

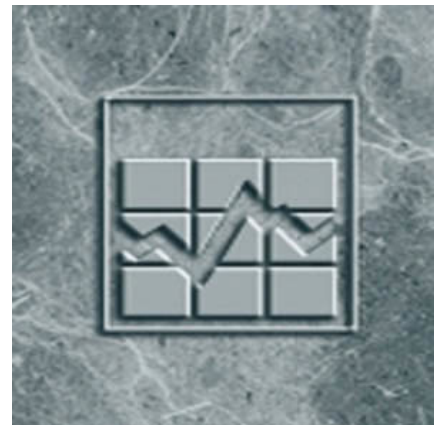
Catalogue no. 75F0002M  
ISSN 1707-2840  
ISBN 978-0-660-45064-3

## Income Research Paper Series

# Construction of a Northern Market Basket Measure of poverty for Nunavut

by Nancy Devin, Burton Gustajtis and Sarah McDermott

Release date: June 21, 2023



 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](http://www.statcan.gc.ca).

You can also contact us by

**Email at** [infostats@statcan.gc.ca](mailto:infostats@statcan.gc.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

## 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](http://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.

Published by authority of the Minister responsible for Statistics Canada

© His Majesty the King in Right of Canada, as represented by the Minister of Industry, 2023

All rights reserved. Use of this publication is governed by the Statistics Canada [Open Licence Agreement](#).

An [HTML version](#) is also available.

*Cette publication est aussi disponible en français.*

---

# Construction of a Northern Market Basket Measure of poverty for Nunavut

by Nancy Devin, Burton Gustajtis 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 Nunavut which builds on the existing MBM-N methodology for Yukon and the Northwest Territories.<sup>1</sup> The methodology proposed in this discussion paper is for the construction of a 2018-base MBM-N for Nunavut. However, there will be a comprehensive review of the MBM and the MBM-N methodologies, which is expected to occur in 2023.<sup>2</sup>

The paper also presents initial MBM-N Nunavut thresholds and provides preliminary poverty rate estimates for the 2018 to the 2021 reference years. In addition, it presents the thresholds for 2022 reference year. A review period will follow the release of this paper, during which Statistics Canada and Employment and Social Development Canada (ESDC) will welcome feedback from interested parties and work with experts, stakeholders, Inuit Organizations, and federal, provincial, and territorial officials to validate the results.

The MBM-N Nunavut methodology proposed in this paper is derived from the MBM methodology currently applied in the provinces and the MBM-N methodology applied in the other two territories. For example, the Nunavut MBM-N's transportation component includes similar adaptations to those that were made for the fly-in communities in the Northwest Territories' MBM-N. Following the existing MBM methodologies, its construction is comprised of the same five major components (e.g., food, clothing, transportation, shelter and other necessities) with a proposal to include a separate component unique to the Nunavut MBM-N. This new component would represent the costs associated with activities linked to the preservation of Inuit knowledge, culture, traditions and way of life. In general, the MBM-N for Nunavut is intended to capture the spirit of the existing MBMs (i.e., to represent a modest, basic standard of living) while accounting for adjustments needed to reflect life in Nunavut.<sup>3</sup>



## Acknowledgements

This discussion paper would not have been possible without the invaluable contributions from the Government of Nunavut's Department of Family Services and Nunavut Tunngavik Incorporated (NTI). We would like to thank them for their support and time in helping create the methodology for the Nunavut MBM-N, and for their help with reviewing this paper.

In addition, the country food and harvesting methodology of the food component would not have been possible without the expertise and assistance of the Office of Nutrition Policy and Promotion at Health Canada.

Finally, we are grateful for the guidance and feedback we received by participants at the 2019 and 2022 Nunavut Roundtables on Poverty Reduction.<sup>4</sup>

## Introduction

On August 21, 2018, the Government of Canada released [Opportunity for All, Canada's First Poverty Reduction Strategy](#), which outlined activities and long-term commitments to guide current and future government actions

1. For more information on the MBM-N for Yukon and Northwest Territories please see [Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories](#).

2. For more information on the third comprehensive review, please see [Launch of the Third Comprehensive Review of the Market Basket Measure](#).

