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Interpreting low-income statistics for the on-reserve and territorial populations using Census and National Household Survey data

by Andrew Heisz

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Abstract

The low-income rate is one of the most observed indicators of well-being, used to track changes in living standards and to identify groups at risk of social exclusion. Statistics Canada does not currently publish low-income rates for the on-reserve and territorial populations, although other organizations have developed and published their own low-income statistics using Census or National Household Survey (NHS) data. This publication examines the concepts and methodologies underlying low-income indicators with the aim of providing guidance to users who wish to examine low income on reserve or in the territories using Census or NHS data. It underlines data quality considerations such as incomplete enumeration on reserve. Other caveats include the fact that the Low-income measure does not account for differences in the cost of living, and that Statistics Canada's definition of income excludes many non-cash sources of income.

Foreword

This paper is intended provide support to users of the Census or National Household Survey who wish to better understand income patterns or study low-income rates for the on-reserve and territorial populations, or who wish to examine the low-income rate for provinces or Canada without excluding these regions.

Statistics Canada currently produces low-income statistics based upon three approaches: the Low-income cut-offs (LICO), the Low-income measure (LIM), and the Market Basket Measure (MBM). Each approach uses a different methodology to derive a set of income "thresholds" below which a family is deemed to be in low income.

This paper introduces the concept of measuring low income based upon the LIM approach for the on-reserve and territorial geographies using data from the 2011 National Household Survey. The concept underlying the LIM is that all persons in a household have low income if their household income is less than half of the median income of all households, adjusted for household size. The LIM methodology requires only information on household income and household size, and therefore, can be applied for the on-reserve or territorial geographies using income data from the NHS or Census.

The paper also indicates that the two other approaches, the LICO and the MBM, cannot currently be implemented for the on-reserve or territorial geographies. This is because these methodologies call for additional data on prices and expenditures on necessities, and this data is not currently available for these regions.

The paper describes the application of existing LIM thresholds to the on-reserve and territorial geographies, and describes caveats of interpreting the LIM for these areas.

Canada's Official Poverty Line

In August 2018, the Canadian government released *Opportunity for All: Canada's First Poverty Reduction Strategy*. This was followed in November 2018 by the tabling of new legislation (Bill C-87) in Parliament that would, if passed, set the "Market Basket Measure" (MBM) as Canada's first Official Poverty Line. For more information regarding Canada's Official Poverty Line, refer to *Opportunity for All: Canada's First Poverty Reduction Strategy*.

In addition to setting the MBM as Canada's Official Poverty Line, *Opportunity for All* proposes a plan to improve the measurement of poverty in Canada. This plan includes expanding the Canadian Income Survey so that Canada's Official Poverty Line can be calculated in the territories; and permit more detailed analysis of poverty for specific groups. In addition, Statistics Canada will explore the feasibility of ensuring that the basket of goods and services reflects the unique costs of living in Canada's northern and remote communities. Finally, the Government will work with National Indigenous Organizations and others to identify and co-develop indicators of poverty and well-being that reflect the multiple dimensions of poverty and well-being experienced by First Nations, Inuit, and Métis.

Interpreting low-income statistics for the on-reserve and territorial populations using Census and National Household Survey data

By Andrew Heisz

Introduction

The low-income rate is one of the most observed indicators of poverty and well-being, used to track changes in living standards and to identify groups at risk of social exclusion. Poverty is a multifaceted subject, and there is no agreement among experts on a single measure. In the contemporary literature, low income is considered but one facet of poverty, with other aspects also being important. Low-income lines reflect a consistent, comparable, and well-defined method of identifying individuals who have significantly lower income than others.

Statistics Canada does not currently publish low-income rates for the on-reserve and territorial populations. However, other organizations have, through custom request, developed and published their own low-income statistics for these areas using Census or National Household Survey (NHS) data. This paper examines the concepts and methodologies underlying low-income indicators with the aim of providing guidance to users who wish to examine low income on reserve or in the territories using Census data.

This paper reviews data quality considerations important to statistics developed for on reserve and the territories, and explores possibilities for low-income measurement on reserve and in the territories using the Census. It concludes that low income can be consistently measured on reserve and in the territories using the Low-income measure (LIM), although there are certain caveats to this conclusion.

In a data appendix, the paper also provides estimates of low income on reserve using the LIM, in Inuit Nunangat regions, and in the territories, using data from the 2011 NHS.

