used to evaluate the long-form census questionnaire estimates. However, since the risk of error often increases for lower levels of geography and for smaller populations, and the data sources used to evaluate these counts are less reliable or not available at these lower levels, it can be difficult to certify the counts at these levels.

Long-form census questionnaire estimates are also subject to confidentiality rules that ensure non-disclosure of respondent identity and characteristics. For more information on privacy and confidentiality, please refer to Chapter 1 of the *Guide to the Census of Population, 2021*, Statistics Canada Catalogue no. 98-304-X. For information on how Statistics Canada balances the protection of confidentiality and the need for disaggregated census data, with specific attention to new 2021 Census content, please refer to *Balancing the Protection of Confidentiality with the Needs for Disaggregated Census Data, Census of Population, 2021*, Statistics Canada Catalogue no. 98-26-0005.

For more information on data processing and the calculation of estimates and their level of precision, please refer to the *Sampling and Weighting Technical Report, Census of Population, 2021*, Statistics Canada Catalogue no. 98-306-X.

Data quality for labour

Tables 1 and 2 below present the non-response and imputation rates per question for Canada and for each province and territory.

The non-response and imputation rates per question at lower levels of geography are also available in 2021 Census data tables presenting data quality indicators. This information is scheduled for release on November 30, 2022.

Table 1
Non-response rates by question, Canada, provinces and territories, Census of Population, 2021

Geography	Non-response rates by question						
	Hours worked	Lay-off/ absent	New job to start	Looking for a job	Reasons for unavailability	When last worked	Industry
	percent						
Canada	1.7	3.1	3.1	2.9	2.8	2.4	2.8
Newfoundland and Labrador	1.3	2.4	2.4	2.2	2.3	2.1	2.8
Prince Edward Island	1.1	2.4	2.3	2.3	1.6	1.8	2.2
Nova Scotia	1.3	2.6	2.5	2.4	2.1	2.1	2.3
New Brunswick	1.4	3.3	3.3	3.0	2.4	2.7	2.6
Quebec	1.3	3.4	3.4	3.0	2.3	2.4	2.3
Ontario	1.5	2.6	2.6	2.5	2.5	2.1	2.7
Manitoba	2.5	4.5	4.5	4.4	4.6	3.2	3.1
Saskatchewan	2.6	4.9	4.9	4.9	4.7	3.3	3.0
Alberta	2.3	3.5	3.6	3.5	3.7	2.8	3.5
British Columbia	2.0	3.0	3.0	2.9	2.8	2.4	3.0
Yukon	5.8	9.1	9.1	9.3	9.9	6.3	5.8
Northwest Territories	10.7	15.2	15.2	15.5	15.6	11.2	10.4
Nunavut	26.4	29.2	29.4	29.5	31.7	26.8	26.8

Geography	Non-response rates by question						
	Occupation	Class of worker	Incorporation status	Weeks worked	Main reason did not work full year	Full-time/ part-time status	Main reason worked mostly part time
	percent						
Canada	2.8	2.9	4.1	3.3	4.4	2.9	4.6
Newfoundland and Labrador	2.8	2.9	3.6	3.1	4.3	2.9	5.0
Prince Edward Island	2.2	2.2	3.3	2.4	3.6	2.3	4.3
Nova Scotia	2.3	2.4	3.5	2.6	3.9	2.3	3.9
New Brunswick	2.6	2.8	3.7	3.0	4.6	2.7	4.6
Quebec	2.3	2.5	3.9	2.7	3.9	2.4	3.9
Ontario	2.7	2.8	4.1	3.0	4.2	2.7	4.6
Manitoba	3.1	3.2	4.2	3.7	4.9	3.3	4.8
Saskatchewan	3.0	3.1	3.5	3.6	5.0	3.2	5.1
Alberta	3.5	3.5	4.7	4.2	5.5	3.8	5.6
British Columbia	3.0	3.1	3.9	3.7	4.7	3.3	4.8
Yukon	5.8	5.8	6.0	6.9	9.8	5.3	9.3
Northwest Territories	10.4	10.5	9.2	10.9	13.7	10.1	17.6
Nunavut	26.8	26.9	33.9	28.4	32.9	26.6	34.6

Source: Statistics Canada, Census of Population, 2021.