3. For more information on the differences between the MBM methodologies please refer to in Appendix E.

4. The 2022 Nunavut Roundtable for Poverty Reduction was held from June 22<sup>nd</sup> to June 24<sup>th</sup>, in Iqaluit, Nunavut while the 2019 Nunavut Roundtable for Poverty Reduction was held from November 19<sup>th</sup> to 21<sup>st</sup>, in Cambridge Bay, Nunavut. The roundtables brought together federal and territorial representatives, National Indigenous Organizations representing Inuit people [e.g., NTI and Inuit Tapiriit Kanatami (ITK)], elders, and people with lived experiences of poverty from communities across Nunavut.

and investments to reduce poverty. The [Poverty Reduction Act](#) legislated key commitments made in the Strategy, including the adoption of the MBM as Canada's Official Poverty Line.

As part of its Data and Measurement Plan, *Opportunity for All* specified that Statistics Canada would explore the feasibility of producing MBM thresholds for the territories so that Canada's Official Poverty Line could be calculated for Canada's territorial residents. To this end, Statistics Canada first developed a methodology for Yukon and the Northwest territories, [Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories](#), and continued to work collaboratively with the Government of Nunavut (GN) to identify what specific changes, compared to the existing MBM and the MBM-N for Yukon and the Northwest Territories, would need to be considered in order to construct MBM-N thresholds for Nunavut.

Similar to the MBM-N for Yukon and the Northwest Territories, foundational work for the Nunavut MBM-N originates from a 2012 study by an informal working group<sup>5</sup> that assessed the technical feasibility of developing a MBM-N for the territories. For the Nunavut MBM-N, this seminal work was further built upon by discussions held during both the 2019 and the 2022 Nunavut Roundtable for Poverty Reduction.

## 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.”<sup>6</sup> The development of the MBM-N methodologies complements these ongoing efforts.

The government is working to better understand poverty and well-being from the perspective of Indigenous peoples and Nunavummiut Inuit in particular. There are ongoing efforts 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 Nunavummiut Inuit. Given that the majority of Nunavut's population reports having an Indigenous identity<sup>7</sup>, integrating such additional indicators of poverty in analyses is particularly important.

### ***The Makimaniq Plan II***

In 2010, the Government of Nunavut and Nunavut Tunngavik Incorporated agreed to co-sponsor a public engagement process to create a poverty reduction action plan and form the Nunavut Roundtable for Poverty Reduction. In 2011, *The Makimaniq Plan: A Shared Approach to Poverty Reduction* was released, describing poverty reduction measures grouped in themes and actions faithful to the priorities identified in the public engagement process. *The Makimaniq Plan II* is its successor.

*The Makimaniq Plan II* expresses Roundtable members' shared understanding of how poverty can be reduced in Nunavut. There is an emphasis in *The Makimaniq Plan* on healing, reconciliation and empowerment as principal areas of action to reduce poverty. It identifies eight long term outcomes to work towards in addressing the complex and overlapping challenges of poverty.

At the heart of *The Makimaniq Plan II* is the belief that to address the systemic causes of poverty in Nunavut, we must all work together more often and more effectively. It defines poverty, as a situation that exists today in Nunavut when people cannot access the supports they need to maintain their connection to the land or to participate fully in the wage-based economy.

5. The 2012 consultation process led by an informal working group working on Low Income Measurement in the territories included representatives from Human Resources and Skills Development Canada (HRSDC) (now Employment and Social Development Canada), Statistics Canada, Aboriginal Affairs and Northern Developments Canada (AANDC), Nunavut, the Northwest Territories and Yukon. The working group was integrated by representatives of territorial Bureaus of Statistics and of departments responsible for social policy and services.
6. 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 supports resilience. Indigenous women also indicated that poverty is about more than a lack of income, that it is also about social disconnection, and they explained that cultural activities promoted social and economic well-being by improving, self-confidence and building identity.
7. Both the 2016 and 2021 Censuses of Population reported about 86% of Nunavummiut reported an Indigenous identity. [Statistics Canada. 2017. Nunavut \[Territory\] and Canada \[Country\] \(table\). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001.](#) Ottawa. Released November 29, 2017. [Statistics Canada. 2022. \(table\). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001.](#) Ottawa. Released September 21, 2022.

The MBM methodology is not intended to create a prescriptive and inflexible basket of goods and services. While changes to the MBM-N for Nunavut have been proposed to better reflect the needs of the Inuit population, the underlining concepts are based on non-Indigenous standards and constructs. As is the case with the other MBMs, it is important to remember that the overall cost associated with each component should be validated and not the individual enumerated items themselves.

