Income Research Paper Series

Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories

by Nancy Devin, Burton Gustajtis, Keith Lam and Sarah McDermott

Release date: November 12, 2021

Statistics Canada   Statistique Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

Email at STATCAN.infostats-infostats.STATCAN@canada.ca

Telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

- Statistical Information Service   1-800-263-1136
- National telecommunications device for the hearing impaired   1-800-363-7629
- Fax line   1-514-283-9350

Depository Services Program

- Inquiries line   1-800-635-7943
- Fax line   1-800-565-7757

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "Contact us" > "Standards of service to the public."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories

By **Nancy Devin, Burton Gustajtis, Keith Lam** and **Sarah McDermott**

As stated in the *Poverty Reduction Act*, the Market Basket Measure (MBM) is now Canada's Official Poverty Line.

This discussion paper describes the proposed methodology for a new Northern Market Basket Measure (MBM-N) for Yukon and the Northwest Territories,[1,2] as well as identifies potential avenues of research in preparation for the next comprehensive review of the MBM, which is expected to occur in 2023.

The paper also presents initial MBM-N thresholds and provides preliminary poverty estimates for reference years 2018 and 2019. A review period will follow the release of this paper, during which time Statistics Canada and Employment and Social Development Canada (ESDC) will welcome feedback from interested parties and work with experts, stakeholders, indigenous organizations, federal, provincial and territorial officials to validate the results.

The MBM-N methodology proposed in this paper is derived from the MBM methodology currently applied in the provinces. As such, it is comprised of five major components: food, clothing, transportation, shelter and other necessities. The MBM-N is intended to capture the spirit of the existing MBM (i.e., to represent a modest, basic standard of living) while accounting for adjustments needed to reflect life in Yukon and the Northwest Territories.

Acknowledgements

This discussion paper would not have been possible without the invaluable contributions of the Statistics Bureaus of Yukon and the Northwest Territories. We would like to thank them for their support and time in helping create the methodology for the MBM-N, and for their help with reviewing this paper.

Introduction

On August 21, 2018, the Government of Canada released *Opportunity for All, Canada's First Poverty Reduction Strategy*, which contained long-term commitments to guide current and future government actions and investments to reduce poverty.

The *Poverty Reduction Act* legislated key commitments made in the strategy. Opportunity for All indicates that Statistics Canada will be investigating the possibility of producing MBM thresholds for the territories. To this end, Statistics Canada held several discussions with the statistical focal points for Yukon and the

> **A MBM-N for Nunavut**
>
> Statistics Canada and ESDC are working in collaboration with Nunavut statistical focal points on developing a MBM-N tailored towards the unique living conditions experienced in that territory.

Northwest Territories to identify what specific changes, compared to the existing MBM, need to be considered in order to construct MBM thresholds for these territories. These discussions were aimed at building upon a 2012 study by an informal working group[3] formed to assess the technical feasibility of developing a MBM-N (Statistics Canada internal document, 2012).

This paper describes the proposed methodology for calculating MBM-N basket component costs and disposable income amounts for comparison, and providing the resulting preliminary disposable income thresholds and

---

1. Work on a MBM methodology adapted to Nunavut is ongoing.
2. The costs and incomes associated for on-reserve Census subdivisions are not included.
3. The 2012 consultation process consisted of and was led by an informal working group on Low Income Measurement in the territories and included representatives from Human Resources and Skills Development Canada (HRSDC), Statistics Canada, Aboriginal Affairs and Northern Developments Canada (AANDC), Nunavut, the Northwest Territories and Yukon. Each territory had representatives from their respective Bureaus of Statistics and departments responsible for social policy as members of the working group.

poverty rate estimates for 2018 and 2019. Readers are encouraged to provide feedback and comments. Although this paper does not address a MBM-N for Nunavut, we welcome feedback and comments related to that territory as well (see text box – *A MBM-N for Nunavut*).

Discussion papers reporting on the proposed creation of a MBM-N

This is the second discussion paper released as part of the development of proposed methodologies for an MBM-N for Yukon and the Northwest Territories. Other MBM-N papers include:

- **January 2021: Proposals for a Northern Market Basket Measure and its disposable income**

  The MBM-N basket for Yukon and the Northwest Territories are comprised of five major components: food, clothing, transportation, shelter and other necessities. A family is in poverty if its disposable income is less than the MBM-N threshold for a family of its size in its region. Proposals for a Northern Market Basket Measure and its disposable income describes considerations for these five components and for its disposable income concept.

- **Spring 2022: Proposals for a Northern Market Basket Measure and its disposable income (Nunavut)**

  The Nunavut MBM-N basket will include the same five major components as outlined in the MBM-N baskets for the Northwest Territories and Yukon, while taking into account additional adjustments to the contents to reflect life in Nunavut.

Working with Indigenous peoples

In *Opportunity for All*, the Government of Canada committed to "work[ing] with National Indigenous Organizations and others to identify and co-develop indicators of poverty and well-being, including non-income-based measures of poverty, that reflect the multiple dimensions of poverty and well-being experienced by First Nations, Inuit and Métis." [4]

It is important to note that discussions around the co-development of new indicators of poverty and well-being for Indigenous peoples are proceeding on a separate track from the MBM-N methodology proposal.

While the proposed MBM-N is based on a methodology which is currently officially used by the Government of Canada to calculate national poverty statistics, the Government is currently working to better understand poverty and well-being from the perspective of Indigenous peoples, and to encourage the co-development of complementary indicators of poverty and well-being, including non-income-based measures of poverty, that reflect the multiple dimensions of poverty and well-being experienced by First Nations, Inuit and Métis. Given that there is a higher proportion of individuals reporting an Indigenous identity in the territories when compared to the rest of Canada, integrating such additional indicators of poverty in analyses pertaining to these regions is particularly important.

The MBM methodology is not intended to be a prescriptive and inflexible basket of goods and services. Although the standards are based on non-indigenous constructs, the costs associated with each component should be the validation process, not the items themselves.

---

4. During the consultations for *Opportunity for All*, the Government of Canada heard that it should take a strengths-based approach to poverty reduction that focuses on well-being and supporting resilience. Indigenous women also indicated that poverty is about more than a lack of income; amongst other things, it is also about social disconnection, and they explained that cultural activities promote social and economic well-being by improving, self-confidence and building identity.

What we heard after the publication of the first MBM-N discussion paper:

During the review process, we heard about the need for a more holistic approach to measuring poverty. Statistics Canada and ESDC are aware that the proposed MBM-N methodology does not fully meet the holistic approach to poverty endorsed by many organizations and individuals working with people that have lived experiences of poverty in the territories. As stated in *Opportunity for All*, the Government recognizes that poverty is a multi-dimensional issue that cannot be fully captured by considering income and costs alone, as is done with the MBM. However, Statistics Canada and ESDC believe that the MBM is a key step towards capturing the strong link between low income and the other dimensions of poverty. For more information on the other dimensions of poverty being measured by the Government of Canada, please see *Canada's Official Poverty Dashboard* which can be found on [Dimensions of Poverty Hub](#).

Summary of proposed MBM-N methodology

The MBM establishes poverty thresholds based on the cost of a "basket" of food, clothing, shelter, transportation and other necessities. Families with disposable incomes less than the applicable thresholds, given their family size and region of residence, are considered to be living in poverty. The following is the proposed methodology for a 2018-base[5] MBM-N. Additional details on these proposals were provided in the previous discussion paper on the development of the MBM-N and described in more detail in Appendix A: Proposed methodology for the MBM-N regions, components and disposable income.