This study focusses on the application of the LIM low-income indicator on reserve and in the territories. As mentioned in the foreword, in August 2018, the Canadian government released *Opportunity for All: Canada's First Poverty Reduction Strategy*. This was followed in November 2018 by the tabling of new legislation (Bill C-87) in Parliament that would, if passed, set the "Market Basket Measure" (MBM) as Canada's first Official Poverty Line. Statistics Canada is exploring the feasibility of developing a Market Basket Measure for the territories. Moreover, the Government will work with National Indigenous Organizations and others to identify and co-develop indicators of poverty and well-being that reflect the multiple dimensions of poverty and well-being experienced by First Nations, Inuit, and Métis.

^{1.} The UNECE Guide of Poverty Measurement, 2017, represents the results of a recent cross country collaboration to describe the state of the art in poverty measurement in the United Nations Economic Conference for Europe (UNECE) region, prepared under the direction of the Conference of European Statisticians (of which Statistics Canada is a member). Readers interested in a more in-depth discussion of poverty and low-income measurement are directed to refer to that publication.

^{2.} To place the issue in a broader perspective, while income reflects an important aspect of well-being, other dimensions should also be considered to provide a holistic view. For example, in the "Framework for OECD's Well Being Indicators" (OECD, 2013), material living conditions such as income, labour and housing are included as are other elements of well-being such as health status, education, and security. Siggner and Dacosta (2005) present a "holistic framework for measuring community well-being" for the purposes of describing Aboriginal persons' well-being in Canadian cities. In this model, income is not mentioned specifically. Rather, themes important for individual and community well-being are explored such as knowledge, long and healthy lives, decent standards of living, and economic development. The Community Well-Being Index is described as a tool to provide information to help inform policies and programs that are aimed at improving the well-being of Aboriginal people. The index is based upon the components of income, education, housing and labour force activity. These models of well-being underscore that income is but one aspect of well-being, and that having a low income is not the only determinant of whether someone is living in poverty. They also underscore that different communities may conceptualise poverty differently.

Low-income measurement on reserve and in the territories

Using the census

Most social surveys in Canada do not cover the on-reserve population, and while there are some social surveys in the territories, these do not focus on the topic of poverty or low income. Accordingly, the Census would be the main source of data for low incomes on reserve and in the territories.³

One challenge in measuring low income on reserve is incomplete enumeration on reserves. In 2011, there were a total of 36 Indian reserves and Indian settlements that were 'incompletely enumerated' in the NHS, out of a total of 997.4 This number has been falling over time, with 14 reserves and settlements being incompletely enumerated in the 2016 Census, out of 984.5 Nevertheless, incomplete enumeration, and non-response in general can lead to non-response bias.6 Bias in survey data from non-response is due to the fact that certain groups may be more likely to answer surveys than others, making the results less representative of the makeup of the whole population. Non-response in the 2011 NHS was higher than in other Census years because of the voluntary nature of the survey, affecting the results of all variables and regions. The long form of the 2016 Census was mandatory, leading to reduced non-response rates and therefore non-response bias.

The impact of non-response on the quality of the estimate is reflected in the Global Non-Response rate (GNR). GNR is provided by geographic area and takes on a percentage value of 0% (no non-response) to 100% (complete non-response). The Global Non-Response rate is the key criterion that determines whether or not the Census or NHS results will be released for a given geographic area.

GNR combines two types of non-response: 1) non-response at the household level; and 2) non-response at the question level. Statistics Canada takes steps to make the data as usable as possible despite the non-response.

Non-response at the household level for enumerated areas are adjusted during weighting. Thus, non-enumerated households (even though they do not respond) are still represented in the data through the weights attached to responding households. Non-response at the question level is accounted for through imputation, a process wherein a likely value for this respondent is chosen to replace the missing value provided. As mentioned above, the non-response rate decreased from the 2011 NHS to the 2016 Census, and accordingly, the imputation rate and the adjustment for non-responding households also decreased significantly in all parts of Canada.

The risk of bias from both types of non-response increases as the non-response rate increases and if the characteristics of those who choose to participate are significantly different than those who refuse. In the NHS, geographic areas with GNR higher than or equal to 50% are suppressed in standard products but are available in custom request (although users are advised to use them with caution). The lower the GNR, the lower the risk of non-response bias in estimates for that area.