## Summary of proposed MBM-N Nunavut methodology

It is proposed that the MBM-N for Nunavut establishes poverty thresholds based on the cost of a “basket” for the same five components found in the other MBMs (i.e., food, clothing, shelter, transportation, and other necessities), with the addition of a separate “inuusiqtattarniq” component.<sup>8</sup> The inuusiqtattarniq component would only be applied to Indigenous families.<sup>9</sup> As is done with the other MBMs, families with disposable incomes less than their applicable thresholds, given their family size and region of residence, will be considered living in poverty. The following is the proposed methodology for a 2018-base<sup>10</sup> MBM-N for Nunavut. Additional details on these proposals are described in *Appendix A: Proposed methodology for the Nunavut MBM-N regions, family size, components and disposable income*.

### Inuit Tapiriit Kanatami’s Inuit Nunangat Market Basket Measure (MBM-IN)

An Inuit Nunangat specific Market Basket Measure (MBM-IN) is currently being developed by Inuit Tapiriit Kanatami (ITK), and is described in the paper *Cost of Living Index Development and Economic Analysis for Poverty Reduction in Inuit Nunangat* (a copy can be requested by contacting ITK at: [info@itk.ca](mailto:info@itk.ca)) While there are similarities between Statistics Canada’s proposed MBM-N for Nunavut and this measure, the two serve different objectives and are built for two different populations.

Notable differences between the MBM-N for Nunavut and ITK’s MBM-IN include: shelter component calculations, the MBM-N for Nunavut has a larger reference family size and a Nunavut specific basket component (i.e., the inuusiqtattarniq component), different methodologies to account for traditional clothing and country food, and the data used to estimate poverty thresholds. These differences make basket cost and poverty estimate comparisons difficult.

The existence of varying methodologies can help promote discussions. Therefore, we encourage readers to consider the MBM-IN methodology when reviewing the MBM-N methodology for Nunavut.

## Nunavut MBM-N regions

It is proposed that the Nunavut MBM-N provides poverty thresholds for four regions across Nunavut: one for Iqaluit and three additional geographies.<sup>11</sup> Under guidance from the representatives from the GN, the development of the Nunavut MBM-N regions responds to the need for sufficient detail on price differences across communities, while keeping price measurement requirements within a reasonable level of quality.<sup>12</sup>

8. Inuusiqtattarniq – meaning “having a normal life”/“removing/staying away from unhealthy elements/trauma”

9. Indigenous families were defined as an economic family where at least one adult member aged 16 years of age or older reported being Indigenous. The CIS in the North does not currently have information on the Indigenous status of children.

10. Typically, the “base” nomenclature designates the last time an update or “rebasings” of the measure was conducted and, where necessary, new standards were introduced. Since this paper outlines the initial proposal for the Nunavut MBM-N methodology, the base year nomenclature here represents the standards introduced for reference year 2018. All references to a Nunavut MBM-N methodology in this discussion paper are referring to the 2018-base MBM-N for Nunavut. Annual adjustments to the component costs are done using the appropriate price indices.

11. Baffin Region excluding Iqaluit, Kivalliq Region and Kitikmeot Region.

12. Many parameters affect prices in the territory including: 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.

## Reference family

To reflect relatively larger and younger families in Nunavut<sup>13</sup>, compared to the rest of the country, it is proposed to increase the size of the MBM-N Nunavut reference family to a five-person family by adding a four-year-old girl.<sup>14</sup> The age and gender were chosen to demonstrate the younger population, and were required to get, for example, the proper nutritional guidelines for adding an extra person to the family. Adjustments to other family sizes will continue to use the square root equivalence scale.

## Summary of proposed methodology for the Nunavut MBM-N basket

### Shelter component

The proposed methodology for the Nunavut MBM-N shelter component would be based on the rental of a three-bedroom dwelling, in-line with the National Occupancy Standard<sup>15</sup> 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.<sup>16</sup>

### Clothing and footwear component

The proposal for the clothing and footwear component would be to base it on the Social Planning Council of Winnipeg and Winnipeg Harvest's 2012 Acceptable Living Level (ALL) for the Nunavut MBM-N reference family, while making adjustments to account for the colder climate in the territory and for the inclusion of traditional clothing.

### Food component

The food component would be based on Health Canada's 2019 National Nutritious Food Basket (NNFB). This food list would be modified to reflect Nunavut MBM-N reference family and to include country food and harvesting.

### Transportation component

The transportation methodology would be similar to the one used for the fly-in communities of the Northwest Territories under the MBM-N methodology. It would have the costs associated with owning, maintaining, and operating both an all-terrain vehicle (ATV) and a snowmobile.