Summary of proposed methodology for the costing of MBM-N basket components (described in [Proposals for a Northern Market Basket Measure and its disposable income](#))

MBM-N regions

It is proposed that the MBM-N (2018-base) provide poverty thresholds for nine regions across the two territories: one for each of the capitals and seven additional geographical groupings – two for Yukon[6] and five for the Northwest Territories.[7] Under guidance from the statistical focal points, the development of the MBM-N regions responds to the need for sufficient detail on price differences across communities, while keeping price measurement requirements within reasonable parameters.[8]

Shelter component

The proposed MBM-N shelter components methodology is based on the rental of a 3-bedroom dwelling, in-line with the National Occupancy Standard set out by the Canada Mortgage and Housing Corporation (CMHC). The rental prices for a dwelling would be derived from the 2016 Census data and adjusted to the 2018 base year.

Clothing and footwear component

It is proposed the clothing and footwear component would reflect the Social Planning Council of Winnipeg and Winnipeg Harvest Acceptable Living Level (ALL) 2012 clothing basket for a family of four, while making adjustments to account for the colder climate in the territories.

Food component

The food component would be based on Health Canada's 2019 National Nutritious Food Basket (NNFB).

---

5. Typically, the "base" nomenclature designates the last time an update or "rebasing" of the measure was conducted and, where necessary, new standards were introduced. Since this is the creation of a MBM-N methodology, the base year nomenclature here represents the standards introduced for reference year 2018. All references to a MBM-N methodology is this discussion paper are referring to the 2018-base MBM-N. Annual adjustments to the component costs are done using the appropriate price index.
6. Rural North and Rural South.
7. Beaufort Delta, Sahtu, Tłįchǫ, Dehcho and South Slave.
8. These include: the logistical challenges of surveying small and isolated communities; the logistical limitations posed by the climate, geography and infrastructure; the high cost of surveying in areas with low population density and a highly dispersed population; and small sample sizes.

Transportation component

The transportation methodology would reflect the differing private transportation usage patterns and needs of people living in the territories. Accordingly, the proposed MBM-N methodology recognizes this by costing a combination of a car and sport utility vehicle (SUV). The fly-in communities of the NWT would have costs associated with owning and operating both an all-terrain vehicle (ATV) and a snowmobile.

Other necessities component

The other necessities component costs would use a "simplified" multiplier[9] applied to the food and clothing costs, which is consistent with the methodology for the MBM in the provinces. An amount would also be added to reflect the widespread need for cellular telephone services.

Summary of proposed methodology for calculating MBM-N disposable income

Defining disposable income

In general, the MBM-N definition of disposable income would mirror the 2018-base MBM methodology. Specifically, the MBM-N methodology defines disposable income as total income (including government transfers) after deducting not only income tax, but also several non-discretionary expenses (e.g., contributions to the Canada Pension Plan and Employment Insurance, union dues, child care expenses, support payments paid, etc.).

Tenure Type Adjustment (TTA)

Similar to what was done for the 2018-base MBM methodology in the provinces, in order to recognize the differing shelter costs faced by homeowners with or without a mortgage and subsidized renters, the MBM-N methodology proposes to make an adjustment to its disposable income, which is referred to as a Tenure Type Adjustment (TTA). The TTA would add the difference between the cost of the shelter component of the MBM-N basket (based on renters) and the typical shelter costs for the other tenure types, to the disposable income of families of the corresponding tenure type. The TTA places homeowners and subsidized renters on a more equal footing with renters in regards to their shelter costs, when evaluating their poverty status.

Medical expense imputation amounts

Medical expenses are derived directly from administrative tax data. When no medical expense data is available, a value is imputed using territorial data from the Survey of Household Spending (SHS).

MBM-N thresholds and poverty rates

In this section we describe the resulting estimated MBM-N thresholds and poverty rates under the proposed methodology. These results should be treated as preliminary given that the review phase of this discussion paper is not complete.

Table 1 shows the MBM-N thresholds for a four-person family for each of the MBM-N regions under the proposed methodology for reference years 2018 and 2019. In general, the MBM-N thresholds for the Northwest Territories are higher than those for Yukon. The threshold differences between the two territories are mainly due to the cost differences in the shelter and food components. In 2018, the MBM-N region of Rural South in Yukon has the lowest threshold amount at $50,895, while Sahtu in the Northwest Territories has the highest threshold amount at $72,526. For the territorial capitals, Whitehorse has a MBM-N threshold of $52,215 and Yellowknife has a MBM-N threshold of $59,926.

---

9. Similar to the 2018-base MBM methodology, the multiplier was established based on an analysis of historical spending patterns on a set of selected expenditure categories deemed necessary for a modest, basic standard of living.

For the 2018 reference year, all 53 of the MBM regions in the provinces had lower 2018-base thresholds compared to the MBM-N thresholds. The MBM province thresholds ranged from $37,397 for Quebec communities with a population less than 30,000 people to $48,677 for Vancouver (in current dollars).

The thresholds presented in Table 1 are developed for the reference family of four (two adults[10] and two children).[11] The same reference family approach is used in the MBM for the provinces. To calculate thresholds for family sizes that are different from that of the reference family, the MBM-N uses a square root of family size equivalence scale. The equivalence scale method is commonly used to adjust other low-income thresholds (e.g., LIMs and LICOs) to different family sizes, and is recommended for use in poverty measurement (UNECE, 2011).[12]

Table 2 shows the 2018 and 2019 poverty rates as measured in the Canadian Income Survey (CIS) using the proposed MBM-N thresholds, for selected geographies, age groups and family types. According to the MBM-N, the preliminary poverty rate decreased in these two territories, from 14.5% in 2018 to 10.8% in 2019. For the preliminary estimates for the number of persons in poverty, please see Appendix B.

Table 1

MBM-N thresholds in current dollars, by MBM-N region, four person family, 2018 and 2019

		2018	2019
MBM-N Geography		current dollars	
Territory	**Region**		
Yukon	Rural North	53,203	54,166
	Rural South	50,895	51,817
	Whitehorse	52,215	53,164
Northwest Territories	Beaufort Delta	71,611	72,902
	Sahtu	72,526	73,848
	Tłı̨chǫ	58,962	60,021
	Dehcho	62,289	63,406
	South Slave	59,004	60,059
	Yellowknife	59,926	60,971

Note: MBM-N thresholds are preliminary.
Source: Statistics Canada. Custom tabulation.

The preliminary poverty rate in Yukon went down from 11.1% in 2018 to 9.0% in 2019, while the preliminary poverty rate for the Northwest Territories went from 17.5% to 12.5% over the same period. Estimates for small domains should be used with caution. For more information (see text box – *Measuring survey error*).

Table 2
Estimations and confidence intervals[1] for the percentage of persons in poverty, MBM-N, selected geographies and demographic groups, 2018 and 2019

	Percentage of persons in poverty					
	2018			2019		
	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound
	percent					
Geography						
Yukon and Northwest Territories	10.8	**14.5**	18.2	8.3	**10.8**	13.4
Yukon	7.9	**11.1**	14.2	6.0	**9.0**	12.0
Northwest Territories	11.0	**17.5**	24.0	8.4	**12.5**	16.7
Age group[2]						
Persons under 18 years	10.0	**17.0**	24.0	7.4	**13.1**	18.8
Persons 18 to 64 years	9.4	**12.6**	15.9	6.9	**9.0**	11.1
Persons 65 years and over	14.6	**21.3**	27.9	11.8	**17.7**	23.5
Family Type[2]						
Persons in economic families	8.3	**12.6**	16.9	5.8	**8.7**	11.6
Persons not in an economic family	19.1	**24.0**	28.9	16.7	**21.5**	26.4

1. Upper and lower bounds are based on a 95% level of confidence.
2. Estimates are for the two territories.
Note: Estimates are based on the preliminary MBM-N thresholds.
None of the 2018 to 2019 changes are statistically significant.
Source: Canadian Income Survey, Statistics Canada. Custom tabulation.