Thus it is important, when examining low-income statistics from the Census or NHS, to also consider the GNR for that estimate, as it will indicate the level of quality of any estimate.

^{3.} Administrative data, such as those available from the Longitudinal Administrative Database or the T1 Family File can also be used to study the distribution of income on reserve and in the territories. This paper focusses on interpretation of low-income statistics using the census. Many of the same points addressed in this paper apply also to administrative data. However, there are additional considerations to use when studying low income using administrative data, including the identification of the on-reserve population using postal codes, and the construction of households using administrative data. Users interested in studying low income on reserve using the administrative files listed above are advised to contact Statistics Canada at STATCAN infostats.STATCAN@canada.ca.

^{4.} According to the 2011 Census definition, 'On reserve' included six census subdivisions (CSDs) types legally affiliated with First Nations or Indian bands, i.e., Indian reserve (IRI), Indian settlement (S-É) (except for the five Yukon settlements of Champagne Landing 10, Klukshu, Two and One-Half Mile Village, Two Mile Village and Kloo Lake), Indian government district (IGD), terres réservées aux Cris (TC), terres réservées aux Naskapis (TK) and Nisga'a land (NL), as well as the northern village of Sandy Bay in Saskatchewan. For more details, see the Aboriginal People Technical Report, National Household Survey, 2011.

^{5.} Changes in number of on-reserve census subdivisions (CSDs) may be due to changes in the geography definitions, such as deletions, boundary changes, or amalgamations.

^{6.} For more details, see the Aboriginal Peoples Reference Guide, National Household Survey, 2011.

Low-income measures available on the census

Statistics Canada produces three low-income measures. For each of these measures, a household is considered to be low income if the household's after-tax income falls below a specified income threshold. Each of the three measures has its own methodology, and each presents a different perspective on low income. The remainder of this paper discusses low-income measurement using these thresholds.

Low-income cut-offs

For the many years in which Statistics Canada has produced low-income statistics from the Census, statistics for the on-reserve population and the territories have been explicitly excluded.

Up to, but not including the 2011 Census, Statistics Canada only released in their standard products low-income statistics based upon Statistics Canada's Low-income cut-offs (LICO). The concept underlying the LICO is that a low-income family is one that is likely to be spending a significantly greater share of their income on food, shelter and clothing than a typical Canadian family (accounting for their family size and the size of their area of residence).

To analysts of the census in those years, the LICO was seen as inappropriate for use in the analysis of low income on reserve and in the territories because "(t)he low income cut-offs are based on certain expenditure-income patterns which are not available from survey data for the entire population". This is because the LICO cut-offs were developed using data from the 1992 Family Expenditures Survey (FAMEX), which was conducted only in the 10 provinces and off reserve. As the relationship between a family's income and their expenditures on food, shelter and clothing might have been substantially different, it was seen as inappropriate to apply these thresholds to the on-reserve population.

Perhaps if the FAMEX had been conducted on reserve and in the territories, a separate set of thresholds could have been developed for these areas. This might have led to useful inferences for low income on reserve, yet developing thresholds for on reserve and in the territories was not possible.

LICOs are available in before and after-tax formats, but, following the preceding logic, neither is appropriate for examining low income on reserve or in the territories.

The Market Basket Measure

For the 2011 NHS and 2016 Census, Statistics Canada released information on the LICO as well as two additional measures of low income: the Market Basket Measure (MBM) and the Low-income measure (LIM). The advice regarding not using the LICO for the on-reserve and territorial geographies was extended to LIM and MBM.⁹

MBM thresholds are defined as the cost of a basket of goods and services required for an inclusive standard of living. The basket thresholds are calculated regionally and are built, in part, from local prices of goods and services. Thus, they reflect regional variation in costs of living, and reflect an easily interpreted and communicated standard: A family with income below the MBM threshold can be said to have insufficient income to afford a basket of goods and services deemed necessary to take part in the community in which they live.

However, these MBM-basket prices are collected jointly with the collection activity of the consumer price index. This collection activity does not happen on reserve or in the territories (outside of the territorial capitals) and so no thresholds are presently available for these regions. Therefore, for the MBM measure of low income, similar considerations would apply as for the LICO. If MBM-basket prices had been collected on reserve and in the territories, perhaps a separate set of thresholds could have been developed for these areas, but presently, MBM thresholds for these regions are not available.¹⁰

^{7.} The LIM uses the household concept while the LICO and MBM use an extended economic family concept which includes unattached individuals (these lines are described below). Differences between these concepts are not important for the present analysis, and we refer to the unit of analysis as the household or family interchangeably in this paper.