Table 2
Imputation rates by question, Canada, provinces and territories, Census of Population, 2021

Geography	Imputation rates by question						
	Hours worked	Lay-off/ absent	New job to start	Looking for a job	Reasons for unavailability	When last worked	Industry
	percent						
Canada	1.8	5.7	3.1	2.9	2.8	3.5	6.1
Newfoundland and Labrador	1.3	4.4	2.4	2.2	2.3	3.2	5.5
Prince Edward Island	1.1	4.5	2.3	2.3	1.6	2.9	5.2
Nova Scotia	1.3	4.6	2.5	2.4	2.1	3.2	5.3
New Brunswick	1.5	5.5	3.3	3.0	2.4	3.8	5.4
Quebec	1.4	5.7	3.4	3.0	2.3	3.3	5.0
Ontario	1.5	5.4	2.6	2.5	2.5	3.4	6.3
Manitoba	2.5	6.7	4.5	4.4	4.6	4.2	6.0
Saskatchewan	2.7	7.2	4.9	4.9	4.7	4.4	5.9
Alberta	2.4	6.2	3.6	3.5	3.7	4.0	7.1
British Columbia	2.0	5.6	3.0	2.9	2.8	3.5	6.6
Yukon	5.9	11.1	9.1	9.3	9.9	7.3	9.2
Northwest Territories	10.7	17.3	15.2	15.5	15.6	12.4	13.7
Nunavut	26.4	30.9	29.4	29.5	31.7	27.7	29.5

Geography	Imputation rates by question						
	Occupation	Class of worker	Incorporation status	Weeks worked	Main reason did not work full year	Full-time/ part-time status	Main reason worked mostly part time
	percent						
Canada	6.7	5.1	4.1	4.9	6.0	3.3	4.8
Newfoundland and Labrador	6.7	6.4	3.6	4.8	5.3	3.3	5.2
Prince Edward Island	6.9	5.4	3.3	4.0	4.8	2.5	4.8
Nova Scotia	6.1	5.2	3.6	4.0	5.2	2.8	4.3
New Brunswick	6.5	5.8	3.7	4.6	6.0	3.0	4.8
Quebec	5.8	4.5	4.0	4.3	5.3	2.8	4.1
Ontario	6.8	4.9	4.1	4.7	5.8	3.2	4.7
Manitoba	6.9	5.7	4.2	5.3	6.5	3.7	5.0
Saskatchewan	6.7	6.2	3.6	5.8	6.9	3.6	5.2
Alberta	7.7	6.1	4.8	5.7	7.5	4.1	5.8
British Columbia	6.9	5.3	3.9	5.4	6.4	3.6	4.9
Yukon	9.4	8.7	6.2	8.2	12.7	5.5	8.7
Northwest Territories	15.3	13.3	9.2	12.8	16.8	10.8	17.0
Nunavut	32.2	29.4	33.9	31.0	36.3	27.3	34.7

Source: Statistics Canada, Census of Population, 2021.

Data quality notes

While considerable effort is made throughout the entire process to ensure a high standard of data quality, there remains the risk of some inaccuracy in the resulting data.

To assess the appropriateness of the 2021 Census of Population data for a user's needs, and to understand the risk involved in drawing conclusions from or making decisions on the basis of these data, users should be aware of the following data quality notes for the labour variables.

Industry and occupation

Industry codes are assigned based on write-in responses describing the respondents' employer name and type of business. Similarly, occupation codes are based on write-in descriptions of the respondents' job title and main duties and responsibilities. Incomplete or vague write-in responses can reduce the accuracy of the codes assigned, particularly for the most detailed levels of the industry and occupation classifications. For example, when "sales" is provided as a description of main duties or responsibilities, any one of the codes corresponding to sales associate, sales supervisor or sales manager could be assigned.