For combined Yukon and the Northwest Territories geography, these decreases were also observed in the selected age groups and family types, from 2018 to 2019. Children,[13] on average, experienced a larger decrease than seniors.[14]

Similarly, over the same period, persons living in families experienced a larger decrease than unattached individuals (i.e., persons not in an economic family). None of the changes between 2018 and 2019 in Table 2 were statistically significant (please see next section *Survey error within the Territorial estimates*).

---

10. One male and one female, aged between 25 and 49 years old.
11. A girl aged 9 and a boy aged 13.
12. For more information on how to use the square root equivalence scale to adjust the MBM-N thresholds, please see *Report on the second comprehensive review of the Market Basket Measure*.
13. Persons aged under 18.
14. Persons aged 65 years and older.

Measuring survey error

As these estimates are derived from a survey, they are subject to survey error. Survey error is composed of non-sampling errors such as non-response and sampling error which causes variability. Variability is the extent to which the estimate produced will differ from other estimates, if the sample size and design were kept the same and no non-sampling error occurred but a different sample was chosen.

One way to describe sampling error is to provide the margin of error for an estimate, based on a certain level of confidence. The most common way to do this is to give an estimate along with its confidence interval. A confidence interval provides the upper and lower bounds for an estimate, based on a predefined level of confidence. For example, the upper and lower bounds for the estimates in Table 2, are set at a 95% level of confidence. In other words, 19 times out of 20 (or 95% of the time) the true value will be found within the confidence interval, had it been calculated using the entire population. Therefore, 95% of the time, the estimates provided in Table 2 could be any value within their respective confidence intervals.

Survey error within territorial estimates

Chart 1 illustrates the importance of considering the quality indicators provided with every estimate to take into account the variability of the estimates when making a statement. Although the year-over-year poverty estimates for both territories went down from 14.5% in 2018 to 10.8% in 2019, the percentages could have been anywhere within their respective confidence intervals. Meaning, the magnitude of the change could have been larger or smaller, or the change could have even gone in the opposite direction. When the income data for more years becomes available, the analysis of the time series should provide further insights into poverty trends over time. In addition, the application of these thresholds to other income sources with a larger sample size (e.g., 2021 Census for 2020 income), or to administrative data sources could also provide for stronger inferences and more disaggregation.

Chart 1
Estimations and confidence intervals[1] for the percentage of persons in poverty, MBM-N, selected geographies and demographic groups, 2018 and 2019
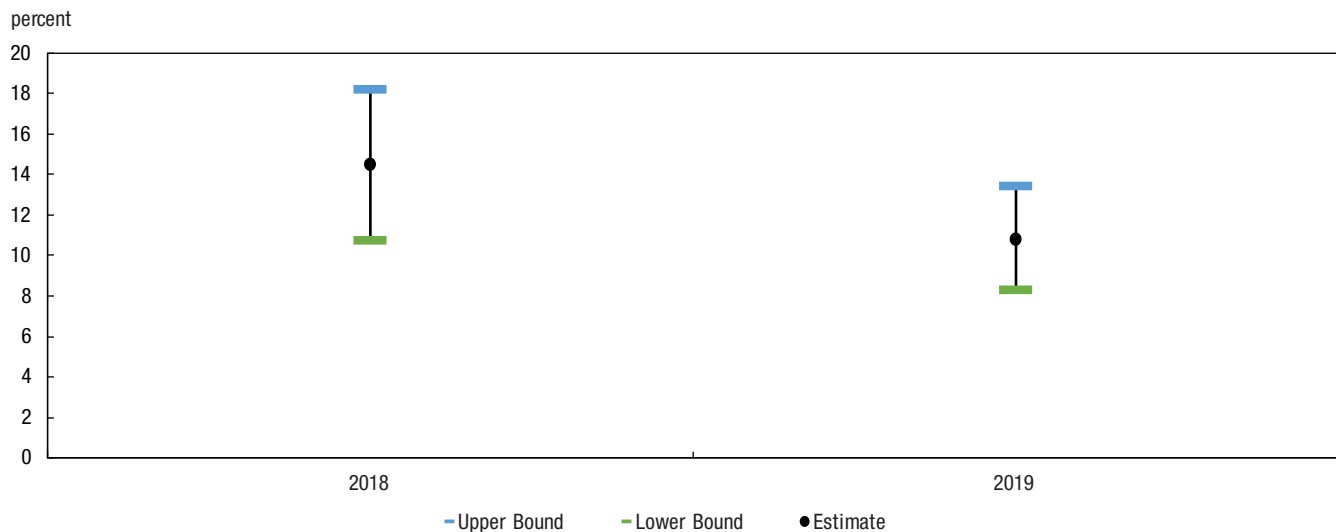
1. Upper and lower bounds are based on a 95% level of confidence.
Source: Canadian Income Survey, Statistics Canada. Custom tabulation.

A MBM-N forward-looking research agenda

A number of research topics were identified during the creation and review process of this paper. Given their complexity and uncertain feasibility in implementation, these MBM-N-specific topics will require further study before the next MBM-N rebasing exercise.[15]

Revised Northern Food Basket: Statistics Canada will examine the feasibility of incorporating the Revised Northern Food Basket (RNFB) for the communities outside the capital into a future MBM-N methodology. The RNFB measures the cost of a nutritious diet for a family of four and is used by Nutrition North Canada (NNC) to monitor the cost of healthy eating in isolated northern communities. Presently, the pricing of the 2019 NNFB is used to estimate food costs in the capital and spatial indexes are used to adjust these costs for all other communities.

Country Food and Harvesting: Currently the MBM methodology only takes into account food purchased from stores. Country food and harvesting is an important source of nutritious food for many remote communities in the territories. Statistics Canada will research other approaches that could account for other sources of food in the territories, such as harvesting, trapping, hunting and fishing for country food.

Conclusion

This is the final discussion paper describing the proposed MBM-N methodology for Yukon and the Northwest Territories. It provides and compares provisional MBM-N thresholds and poverty rates, which were the result of collaboration between Statistics Canada, ESDC, and the statistical bureaus of Yukon and the Northwest Territories.

The paper has also proposed some elements for a forward-looking research agenda for the MBM-N, outlining two key topics that Statistics Canada and ESDC intend to study in preparation of the next comprehensive review, scheduled for 2023.

It is important to note that the fundamental purpose of this paper is to foster engagement with key stakeholders. Therefore, following the release of this paper, there will be a review period during which time Statistics Canada and ESDC will engage with experts, stakeholders, Indigenous organisations and federal, provincial and territorial officials to help validate the results. The review period is expected to end in the beginning of 2022. We encourage readers to contact us to share their views, suggestions and feedback by sending an email to:

statcan.market.basket.measure-mesure.du.panier.de.consommation.statcan@statcan.gc.ca

If access to email is impractical or not possible, we can also be reached by contacting Statistics Canada's general enquiries line:

- Toll-free number: 1-800-263-1136
- National TTY line: 1-866-753-7083

---

15. The MBM-N forward-looking research agenda topics, are in addition to those previously identified during the 2018-base MBM review.

Appendix A: Proposed methodology for the MBM-N regions, components and disposable income

Proposed methodology for the MBM-N regions

Under guidance from the statistical focal points, the MBM-N regions were based, where appropriate, on the Census Division boundaries, while also taking into consideration similarities between communities in order to make logical geographical groupings. The intent is to have the most detailed price differentials for goods and services for the communities, while keeping the price measurement within reasonable parameters. It is proposed that the MBM-N provide poverty thresholds for nine regions across the two territories: one for each of the capitals and seven additional geographical groupings – two for Yukon and five for the Northwest Territories.