Statistics Canada (1999).
 Statistics Canada stated: "The low-income concept does not apply to the full population in private households. For the purposes of low-income statistics, units in the Yukon Territory,
Northwest Territories and Nunavut and on Indian reserves were excluded... The Low-income after-tax cut-offs were based on certain expenditure—income patterns which are not available
from survey data for the entire population. It is also felt that in certain areas, the consumption of hunting or fishing products, barter economies or substantial in-kind transfers may reduce the
interpretability of income-based measures." Statistics Canada (2013c).

^{10.} It could be that modifications to the current MBM methodology would also be desirable for constructing thresholds on reserve and in the North. A feasibility study examined the application of the MBM to the territorial capitals, and concluded that a different basket was appropriate for these areas.

The Low-income measure (LIM)

LIM low-income lines define a level of income needed for families of various sizes to achieve a standard of living that is one-half the median standard of the population. This is a useful conceptualization because it allows for researchers and policy makers to identify which parts of the population have income levels that are low relative to a clearly

Table 1
Low-income prevalence rates using the Low-income measure, after tax (LIM-AT),
Canada, 2010

	Low-income rate
	percentage
All persons	14.9
Children (persons under 18 years of age)	17.1
Seniors (persons 65 years of age or older)	13.4
Persons living in lone-parent families	28.0
Off-reserve Aboriginal identity	25.3

Source: Statistics Canada, National Household Survey, 2011.

defined and transparently derived norm. Because the LIM is strictly income based, and is not built using local prices or expenditure patterns, it is computable on or off reserve and in the territories using the Census or NHS.

LIM also has wide acceptance for use in comparing low-income rates among countries with different cultures, preferences and standards of living, which provides a precedent for making comparisons between different areas within a country.¹¹ This section of the paper describes in detail how this statistic is determined and how the results should be interpreted.

Table 1 shows low-income rates using the LIM taken from the National Household Survey for 2011. Estimates exclude the population on reserve and in the territories. As the table indicates, the low-income rate among all persons was 14.9% and for off-reserve Aboriginal persons it was 25.3% in Canada in 2010 (the income reference year in the Census is the calendar year preceding the Census reference date).

The LIM: A relative measure of low income

The conceptual basis for the LIM is that a low-income person is one who has limited means relative to others in their society. Relative low-income measures, such as the LIM, are most frequently used in wealthier societies where the social inclusion of their citizens receives equal emphasis as whether basic needs are met.¹² In the international statistical literature, this type of low-income line is often referred to as a "relative poverty line".¹³ Persons in low income should be described as having low income relative to the median-standard, rather than relative to the price of goods and services in their area (as with the MBM).

The LIM thresholds

LIM thresholds are generally calculated for after-tax income and are available for households of different sizes, shown in Table 2 for 2010 from the National Household Survey. Persons with household income less than the threshold are said to be in low income.

Income is measured at the household level, but to take account of the fact that persons in different household sizes

Table 2
Low-income measure, after tax (LIM-AT) threshold by household size, 2010

	Low-income rate
Household size	dollars
1 person	19,460
2 persons	27,521
3 persons	33,706
4 persons	38,920
5 persons	43,514
6 persons	47,667
7 persons or more	51,486

Note: In 2010 constant dollars.

Source: Statistics Canada, National Household Survey, 2011.

^{11.} For an example, see OECD (2016). The UNECE also recommends a LIM measure for the United Nations Development Programme (UNDP) sustainable development goal 10.2 (By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status).

^{12.} In a UNECE survey of countries (43 responded), 34 countries reported using a relative poverty measure similar to the LIM, including all 21 European responding countries, Canada and New Zealand.

^{13.} See UNECE (2017), p.72.

would have different income needs to meet the same standard of living, the low-income thresholds for multiple persons are not simple multiples of the threshold of a single person. Rather, income thresholds for multiple person households are derived using a formula that takes into account the needs of larger families, while accounting also for the fact that the additional needs required decrease for each additional member. Thus, a family of four requires more income to meet a standard of living as a family of two, but not twice as much.