The potential for inaccuracy in industry and occupation codes is elevated for smaller domains, when increased sampling variability also impacts the accuracy of estimates. In such situations, users are advised to consider using broader industry and occupation categories.

Comparability over time

Most labour variables can be compared over time with some caveats, as described below under each concept heading.

Labour force status

The labour force status variable has remained relatively stable since the 1981 Census. The concept is derived based on response patterns to various questions. It classifies respondents as "employed," "unemployed" or "not in the labour force" and provides the employment rates, unemployment rates and participation rates.

Among the questions from which the variable is derived, only the school attendance has undergone changes impacting somewhat the comparability of the concept. Specifically, the full-time and part-time status of school attendance was removed in 1986 and 2006 onward, rendering slightly different estimates and rates especially for those aged 15 to 19 years old.

Industry

The industry and occupation variables are created from classifications subject to revision every five years. Some of those revisions are minor updates whereas some are major structural changes.

During the 2021 Census, the Industry variable was classified based on the North American Industrial Classification System (NAICS) 2017. The most detailed information available for census industry data is at the four-digit code level. Comparison with the 2016 Census data, which is based on the NAICS 2012, is possible, keeping in mind the caveats presented earlier for such comparison.

There are a number of differences between NAICS 2012 and 2017, most notably the creation of new cannabis-related industries in agriculture, manufacturing, wholesale trade and retail trade. The new industries are:

- 111412 Cannabis grown under cover (1114 – Greenhouse, nursery and floriculture production)
- 111995 Cannabis grown in open fields (1119 – All other crop farming)
- 312310 Cannabis product manufacturing (3123 – Cannabis product manufacturing)
- 413410 Cannabis merchant wholesalers (4134 – Cannabis merchant wholesalers)
- 453993 Cannabis stores (4539 – Other Miscellaneous store retailers)

In addition, new examples for cannabis wholesale by business-to-business electronic markets and cannabis products wholesale agents and brokers have been added to:

(4191 Business-to-business electronic markets, and agents and brokers)

- 419110 Business-to-business electronic markets
- 419120 Wholesale trade agents and brokers, respectively.

Cannabis cultivation for medicinal purposes has been moved from 111419 Other food crops grown under cover to 111412 Cannabis grown under cover (1114 – Greenhouse, nursery and floriculture production).

Details of the revisions made for 2017 can be found at Introduction to the North American Industry Classification System (NAICS) Canada 2017 Version 3.0.

For further information on the comparability between classifications, data users are advised to consult concordance tables at Concordances between classifications.

Occupation

The occupation variable is based on the 2021 National Occupational Classification (NOC) Version 1.0. Users should be aware of limitations in comparing data—such as from the 2016 Census and from the Labour Force Survey (LFS)—based on the NOC 2016. As indicated in the NOC 2016 to NOC 2021 correspondence tables, approximately 80% of the five-digit NOC 2021 codes can be directly compared with a single occupation code from the NOC 2016. The remaining 20% of occupations are not directly comparable. Similarly, approximately one-third of NOC 2021 four-digit occupation codes are directly comparable with a NOC 2016 code.

Class of worker

The class of worker variable has remained relatively stable and is comparable over time. In 2021, the concept of “employee” was further expanded to determine if their position was permanent, a fixed-term or casual. The data relating to job permanency is not historically comparable because 2021 is the first year the data have been collected.

Work activity during the reference year

The work activity during the reference year variable is comparable over time. Overall, in 2021, a decline in full-time full-year work is an expected outcome of the pandemic. Work activity is unique to the census and the National Household Survey (NHS), and as such, comparability with other data sources is not possible currently.