Specifically, for Yukon, the 62nd parallel would be used to delineate the boundary of Rural South and Rural North, while Whitehorse would be the entire Census Agglomeration (CA). The Yukon Subdivision, Unorganized, which occupies the majority of the territory and spans the two proposed areas, would be included in the Rural North region as approximately two-thirds of its total area is located in the region.[16] For the Northwest Territories, the five Census Divisions (e.g., Beaufort Delta, Sahtu, Tłı̨chǫ, Dehcho and South Slave) would be used to group communities, while the Census Division Region 6, which includes Yellowknife, would be used for the capital.[17]

There are a number of issues that make measuring poverty in the Northwest Territories and Yukon particularly challenging, especially for geographies outside of the territorial capital. These challenges can impact both the expenditure and income sides of the MBM-N methodology. For example, the logistical challenges of isolated communities with limited infrastructure can impact the availability of food and clothing price collection for estimating the MBM-N basket costs. Similar logistical challenges, along with the need to protect the confidentiality of the survey response, can impact the availability of income data. For example, the income source for the annual poverty estimates is the CIS which excludes households in remote areas with a very low population density. Although this impact is small[18], it is important to note because a large proportion of First Nations and Inuit people reside in these excluded areas.[19]

Proposed methodology for the MBM-N basket

The MBM-N basket consists of five components: clothing, food, shelter, transportation and other expenses. In general, each of these components were adapted from the MBM, to reflect life in Yukon and the Northwest Territories.[20]

Clothing and footwear component

The MBM-N clothing and footwear component is based on the 2012 Social Planning Council of Winnipeg and Winnipeg Harvest Acceptable Living Level (ALL) Basket, with several adjustments to account for the colder climate in the Northwest Territories and Yukon. The ALL clothing and footwear list was adapted for use in MBM-N by specifying the quantity, quality, and replacement schedule for each of the items required by the MBM-N reference family (i.e., two adults and two children). In general, it provides clothing and footwear for most common work, school and social occasions.

Prices are collected from stores for the 2018 base year in each capital and the arithmetic average of the three lowest price observations in each city is calculated for each item in the basket. In addition, a three-year average

---

16. After review and consultations with the Yukon statistical focal point, the community of Ross River was moved into Rural North as its costs are more similar to the other communities in this MBM-N region.
17. The costs for the MBM-N region of Yellowknife are derived from the Census Division (6106). Please see Appendix B for an illustrative representation of the MBM-N regions.
18. The CIS coverage of the population is about 96% for the Northwest Territories and 92% for Yukon.
19. Since incomes are not available from the CIS for these regions and therefore annual estimates will not be possible, they are not included in the estimation of MBM-N basket costs (e.g., for the shelter component).
20. For an overview of the differences between the MBM and MBM-N, please see Appendix E.

of item prices is taken to ensure that price volatility is minimized. These prices, combined with specified quantities and a replacement schedule, results in the cost of the clothing component. The pricing methods for the MBM-N are similar to the 2018-base MBM.

Table A.1
MBM-N clothing thresholds in current dollars, by MBM-N region, four person family, 2018 and 2019

		2018	2019
MBM-N Geography		current dollars	
Territory	**Region**		
Yukon	Rural North	3,673	3,611
	Rural South	3,492	3,433
	Whitehorse	3,246	3,191
Northwest Territories	Beaufort Delta	4,227	4,270
	Sahtu	3,985	4,026
	Tłįchǫ	3,592	3,629
	Dehcho	3,973	4,014
	South Slave	3,725	3,763
	Yellowknife	3,400	3,435

Note: MBM-N thresholds are preliminary.
Source: Statistics Canada. Custom tabulation.

In order to adapt to the specific needs of the Northwest Territories and Yukon, it is proposed that several adjustments be made to the ALL clothing and footwear list. During the 2012 MBM-N feasibility study consultation process, it was proposed that certain items found in the ALL clothing basket were unnecessary or not typically used in the territories, and therefore should be removed. Conversely, new items should be added.

Also, it is proposed that the replacement schedule (i.e., the lifespan of clothing items) for certain items be adjusted. During the most recent consultation process with the territorial statistical focal points, it was also proposed that an adjustment should be made to the replacement schedule, to account for the higher use of winter clothes in the territories.

Using Environment and Climate Change Canada temperature data from Winnipeg, the city where the 2012 ALL basket is based, and comparing it to a corresponding territorial capital, an adjustment ratio was created.[21] It is proposed that this ratio be used to adjust the 2012 ALL clothing basket replacement schedule for summer and winter clothes. For example, this ratio would increase how often a family would need to replace typical winter items like scarfs and toques, while decreasing how often they would need to replace typical summer items like bathing suits.

Both of these adjustments reflect the need for warmer clothes in the territories, particularly during the winter months, as well as the more frequent use of certain items due to the cold climate.[22]

For areas outside of the capital, a weighted average method is being proposed, and incorporates the costs associated with travel to the closest territorial capital and the cost of ordering online. The price of the trip to the capital would include gasoline, hotel and/or plane tickets if required.[23] The shipping cost associated with online purchases would be estimated on an annual basis, under the assumption of monthly bulk orders. The weights are based on the percentage of people in the lower end of the income distribution for these regions with internet access, either at home or on a mobile device.

After directly pricing clothing items for the 2018 base year, the clothing component thresholds for subsequent years would be updated using the territory specific Consumer Price Index (CPI) for "clothing and footwear ".[24]

---

21. Adjustment ratio = (number of days below a temperature of 5°C in the respective territorial capital / number of days below a temperature of 5°C in Winnipeg).
22. For more information on the cold climate adjustors, please see Appendix D.
23. Although the costs associated with only one trip are included in the MBM-N methodology, persons living outside the territorial capital typically make multiple trips to the capital for medical reasons (e.g., doctor visits, dentist visits, etc.) which are covered by the territorial governments. The primary reason for the trip in the MBM-N methodology is for purchasing clothing items, although other items could be purchased as well.
24. The indexes used to make annual adjustments to each component (e.g., food, clothing and footwear, shelter, transportation and other) are based on the territorial capital only.

What we heard after the publication of the first MBM-N discussion paper:

During the review period, we heard concerns about the perceived subjectivity of the additions and subtractions in the clothing and footwear component. While these changes might seem subjective and restrictive, they should not be viewed as prescriptive and inflexible. They are not meant to be a detailed list of items a family must buy. Rather, users are encouraged to judge if the total cost for the clothing and footwear component are reasonable for the reference family, not what individual items are being costed. A similar consideration should be taken into account when examining the food component.

Food component

It is proposed that the MBM-N would use the 2019 National Nutritious Food Basket (NNFB) developed by Health Canada to calculate the cost of the food component. The foods in the NNFB are consistent with the new Canada's Food Guide and are commonly consumed nutritious foods that Canadians reported consuming in the 2015 Canadian Community Health Survey-Nutrition, the most recently available survey of food consumption.

The 2019 NNFB includes fresh, frozen and canned food formats to balance considerations of cost, access and availability. Additionally, 5% is added to the total cost of the basket for miscellaneous foods and beverages such as coffee, tea, herbs, spices and condiments.

Food prices were collected in 2018 by Statistics Canada in the territorial capitals. Monthly prices were collected from selected stores in each city and then the geometric mean of each item was calculated in order to determine the annual price for a given city. No adjustments were made to the 2019 NNFB to reflect life in the territories. It should be noted, as with all the other components, that the MBM methodology does not prescribe individual food items that a person should consume, rather it is meant to estimate the typical cost of a nutritious diet for the reference family.

Table A.2
MBM-N food thresholds in current dollars, by MBM-N region, four person family, 2018 and 2019

MBM-N Geography		2018	2019
		current dollars	
Territory	Region		
Yukon	Rural North	15,745	16,112
	Rural South	15,144	15,497
	Whitehorse	12,416	12,706
Northwest Territories	Beaufort Delta	20,220	20,709
	Sahtu	22,146	22,682
	Tłı̨chǫ	16,321	16,716
	Dehcho	17,143	17,558
	South Slave	15,763	16,144
	Yellowknife	12,454	12,755

Note: MBM-N thresholds are preliminary.
Source: Statistics Canada. Custom tabulation.