The factor by which the thresholds increase across family sizes is straightforwardly determined. The threshold for a household with 2 persons is the equivalent of the threshold for a household of 1 person times the square root of 2; the threshold for a household with 3 persons is the equivalent of the threshold for a household of 1 person times the square root of 3; and so on. These operations used in deriving the LIM are consistent with international standards and best practices.¹⁴

Important considerations when using the LIM on reserve or in the territories

The Low-income measure does not account for cost of living

It is worth reiterating that the LIM does not account for differences in costs of living across regions. In fact, except for the family size adjustment described earlier, cost of living is not explicitly factored into the LIM calculation at all.

The definitions of income are the same on and off reserve, however, there are shortcomings to all income measures

Statistics Canada provides statistics on the incomes of Canadians using clearly defined definitions of income based upon standards which have been developed over a long period of time and are consistent with international statistical practices. The definition of income is the same for all Canadians regardless of the region of residence of the person.

However, a combination of measurement issues and historical practice means that not all recommended international practices are carried out fully by the statistical agency. Two such areas which may have bearing on the measurement of low income for the on-reserve population are (1) the value of goods or services received inkind, such as subsidies to housing, and (2) the value of goods and services produced for own consumption, such as food produced from hunting or fishing,¹⁵ are not included in income.¹⁶ The literature on income measurement indicates that these should be included in income estimates, while acknowledging that it is not always possible, and Statistics Canada estimates do not presently include these items on or off reserve.

It is also possible that the quality of measurement (of those components that are measured) differs on and off reserve. Estimates of income produced by Statistics Canada rely centrally (but not solely) upon administrative information gathered by Canadian Revenue Agency (CRA) as part of the income tax system. This includes taxfiler declarations, as well as slips issued by employers and administrative data generated for the purposes of delivering government programs.

Statistics Canada includes tax-exempt income in income estimates, which includes tax-exempt income reported on tax documents such as social assistance T5007 slips, T1 tax returns or T4 Statement of Remuneration Paid slips, or otherwise on the Census. Even when income earned on reserve is tax exempt, it is required to be declared on T1 and T4 slips. In many instances, even if persons do not file taxes, or report the tax-exempt income, such earnings are accounted for from their T4 slips. And as indicated earlier, persons with no income records at all, or partial income records only, will have income values imputed by Statistics Canada. Nevertheless, it can be difficult to measure tax-exempt and other undeclared income on or off reserve.

Data quality issues could also arise if there is a larger incidence of non-filing of tax returns by residents of reserves. Briefly, non-availability of tax information for census respondents is the equivalent of question-level non-response, leading to a higher GNR.

^{14.} This process of adjusting income for household size is called "equivalization" in the poverty literature.

^{15.} Many First Nations use fishing and hunting as a way to supplement food supplies to family members and members of the communities. Depending on the community or the region, it may vary from an activity to a necessity to be able to feed a family.

^{16.} Inter-household transfers (money transferred from one household to another such as that given from a parent to child who is a student to aid in living expenses) is also not included in income.

Thus, some sources of income are not captured on or off reserve, but the nature and amount of these incomes might be different in different regions. The prevalence of band housing on reserve, and the importance of hunting and fishing to the indigenous culture, suggest that the shortfall might be larger for the on-reserve than off-reserve populations, although more research would be needed to determine if this is the case, and by how much.¹⁷

On the Census, the Low-income measure threshold is established using the off-reserve population in the provinces.

A user requesting on-reserve data from the census database would need to keep in mind that the threshold is derived using the median living standard of the off-reserve population living in the 10 provinces. This follows from the decisions described above that excluded these areas in the calculations of the low-income rates as well.

Usually the LIM allows for a comparison of a unit of the population to the median standard of living of all units in that population. In the case of "on reserve and the territories" the LIM comparator population is out of the population. Users should keep in mind that this is a non-standard application of the LIM which might not be appropriate for some analyses.

The methodology underlying the LIM threshold is sufficiently flexible that if one wanted to define a threshold based only on the on-reserve population, one could do that. Alternatively, one could derive a threshold including all Canadians.