Table 3
Distribution of proportions for work activity during the reference year, Census of Population, 2021 and 2016

Work activity during 2015 or 2020	2016	2021
	percent	
Worked before the reference year	30.3	32.0
Worked the year after the reference year	2.1	4.7
Worked 1 to 13 weeks, full time	2.2	3.5
Worked 1 to 13 weeks, part time	3.1	3.6
Worked 14 to 26 weeks, full time	3.5	3.7
Worked 14 to 26 weeks, part time	3.0	3.1
Worked 27 to 39 weeks, full time	3.2	3.3
Worked 27 to 39 weeks, part time	1.9	1.8
Worked 40 to 48 weeks, full time	9.4	5.4
Worked 40 to 48 weeks, part time	2.7	1.7
Worked 49 to 52 weeks, full time	33.6	33.7
Worked 49 to 52 weeks, part time	4.9	3.5
Total	**100.0**	**100.0**

Sources: Statistics Canada, Census of Population, 2021 and 2016.

Comparability with other data sources

Labour force status

When comparing results from the census and the Labour Force Survey (LFS), users should take into account a number of factors, including population coverage, collection methodology, sample size and questionnaire content. More information on the comparability of labour force status data from the 2021 Census of Population (long-form questionnaire) and the LFS is provided in Appendix 2.11 of the *Dictionary, Census of Population, 2021*, Statistics Canada Catalogue no. 98-301-X.

In both the census and the LFS, values for labour force status are assigned based on responses to a series of questions concerning the respondents' employment and job search activities during the reference week. In previous censuses, differences in the questions asked, and in the rules used to assign labour force status, have had a relatively minor impact on the comparability of census and LFS estimates.

Users should be aware of the impact of these differences on 2021 Census results, which correspond to the week of Sunday, May 2, to Saturday, May 8, 2021, when the third wave of the pandemic resulted in an elevated number of Canadians working reduced hours or being on layoff. The LFS questionnaire includes questions which result in some respondents who initially report that they did not work during the reference week being classified as employed. For example, a respondent who works zero hours during the reference week as a result of business closures, but has not received an indication that their employment has been terminated, is classified as employed. In contrast, in the census, the same respondent might respond that they were on layoff during the reference week and, on that basis, be classified as unemployed.

As a result of differences between the census and LFS in the treatment of respondents on temporary layoff, comparisons between the two sources should be made with caution.

Table 4
Employment, unemployment and participation rates by province, Canada, Census of Population, 2021, and Labour Force Survey, May 2021

	Employment rate		Unemployment rate		Participation rate	
	Census	LFS	Census	LFS	Census	LFS
Provinces	percent					
Canada	57.2	59.4	10.3	8.4	63.7	64.7
Newfoundland and Labrador	47.5	48.0	15.2	14.8	56.0	56.3
Prince Edward Island	59.0	57.5	10.3	10.3	65.8	64.1
Nova Scotia	51.6	55.6	12.8	9.4	59.3	61.3
New Brunswick	53.7	54.8	10.4	10.2	59.9	61.0
Quebec	59.2	59.2	7.6	7.0	64.1	63.6
Ontario	55.1	58.6	12.3	8.9	62.8	64.3
Manitoba	60.0	62.2	8.0	7.1	65.2	66.9
Saskatchewan	61.2	62.2	8.1	7.3	66.6	67.1
Alberta	60.3	62.7	11.5	9.3	68.2	69.1
British Columbia	58.2	60.5	8.4	7.1	63.5	65.1

LFS = Labour Force Survey
Sources: Statistics Canada, Census of Population, 2021; and Labour Force Survey, May 2021.

Industry and occupation

The distribution of proportions among sectors of industry compared well between the 2021 Census and the LFS.