The proposed methodology for estimating the food component costs outside of the capitals would be to use an adjustment factor based on Statistic Canada's Living Cost Differential data and territorial spatial indexes. The spatial indexes would be derived by combining Living Cost Differential (LCD) data and data supplied by the territorial statistical agencies, to create community level spatial indexes.[25] These indexes would then be applied to their respective capital's costs for the four main food groups that are found in the NNFB (i.e., vegetables and fruit, protein foods, whole grain foods, and unsaturated fats), which would be aggregated to calculate food component cost for a specific community. Finally, the 2016 Census based population weights would be used to aggregate the community level food costs into their respective MBM-N regions.

As with the previous component, direct pricing of the food basket would be for the 2018 base year, while subsequent years' costs would be adjusted using the territory-specific CPI for "food purchased from stores".

---

25. For more information on the spatial indexes, please see Appendix E.

Shelter component

It is proposed that the MBM-N derive shelter costs for rental units measured in the 2016 Census, and would include both rent and utilities (e.g., heat, water and electricity). The Census is chosen as the data source because its large sample size allows for precise estimation of rental costs and covers all types of rental units, including those outside of the capital.

It is proposed that the MBM-N adopt the National Occupancy Standard for the reference family of one adult couple with two children (a girl aged 9 and a boy aged 13). Therefore, it would be based on shelter costs required for the reference family, or, more specifically: (1) the cost of a 3-bedroom rental unit; and, (2) it only includes units that are not in need of major repairs.[26] Finally, collective dwellings, rent-free units and those found within reserves are excluded.

Table A.3
MBM-N shelter thresholds in current dollars, by MBM-N region, four person family, 2018 and 2019

MBM-N Geography		2018	2019
		current dollars	
Territory	**Region**		
Yukon	Rural North	12,433	12,681
	Rural South	11,765	11,999
	Whitehorse	18,657	19,028
Northwest Territories	Beaufort Delta	21,214	21,556
	Sahtu	18,859	19,163
	Tłı̨chǫ	17,065	17,340
	Dehcho	18,047	18,338
	South Slave	18,069	18,360
	Yellowknife	25,320	25,728

Note: MBM-N thresholds are preliminary.
Source: Statistics Canada. Custom tabulation.

To determine the typical cost for a modest 3-bedroom rental unit, it is proposed to use a quantile regression model in order to accurately measure shelter costs across all MBM-N regions. In addition, an amount for tenant's insurance is also proposed to be included. In consultation with our territorial statistical focal points, it was determined that the vast majority of rental units in the territories included appliances as part of the rent. Therefore, the MBM-N shelter component would not include a separate category of expenses related to the purchase of appliances.

The proposed methodology for estimating the shelter component costs outside of the capital would be the same as the capital, but the shelter costs would be calculated separately for each of the MBM-N regions.

Finally, in the MBM-N, it is proposed that the territory specific all-items index of the CPI be used to update the value of the shelter component for subsequent reference years.[27]

Transportation component

In general, it is proposed that two main changes be made to the 2018-base MBM methodology to reflect life in the Northwest Territories and Yukon. First, it is proposed that the transportation component would comprise of only costs related to private transportation. Second, considering the road infrastructure in the territories, it is proposed the component should be based on the costs for a weighted basket made-up of both a small Sport Utility Vehicle (SUV) and a compact car.

The selection of which compact car and SUV to use would be based on their sales numbers. Using registration data, a weighted average for all compact cars and SUVs would be used to determine the total costs for the component.

The proposed methodology for estimating costs outside of the capital would depend on whether the communities have road access. For communities with road access, the costs of the transportation component would be the same as in the capital, but

---

26. The shelter cost estimates are obtained using rented dwellings only. They do not reflect the market availability in each MBM-N region.
27. The only exception is for the Rural-North region in the Yukon. Given the increase in resource extraction and the consequential demand in the rental market from 2016 to 2018, data from the Yukon Rent Survey was used to augment the all-items index for those years. Once the 2018 base year is established, the annual updates will only use the all-items index (with annual monitoring to ensure estimates are being adjusted appropriately).

Table A.4
MBM-N transportation thresholds in current dollars, by MBM-N region, four person family, 2018 and 2019

MBM-N Geography		2018	2019
		current dollars	
Territory	**Region**		
Yukon	Rural North	5,508	5,603
	Rural South	5,239	5,329
	Whitehorse	4,884	4,968
Northwest Territories	Beaufort Delta	5,860	5,953
	Sahtu	6,176	6,274
	Tłı̨chǫ	5,313	5,397
	Dehcho	5,547	5,635
	South Slave	5,096	5,177
	Yellowknife	5,141	5,223

Note: MBM-N thresholds are preliminary.
Source: Statistics Canada. Custom tabulation.

with adjustments based on the registration weights to account for the higher prevalence of SUVs versus compact cars outside of the capital. In addition, for these regions, it is proposed that a small nominal cost be added to account for the higher maintenance cost and higher number of kilometres typically driven compared to the capital.

For the fly-in communities in the Northwest Territories, the transportation costs would be based on the costs associated with purchasing a new mid-quality range All-Terrain Vehicle (ATV) and a snowmobile from Hay River and shipping it by barge to the fly-in community, as well as the costs associated with operating and maintaining them.[28]

Finally, it is proposed that the appropriate territorial level index for private transportation be used to adjust the transportation component for subsequent reference years.

What we heard after the publication of the first MBM-N discussion paper:

During the review, we heard concerns that an ATV was not sufficient to meet the needs for people living in the fly-in communities of the Northwest Territories. It was suggested that the costs associated with snowmobiles should also be included, especially when one considers going "on the land" during the winter.

After review and consultations with the statistical focal points from the Northwest Territories, it was agreed upon that the costs associated with both a mid-level ATV and snowmobile better reflect the needs of people living in the fly-in communities, and represents a modest, basic standard of living for these communities.

Other component

The MBM-N has a final component that recognises the needs for other necessary goods and services that are not captured under the shelter, clothing, food and transportation categories (e.g., household items, personal care, reading materials, etc.). The methodology for pricing other goods and services does not utilize the pricing of items as other parts of the MBM-N does. Doing so would be difficult, as there are a large number of items that would potentially need to be priced, and many of the items would be considered necessities for some families but not for others. Accordingly, the other component is meant to approximate average expenditures on a wide range of other goods and services, using data sourced from Statistics Canada's SHS.

In addition, it is proposed that an amount for cellular telephone services be priced separately and added to the other necessities component. The cellular telephone services amount would be based on the median territorial expenditure for a family of four in the first five income deciles in each territory, based on SHS data.

---

28. The fly-in communities are: Lutsel k'e, Ulukhaktok, Paulatuk and Sachs Harbour.

Table A.5
MBM-N other necessities thresholds in current dollars, by MBM-N region, four person family, 2018 and 2019

MBM-N Geography		2018	2019
		current dollars	
Territory	**Region**		
Yukon	Rural North	15,844	16,159
	Rural South	15,255	15,559
	Whitehorse	13,012	13,271
Northwest Territories	Beaufort Delta	20,090	20,414
	Sahtu	21,360	21,704
	Tłįchǫ	16,671	16,939
	Dehcho	17,579	17,862
	South Slave	16,351	16,614
	Yellowknife	13,611	13,830

Note: MBM-N thresholds are preliminary.
Source: Statistics Canada. Custom tabulation.

The proposed methodology for the other necessities component in and outside of the capital would use the same methodology. The 2018-base MBM multiplier[29] would be applied to the food and clothing component threshold costs for each of the MBM-N regions.

Finally, in the MBM-N, it is proposed that the territory specific all-items index of the CPI be used to update the value of the other necessities component for subsequent reference years.

Proposed methodology for the MBM-N disposable income

In the MBM-N methodology, disposable income is defined as total income (including government transfers) after deducting not only income tax, but also several non-discretionary expenses including Canada Pension Plan and Quebec Pension Plan contributions, Employment Insurance and Registered Pension Plan contributions, union dues, child care expenses, support payments paid, and direct medical expenses including private insurance premiums.