Would the set of LIM thresholds have been different (higher or lower) if the population on reserve and in the territories had been included? Table 3 shows estimates from the 2011 NHS for thresholds for fourperson households. Including the reserves and territories in the threshold calculations would have yielded slightly lower low-income thresholds, and hence slightly lower low-

Table 3
Low-income measure, after tax (LIM-AT) thresholds for a household size four, by population of comparison, 2010

	Population	Threshold for a household of size four
Population of comparison	count	dollars
Provinces only, not including on reserve	32,386,170	38,920
Provinces only, including on reserve	32,746,500	38,712
All Canada	32,852,325	38,730
On-reserve population only	360,615	19,264

Note: In 2010 constant dollars.

Source: Statistics Canada, National Household Survey, 2011.

income rates for both the on and off-reserve populations.

The last line of Table 3 shows the LIM threshold that would be computed using only the on-reserve population. Because median income on reserve is much lower than it is off reserve, the LIM threshold is also much lower (\$19,264). This would yield lower low-income rates for the on-reserve population compared to using the usual threshold which is based on the population of the 10 provinces, excluding reserves (\$38,920).

This exercise demonstrates the relative nature of the LIM. The choice of basing the threshold on all of Canada, on one territory, or another population set would be influenced by the framework of low income and poverty desired in the analysis. A low-income threshold based on the entire population, including on reserve and the territories, would best represent income levels in Canada.

^{17.} The LIM is unique among Statistics Canada low-income lines in that shortcomings in compiling income affect not only the low-income estimates, but also the low-income lines themselves, as the low-income line is derived from median income.

Other research using the LIM on reserve

In the absence of official Statistics Canada releases on this subject, other research organisations have produced estimates of low income on reserve using Census data. Most recently, MacDonald and Wilson (2016) from the Centre for Policy Alternatives describe estimates for the on-reserve Aboriginal children population using 2006 Census and 2011 NHS data. In that study, MacDonald and Wilson make many of the same points as are made in this document regarding the interpretation of low-income estimates generated for the on-reserve population. Notably:

- MacDonald and Wilson examine low-income rates and note that these "are simply a reflection of whether
 the household income in a given family is below a certain dollar figure", and "it tells us nothing about
 other barriers that may impede a child's ability to achieve their full potential" (p.20). In this document we
 underscore the same point that income is but one factor of overall well-being.
- MacDonald and Wilson discuss the issue of data quality for the on-reserve population in terms of Global Non-Response (GNR).
- MacDonald and Wilson examine low income using the LIM, citing its acceptance internationally as a
 measure of low income (p. 23). They also exploit the widespread availability of LIM statistics to create
 comparisons of child low-income rates across countries using, for Canada, data from the NHS including the
 on-reserve and territorial populations (p.11-12).
- As in this document, MacDonald and Wilson note the importance of unmeasured income sources such
 as the value of food produced for own consumption and subsidised housing. These and other items are
 excluded from Statistics Canada measures of income for all Canadians, and data users should be take
 these shortcomings into consideration when comparing any two populations.
- MacDonald and Wilson reflect upon on-reserve filing rates, more from the perspective that tax-filing is
 necessary to receive some benefits such as the new Canada Child Benefit (p.24). This paper adds to this
 that non-filing of taxes should also be considered as a potential data quality issue. As indicated above,
 GNR reflects the scale of imputation necessary when tax data is not available.

Conclusions regarding the interpretation of the LIM on reserve and in the territories

The purpose of this paper was to examine the concepts and methodologies underlying low-income indicators with the aim of providing guidance to users who wish to examine low income on reserve or in territories using Census or NHS data.

The paper reviewed low-income measurement on reserve and in the territories using the census data, in light of various data quality considerations.

Then, it described possibilities for low-income measurement on reserve and in the territories using the Census, and presented a way of interpreting these indicators in light of the different low-income measures available.