Table 5
Distribution of proportions for industrial sectors, Canada, Census of Population, 2021, and Labour Force Survey, May 2021, data non-adjusted for seasonality

	Census	LFS
Industrial sector	percent	
11 Agriculture, forestry, fishing and hunting	2.3	1.9
21 Mining, quarrying, and oil and gas extraction	1.3	1.4
22 Utilities	0.8	0.8
23 Construction	7.7	7.7
31 to 33 Manufacturing	8.4	9.3
41 Wholesale trade	3.4	3.3
44 and 45 Retail trade	11.2	11.4
48 and 49 Transportation and warehousing	5.2	5.3
51 Information and cultural industries	2.2	2.1
52 Finance and insurance	4.6	5.0
53 Real estate and rental and leasing	1.9	1.9
54 Professional, scientific and technical services	8.6	8.9
55 Management of companies and enterprises	0.3	0.0
56 Administrative and support, waste management and remediation services	4.1	3.9
61 Educational services	7.7	7.8
62 Health care and social assistance	13.6	13.6

Table 5
Distribution of proportions for industrial sectors, Canada, Census of Population, 2021, and Labour Force Survey, May 2021, data non-adjusted for seasonality

	Census	LFS
Industrial sector	percent	
71 Arts, entertainment and recreation	1.5	1.6
72 Accommodation and food services	5.0	4.6
81 Other services (except public administration)	4.1	3.9
91 Public administration	6.3	5.6
Total	**100.0**	**100.0**

LFS = Labour Force Survey
Sources: Statistics Canada, Census of Population, 2021; and Labour Force Survey, May 2021.

Census and LFS occupation information are currently classified using different versions of the NOC. As of late 2022, Census occupation information is coded using the NOC 2021, while LFS occupation information is coded using NOC 2016. As a result, comparison with the LFS is limited at this time. Historical LFS occupation information coded to NOC 2021 will be available in January 2023. Until that time, it is possible to directly compare approximately 80% of 2021 occupations at the five-digit level. The remaining 20% of codes are not comparable because of the complex correspondence between the two classifications.

Class of worker

Results for the class of worker variable show that census proportions of employees and self-employed individuals are comparable to the LFS proportions. As observed in previous cycles, the 2021 Census self-employment rates remain lower than the LFS rates.

The census uses a single question to classify respondents as an employee, self-employed or an unpaid family worker and to determine if a self-employed individual has employees, whereas the LFS uses two separate questions. It is possible that some Census self-employed individuals may declare having employees, even though their help is unpaid, because of slight differences in the questions. Additionally, it is possible that some census unpaid family workers work for relatives that live outside of their household. To be an unpaid family worker according to the LFS, the family member you work for must live in the same household.

Table 6
Distribution of proportions for class of worker, Census of Population, 2021, and Labour Force Survey, May 2021, data non-adjusted for seasonality

	Census	LFS
Class of worker	percent	
Employees	85.3	85.4
Unpaid family workers	0.3	0.1
Self-employed incorporated, no paid help	2.7	3.4
Self-employed incorporated, with paid help	3.1	3.3
Self-employed unincorporated, no paid help	7.1	7.1
Self-employed unincorporated, with paid help	1.6	0.7
Total	**100.0**	**100.0**

LFS = Labour Force Survey
Sources: Statistics Canada, Census of Population, 2021; and Labour Force Survey, May 2021.

Work activity during the reference year

The concept of work activity is derived based on responses to the number of weeks worked during the reference year and during those weeks worked in 2020, if the individual worked mostly full-time or part-time. The work activity concept uses the reference year January to December 2020, as does census income data.

As a result, when comparing work activity with income data, there could be workers reporting a certain number of weeks worked in 2020 without any earnings reported for that year. There could also be workers who did not report any work activity (no weeks worked) in 2020 but did have earnings in that year. Although it is possible to have pre-payment or retroactive payment of employment income, it is uncertain if the extent of such arrangements is captured accurately in the long-form questionnaire. Moreover, some self-employed workers receive dividends instead of earnings, and proxy reporting as well as respondents' inaccurate recall for the year 2020 could also be contributing factors to explain these inconsistencies.