In addition to accounting for different housing tenure types, it is proposed that the MBM-N follow the other changes introduced by the 2018-base MBM (i.e., medical expense imputation amount and capital gains tax adjustments).[30]

Tenure Type Adjustment

As was done in the 2018-base MBM, it is proposed that the MBM-N methodology would make an adjustment, where possible, for other housing tenure types other than rental dwellings, such as homeownership with or without mortgages and those residing in subsidised dwellings. This would serve to place families in all tenure types on a more equal footing to those families in rental units, when determining their poverty status.

Summary of the process

The estimation of the TTA for each MBM-N region and tenure type would be obtained by subtracting the typical shelter costs of a specific tenure type from the shelter cost for renters derived during the construction of the basket. These TTA values are calculated for a three-bedroom unit for a family with an income in the second decile for each MBM-N region.

TTAs are based on National Occupancy Standard set out by CMHC for a family of four, and then equivalent values for other family sizes are computed using the square root method. These TTAs are then added to disposable income when evaluating poverty status.

The shelter cost for each tenure type is estimated for the base year. The MBM-N does not directly take into account the housing availability in the two territories, but indirectly addresses it through the use of the annual adjustors to estimate the increase in prices over time. Therefore, the tenure type costs reflect an estimation of their costs for a given reference year, but do not reflect the availability of each tenure type in a specific MBM-N region.

---

29. The multiplier value would be the same as the one found in the 2018-base MBM (0.754).
30. For more information on the methodology around the other aspects of disposable income please see, Defining disposable income in the Market Basket Measure.

Homeowners without mortgages

For homeowners without a mortgage, the shelter costs considered for the MBM consist of property taxes, utility costs, condominium fees and basic home insurance costs. As noted above, these are estimated from 2016 Census data for a three-bedroom unit for a family in the second income decile for each MBM-N region.

Homeowners with mortgages

For the purpose of the MBM-N, shelter costs for homeowners with a mortgage would consist of property taxes, utility costs, condominium fees, basic home insurance costs and mortgage interest payments. The key difference, relative to homeowners without a mortgage, is the interest cost component (which is zero for homeowners without a mortgage).

Table A.6
Tenure Type Adjustment in 2018 current dollars, by MBM-N region, four person family, 2018

MBM-N Geography		Homeowners with a mortgage	Homeowners without a mortgage	Subsidized Renters
Territory	**Region**		dollars	
Yukon	Rural North	0	5,470	5,842
	Rural South	0	5,652	4,080
	Whitehorse	1,043	11,204	8,211
Northwest Territories	Beaufort Delta	1,604	11,805	18,322
	Sahtu	500	9,440	14,754
	Tłı̨chǫ	0	7,106	14,046
	Dehcho	1,985	10,235	14,823
	South Slave	758	8,471	14,474
	Yellowknife	4,961	13,371	14,440

Note: Tenure Type Adjustments are preliminary. Negative Tenure Type Adjustments were set to zero.
Source: Statistics Canada. Custom tabulation.

Given the data limitations, a few changes compared to the 2018-base MBM were needed, in the calculation of the tenure type costs for homeowners with a mortgage. First, the mortgage interest costs were estimated using data from the 2018 Canadian Housing Survey (CHS), not the Survey of Financial Security (SFS). Second, the calculation was done for mortgages on three-bedroom dwellings only and with no age group differences. Finally, only homeowners in the second income decile were considered when estimating the shelter cost medians.

Subsidized renters

For tenants living in subsidized housing, TTAs are determined by estimating the median cost of a subsidized three-bedroom rental unit for a family in the second decile of income, and then measuring the difference between its cost and corresponding shelter cost in the basket component of the MBM. For subsidised renters, shelter costs consist of the rent paid plus utility costs and relevant insurance costs.[31]

Capital gains taxes

A capital gain or capital loss occurs when an individual disposes of, or transfers, a capital property (e.g., land, buildings, stocks, bonds, mutual funds, etc.). Since the MBM-N does not include the values of capital gains/losses in the definition of disposable income, yet deducts the income taxes, an adjustment to the disposable income is made to take into account the tax implications of capital gains/losses.

The taxes implications of capital gains/losses are not directly known from available tax information, they are first estimated and then the disposable income adjusted accordingly when administrative data indicates a capital gain/loss.[32]

The effective tax rate would be calculated as the ratio of total tax paid divided by the sum of total income and the taxable amount of the capital gain/loss. This rate would then be multiplied by the taxable amount of the capital gain/loss. The disposable income would then be adjusted by the amount of tax attributed to the capital gain/loss.

---

31. Since there is no information on which rental units are subsidized on the CIS for the North, the information was imputed using 2016 Census data.
32. For more information on the capital gains taxes methodology, please see: Report on the second comprehensive review of the Market Basket Measure.

Imputation amount for medical expenses

Medical expenses are one of the non-discretionary expenses that are deducted from after-tax income to derive disposable income for the MBM-N. These medical expenses include out-of-pocket expenses for prescription medicines, eye wear, medical services and health care equipment, dental services, health care and dental plan insurance premiums.

When determining disposable income, medical expenses gathered from tax forms are used, if the medical expense claimed on the tax form is greater than zero. If an adult respondent to the CIS[33] is not linked to tax data or if their medical claim for tax purposes is zero,[34] it is proposed that a territorial-level imputation value be used.

Table A.7
MBM-N imputation amount for out of pocket medical expenses, by territory, 2018

	Dollars
MBM-N Geography	
Yukon	549
Northwest Territories	685

Source: Statistics Canada. Custom tabulation.

Values would be derived from the most recent SHS data available[35] and reflect the territorial average of medical expenses for persons with less than the median income by territory who did not claim an amount on their tax return. This amount would only be computed for the base year (2018), while other years would be estimated by adjusting the 2018 amounts using the health care index.[36]

---

33. Persons 16 years of age or older.
34. In order to be able to claim an amount for tax purposes, medical expenses must exceed the lesser of 3% of net income or a minimum threshold amount.
35. 2015 and 2017 reference year pooled data.
36. Statistics Canada. Table 18-10-0005-01. Consumer Price Index, annual average, not seasonally adjusted.

Appendix B: Number of persons in poverty

Table B.1
Estimations and confidence intervals[1] for the percentage of persons in poverty, MBM-N, selected geographies and demographic groups, 2018 and 2019

	2018			2019		
	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound
	Number of persons in poverty					
Geography						
Yukon and Northwest Territories	8,600	**11,600**	14,600	6,700	**8,800**	10,900
Yukon	3,000	**4,200**	5,400	2,300	**3,500**	4,700
Northwest Territories	4,600	**7,400**	10,100	3,500	**5,300**	7,100
Age group[2]						
Persons under 18 years	1,900	**3,200**	4,400	1,400	**2,500**	3,500
Persons 18 to 64 years	5,000	**6,800**	8,600	3,700	**4,900**	6,000
Persons 65 years and over	1,100	**1,600**	2,200	1,000	**1,500**	1,900
Family Type[2]						
Persons in economic families	5,500	**8,400**	11,300	3,900	**5,900**	7,800
Persons not in an economic family	2,600	**3,200**	3,800	2,300	**2,900**	3,600

1. Upper and lower bounds are based on a 95% level of confidence.
2. Estimates are for the two territories.
Note: Estimates are based on the preliminary MBM-N thresholds.
None of the 2018 to 2019 changes are statistically significant.
Source: Canadian Income Survey, Statistics Canada. Custom tabulation.