The conclusions are:

- The LIM measure on-reserve and in the North can be calculated using existing Census or NHS data, and
 can be used for examining patterns in low income in these regions. The MBM and LICO cannot presently
 be applied to the on-reserve and territorial populations due to a lack of data on expenditures and prices
 of goods and services in these areas, which is necessary to compute the low-income thresholds for these
 measures.
- The LIM is a relative measure of low income. It compares the level of income received by a household to a single standard based upon a national median income. The LIM does not account for regional differences in costs of living, and it does not describe differences across regions in the ability to meet a minimum standard of living.
- Statistics Canada defines income in the same way on and off reserve, which provides a common conceptual base upon which income comparisons can be made. However, income statistics explicitly exclude certain sources of income, such as the value of food produced for own consumption, and the value of subsidised housing. The importance of these exclusions can differ from region to region. These may be more important to the on reserve than the off-reserve populations. Likewise, although tax-exempt income earned on reserve is included in the income concept, and captured through the T1, T4 and other government provided slips, Statistics Canada is unable to measure all tax-exempt income on reserve.
- Users should be aware that, in standard Census and NHS tabulations, LIM thresholds are computed with reference to the median income of the off-reserve population living in one of the ten provinces. Other comparison populations would need to be specified by the user through custom request.¹⁸
- When using Census or NHS data, users should take note of the data quality of their estimates, based upon GNR values. The GNR values will reflect non-response at the household and question levels.

This study focussed on the application of the LIM low-income indicator on reserve and in the territories. As mentioned in the foreword, in August 2018, the Canadian government released *Opportunity for All: Canada's First Poverty Reduction Strategy*. This was followed in November 2018 by the tabling of new legislation (Bill C-87) in Parliament that would, if passed, set the "Market Basket Measure" (MBM) as Canada's first Official Poverty Line. Statistics Canada is exploring the feasibility of developing a Market Basket Measure for the territories. Moreover, the Government will work with National Indigenous Organizations and others to identify and co-develop indicators of poverty and well-being that reflect the multiple dimensions of poverty and well-being experienced by First Nations, Inuit, and Métis.

^{18.} Custom requests can be obtained through contacting STATCAN.infostats-infostats.STATCAN@canada.ca.

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Appendix

Table A.1

Prevalence of low income based on Low-income measure, after tax (LIM-AT) for Canada, provinces, territories, Inuit area of residence, and reserve status, 2010

			Prevalence of low income (LIM-AT), excluding areas	Prevalence of low income (LIM-AT), including areas
	Global Non-Response Rate	Population in Private Households	where the concept is not applicable	where the concept is not applicable
Geography Name	percentage	count	percentage	percentage
Canada	26.1	32,852,325	14.9	15.2
Newfoundland and Labrador	31.4	507,270	17.9	18.0
Prince Edward Island	33.4	137,375	15.8	15.9
Nova Scotia	28.2	906,175	17.4	17.8
New Brunswick	28.6	735,835	17.2	17.6
Quebec	22.4	7,732,520	16.7	16.8
Ontario	27.1	12,651,795	13.9	14.0
Manitoba	26.2	1,174,345	16.4	19.3
Saskatchewan	29.3	1,008,760	14.0	16.7
Alberta	27.4	3,567,980	10.7	11.3
British Columbia	26.1	4,324,455	16.4	16.8
Yukon	29.9	33,320		9.7
Northwest Territories	16.1	40,800		12.5
Nunavut	25.2	31,695		21.4
Inuit Nunangat	21.2	52,110	16.7	19.7
Nunatsiavut	11.5	2,615	23.0	23.0
Nunavik	14.5	12,055	15.3	15.3
Nunavut	25.2	31,695		21.5
Inuvialuit region	18.0	5,745		18.2
Outside Inuit Nunangat	25.8	32,800,210	14.9	15.2
On reserves	21.9	360,615		50.6
Off reserves	26.1	32,491,705	15.0	14.9

^{...} not applicable

Notes:

The 'NHS Global Non-Response Rate (GNR)' is a combined measure of complete questionnaire non-response and non-response to individual questions. Geographic areas with a GNR higher than or equal to 50% are suppressed from tabulations on standard published NHS data products.

Residents of the territories or reserves are excluded from Statistics Canada's after-tax Low-income measure (LIM-AT). The table column "Prevalence of low income (LIM-AT), excluding areas where the concept is not applicable" applies this exclusion in the calculation of the prevalence of low-income.

For the purposes of this project, the table column "Prevalence of low income (LIM-AT), including areas where the concept is not applicable" ignores the exclusion to see what the estimates would be. However, the LIM-AT threshold used to determine if a person is in low-income is still derived using the population excluding residents of territories or reserves. In other words, the low-income status of residents of the territories or reserves is assessed using the same LIM-AT line as the ones used in the official LIM-AT concept.

Data are rounded. Components may not add up to the total due to this reason.

Source: Statistics Canada, National Household Survey, 2011.