Appendix C: MBM-N Regions

Map C.1
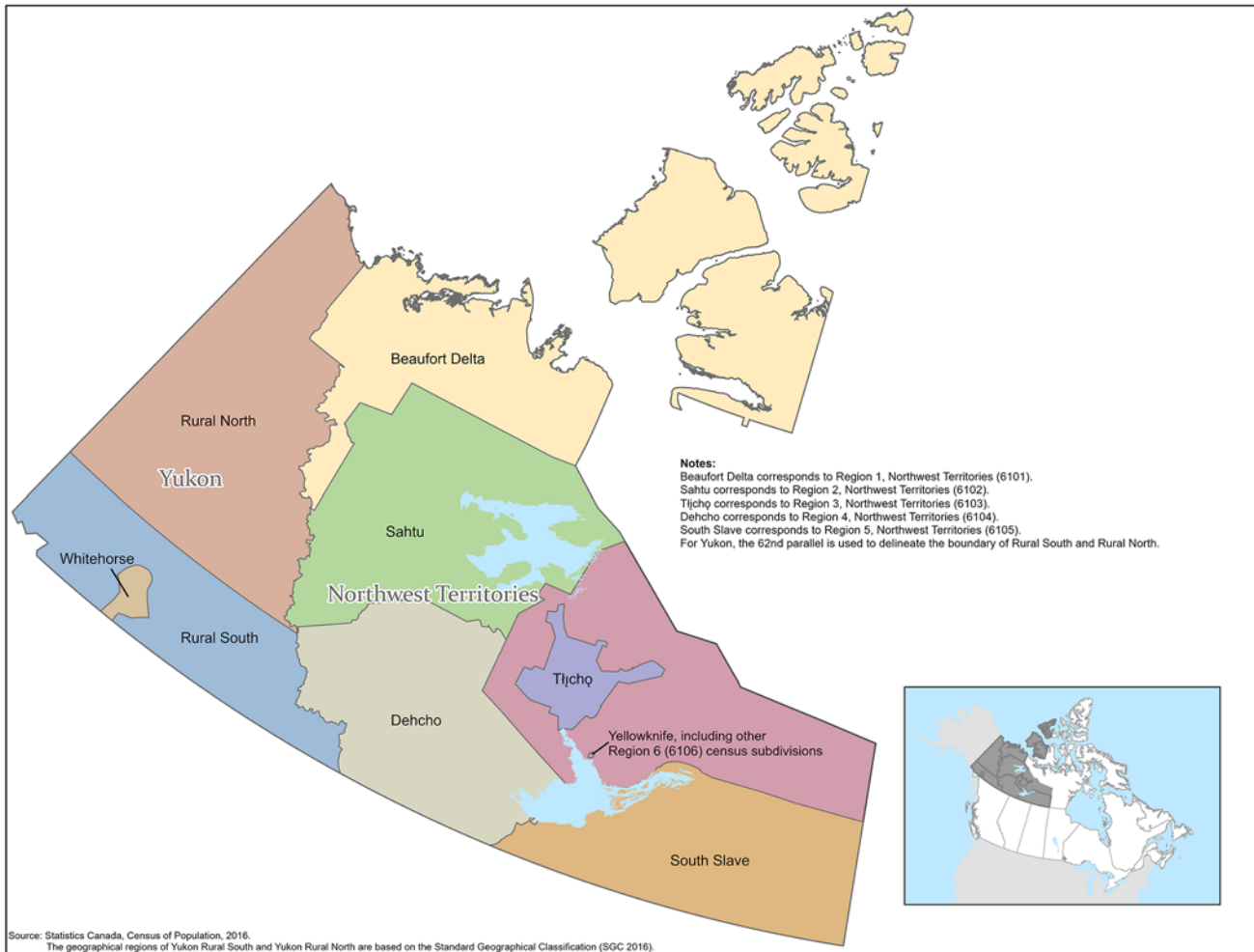**Northern Market Basket Measure (MBM-N) regions for Yukon and Northwest Territories**

Notes:
Beaufort Delta corresponds to Region 1, Northwest Territories (6101).
Sahtu corresponds to Region 2, Northwest Territories (6102).
Tłı̨chǫ corresponds to Region 3, Northwest Territories (6103).
Dehcho corresponds to Region 4, Northwest Territories (6104).
South Slave corresponds to Region 5, Northwest Territories (6105).
For Yukon, the 62nd parallel is used to delineate the boundary of Rural South and Rural North.

Yellowknife, including other
Region 6 (6106) census subdivisions

Source: Statistics Canada, Census of Population, 2016.
The geographical regions of Yukon Rural South and Yukon Rural North are based on the Standard Geographical Classification (SGC 2016).

Table C.2
Yukon and Northwest Territories MBM-N regions, by Census subdivision, 2016 Census boundaries

Yukon MBM-N Region	Census subdivision	Northwest Territories MBM-N Region	Census subdivision
Rural North	Faro (6001004)	Beaufort Delta	Tsiigehtchic (6101010)
	Carmacks (6001012)		Paulatuk (6101014)
	Mayo (6001022)		Fort McPherson (6101015)
	Dawson (6001029)		Inuvik (6101017)
	Moosehide Creek 2 (6001031)		Aklavik (6101025)
	Ross River (6001037)		Tuktoyaktuk (6101036)
	Pelly Crossing (6001041)		Sachs Harbour (6101041)
	Beaver Creek (6001042)		Region 1, Unorganized (6101063)
	Yukon, Unorganized (6001045)		Ulukhaktok (6101095)
	Stewart Crossing (6001050)	Sahtu	Délı̨ne (6102003)
	Keno Hill (6001052)		Tulita (6102005)
Rural South	Watson Lake (6001003)		Norman Wells (6102007)
	Teslin (6001006)		Fort Good Hope (6102009)
	Teslin Post 13 (6001007)		Colville Lake (6102012)
	Carcross 4 (6001008)		Region 2, Unorganized (6102063)
	Klukshu (6001016)	Tłı̨chǫ	Behchokǫ̀ (6103031)
	Haines Junction (6001018)		Whatì (6103034)
	Kloo Lake (6001019)		Gamètì (6103049)
	Upper Liard (6001032)		Wekweètì (6103052)
	Two Mile and Two and One-Half Mile Village (6001035)		Region 3, Unorganized (6103097)
	Tagish (6001036)	Dehcho	Kakisa (6104005)
	Champagne Landing 10 (6001038)		Sambaa K'e (6104006)
	Burwash Landing (6001039)		Fort Liard (6104009)
	Swift River (6001046)		Nahanni Butte (6104010)
	Johnsons Crossing (6001047)		Jean Marie River (6104013)
	Carcross (6001048)		Fort Providence (6104014)
	Destruction Bay (6001049)		Hay River Dene 1 (6104017)
	Teslin (6001057)		Fort Simpson (6104038)
Whitehorse	Whitehorse (6001009)		Wrigley (6104044)
	Lake Laberge 1 (6001010)		Region 4, Unorganized (6104097)
	Mt. Lorne (6001044)	South Slave	Fort Smith (6105001)
	Ibex Valley (6001055)		Enterprise (6105003)
	Marsh Lake (6001058)		Salt Plains 195 (6105004)
	Macpherson-Grizzly Valley (6001059)		Hay River (6105016)
	Whitehorse, Unorganized (6001060)		Fort Resolution (6105018)
			Łutselk'e (6105020)
			Reliance (6105026)
			Region 5, Unorganized (6105097)
		Yellowknife	Detah (6106021)
			Yellowknife (6106023)
			Region 6, Unorganized (6106097)

Note: Costs and incomes associated with 'on reserve' populations are not included in the MBM-N calculations. According to the 2016 Census definition, the following six Census subdivision (CSD) types are associated with 'on reserve' populations: 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). For more information on these on CSDs, please see Census subdivision types associated with 'on reserve' population section.
Source: Statistics Canada, Census of Population, 2016. Custom tabulation.

Appendix D: MBM-N cold climate adjustment factors

Table D.1
MBM-N clothing and footwear cold climate adjustment factors, by territory, 2018

MBM-N Geography	Summer	Winter
Yukon	0.94	1.05
Northwest Territories	0.72	1.23

Source: Statistics Canada. Custom tabulation.

Appendix E: MBM-N spatial index adjustment factors

Table E.1
MBM-N food component spatial index adjustment factors, by MBM-N region, 2018

MBM-N Geography		Fats and Oils	Fruits and Vegetables	Protein Foods	Whole Grain Foods
Territory	**Region**				
Yukon	Rural North	1.27	1.26	1.17	1.32
	Rural South	1.18	1.24	1.14	1.22
	Whitehorse	1.00	1.00	1.00	1.00
Northwest Territories	Beaufort Delta	1.60	1.66	1.60	1.59
	Sahtu	1.75	1.86	1.66	1.70
	Tłįchǫ	1.31	1.31	1.31	1.31
	Dehcho	1.36	1.39	1.36	1.36
	South Slave	1.25	1.27	1.23	1.28
	Yellowknife	1.00	1.00	1.00	1.00

Source: Statistics Canada. Custom tabulation.

Formula E.2: MBM-N food component formula for regions outside the capitals

The methodology for estimating the food costs outside of the capitals could be expressed in the following way.

First, indexes for each food group would be derived by averaging Living Cost Differential (LCD) data, $I_c^{LCD_i FG_i}$, and data supplied by the territorial statistical agencies, $I_c^{T_i FG_i}$, to create community level spatial indexes. A weighted sum would then be applied to the community indexes to obtain MBM-N region indexes, $I_n^{FG_i}$

$$I_n^{FG_i} = \sum_{c=1}^{n} \left[\left(\frac{I_c^{T_i FG_i} + I_c^{LCD_i FG_i}}{2} \right) \times w_c \right]; \ i = 1, \ ..., 4; \ n = 1, \ ...9,$$

where:

$I_c^{T_i FG_i}$ = Territorial provided special index for a given food grouping i, in community c,

$I_c^{LCD_i FG_i}$ = Living Cost Differential based special index for a given food grouping i, in community c,

w_c = 2016 Census based population weight for community c.

Second, these indexes would then be applied to their respective capital's costs for the four main food groups that are found in the NNFB (i.e., vegetables and fruit, protein foods, whole grain foods, and unsaturated fats).

Finally, the four main food group indexes are aggregated to calculate the food component cost for a specific MBM-N region, FC_n.

$$FC_n = \sum_{i=1}^{4} \left(I_n^{FG_i} \times FC_{CAP}^{FG_i} \right) \times 1.05; \ n = 1, \ ...9,$$

where:

$I_n^{FG_i}$ = Weighted average spatial index for a given food grouping i, in a geographical grouping n,

$FC_{CAP}^{FG_i}$ = Food cost in the capital for a given food grouping i.

Appendix F: Methodological comparison between the MBM (2018-base) and MBM-N

Table F.1
Methodological comparison between the MBM (2018-base) and MBM-N

Component	MBM	MBM-N
Shelter	• Canadian Mortgage and Housing Corporation's National Occupancy Standards for reference family • Uses 2016 Census • Median rent for 3-bedroom rental unit • Non-subsidized rental units • Supplement for appliance costs • Amount for tenant's insurance included • Annual adjustments use the provincial all-items indexes	• Canadian Mortgage and Housing Corporation's National Occupancy Standards for reference family • Uses 2016 Census • Median rent for 3-bedroom rental unit • Non-subsidized rental units • No supplement for appliance costs • Amount for tenant's insurance included • Annual adjustments use the territorial all-items indexes
Transportation	• Uses a weighted average of the cost of public transit and private transportation (Population centres with fewer than 30,000 people only have private transportation costs) • Weighted basket of five used compact cars and associated costs • Eight-year-old vehicles, amortized over five years with a 36-month financing term • 1,200 litres of gas per year • Cost of monthly public transit passes for two adults and one child and an additional amount sufficient for 12 round trip taxi rides • Not applicable (no difference for fly-in communities) • Annual adjustments use the provincial private or private transportation indexes	• Uses only private transportation costs • Weighted basket of one used compact car and one used sport utility vehicle • Eight-year-old vehicles, amortized over five years with a 36-month financing term • 1,200 litres of gas per year in the capitals, a little more outside the capitals • Not applicable (no public transportation costs) • For the fly-in communities of the NWT, costs associated with purchase of a new mid-quality range all-terrain vehicle (ATV) and snowmobile, amortized over eight years with a 36-month financing term • Annual adjustments use the territorial private transportation indexes
Food	• Health Canada's 2019 National Nutritious Food Basket (NNFB) • 5% is added to the total cost of the 2019 basket for miscellaneous foods and beverages • Prices collected in 38 cities across the provinces	• Health Canada's 2019 National Nutritious Food Basket (NNFB) • 5% is added to the total cost of the 2019 basket for miscellaneous foods and beverages • Prices collected in the territorial capitals, adjusted using spatial indexes for outside the capitals
Clothing and footwear	• 2012 Social Planning Council of Winnipeg and Winnipeg Harvest Acceptable Living Level (ALL) Basket • Prices collected in 11 cities across the provinces • Not applicable (no adjustments are made to the ALL basket)	• 2012 Social Planning Council of Winnipeg and Winnipeg Harvest Acceptable Living Level (ALL) Basket • Prices collected in the territorial capitals. For outside the capitals, a weighted average of the costs associated one trip to the closest territorial capital and the cost of ordering online. • Adjustments were made to the ALL replacement schedule and clothing list due to the colder climate.
Other necessities	• Fixed multiplier (75.4%) using Survey of Household Spending (SHS) data of the total cost of the food and clothing components for each MBM region. • Additional provincial amount for cell phone services	• Fixed multiplier (75.4%) using Survey of Household Spending (SHS) data of the total cost of the food and clothing components for each MBM-N region. • Additional territorial amount for cell phone services
Disposable Income	• Total income (including government transfers), less income tax and several non-discretionary expenses • Three Tenure Type Adjustments • Medical expenses imputation uses provincial data	• Total income (including government transfers), less income tax and several non-discretionary expenses • Three Tenure Type Adjustments • Medical expenses imputation uses territorial data

References

Djidel, Samir, Burton Gustajtis, Andrew Heisz, Keith Lam, Isabelle Marchand and Sarah McDermott (2020), "Report on the second comprehensive review of the Market Basket Measure". Catalogue no. 75F0002M2020002.

Djidel, Samir, Burton Gustajtis, Andrew Heisz, Keith Lam and Sarah McDermott (2019a), "Towards an update of the Market Basket". Catalogue no. 75F0002M2019013.

Djidel, Samir, Burton Gustajtis, Andrew Heisz, Keith Lam and Sarah McDermott (2019b), "Defining disposable income in the Market Basket Measure". Catalogue no. 75F0002M2019014.

Employment and Social Development Canada, 2018. "Opportunity for All – Canada's First Poverty Reduction Strategy", Cat. No.: SSD-212-08-18E.

Gustajtis, Burton, Keith Lam and Sarah McDermott (2021), "Proposals for a Northern Market Basket Measure and its disposable income". Catalogue no. 75F0002M2021001.

Hatfield, Michael, Wendy Pyper and Burton Gustajtis. (2010), "First Comprehensive Review of the Market Basket Measure of Low Income", Applied Research Branch paper, Human Resources and Skills Development Canada.

Heisz, Andrew (2019), "An update on the Market Basket Measure comprehensive review". Catalogue no.75F0002M2019009.

Statistics Canada, 2019. "Methodological changes to the Market Basket Measure in 2019". Catalogue no.75F0002M2019005

Statistics Canada, 2016. "Low Income Lines: What they are and how they are created". Catalogue no.75F0002M2016002

Statistics Canada, 2012. Northern Market Basket Measure Feasibility Study. Unpublished document.

UNECE (2011), "Canberra Group Handbook on Household Income Statistics", Second Edition.