### Other necessities component

The other necessities component costs would use a multiplier<sup>17</sup> which would be applied to the food and clothing costs. This is a similar costing methodology used for the other MBMs. An amount would also be added to reflect the widespread need for cellular telephone services.

### Inuusiqattiarniq component

An additional component is being proposed for the Nunavut MBM-N, called the inuusiqattiarniq component. Feedback from previous working groups and roundtables identified this component as central to the creation of a Nunavut MBM-N methodology to capture an estimate of costs of goods and services required to preserve Inuit knowledge, culture, traditions and way of life. Given the importance of maintaining and promoting these elements, these costs would be presented in a separate component from the typical five components found in the other MBMs. The inuusiqattiarniq component costs would use a multiplier based on expert judgement from Statistics

13. In 2016, the proportion of Census Families (CF) of size two and three in Nunavut was 56.6%; the proportion of CF of size four was 19.2%; and the proportion of CF of size five and more was 24.1%. In 2021, the proportions were similar at 56.8%, 18.3% and 24.9%, respectively. While for the rest of Canada without Nunavut in 2016, the proportions were 72.4%, 19.5% and 8.5%. And in 2021 the proportions were similar at 72.8%, 19.2%, and 8.6%, respectively. [Custom Tabulation based on: Statistics Canada. 2017. Nunavut \[Territory\] and Canada \[Country\] \(table\). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. Statistics Canada. 2022. \(table\). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released September 21, 2022.](#)

14. The reference family for the provincial MBM and Yukon and Northwest Territories methodologies is a four-person family, comprising of adults and two children.

15. As the two children in the MBM reference family were previously of different genders, the addition of the 4-year-old girl does not change the number of bedrooms the MBM Nunavut reference family needs.

16. The shelter cost estimates are obtained using non-subsidized rented dwellings only. They do not reflect the market availability in each MBM-N region.

17. The multiplier was established based on an analysis of historical spending patterns of a set of selected expenditure categories deemed necessary for a modest, basic standard of living. The same multiplier is used for both the provincial MBM and the other two territorial MBM-N. Please refer to the [Market Basket Measure Technical Paper: The other necessities component](#) for more information.



Canada, ESDC and the GN, and would be informed by multiple data sources. It would only be added to the cost of the basket for families with at least one adult member reporting an Indigenous identity on the Canadian Income Survey (CIS).

### Indexation

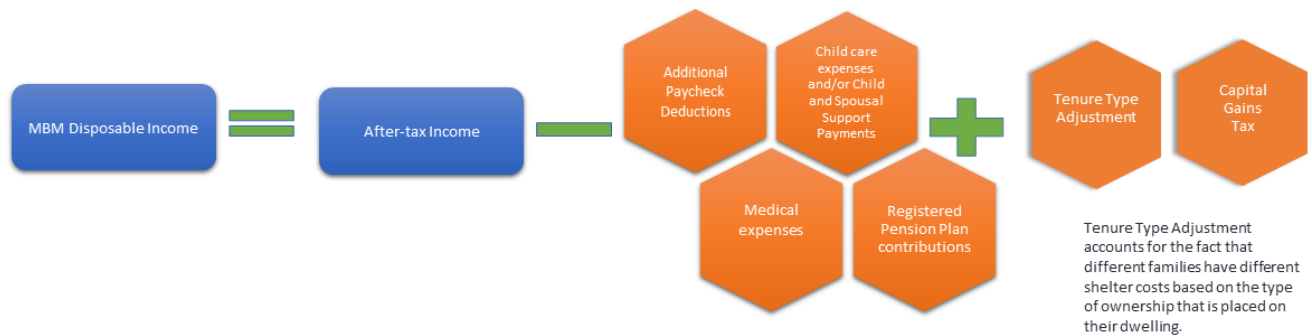
As the “all-items” index is the lowest product level index category publicly available for Nunavut, it is proposed that it be used to adjust all the components of the MBM-N Nunavut basket for inflation.<sup>18</sup>

## Summary of proposed methodology for calculating Nunavut MBM-N’s disposable income

### Defining disposable income

Nunavut’s MBM-N definition of disposable income would mirror the 2018-base methodology found in the provincial MBM and the MBM-N for the other two territories, except for a small change to the Tenure Type Adjustments discussed below. Specifically, the MBM-N methodology for Nunavut would define 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, childcare expenses, support payments paid, etc.).

**Figure 1**  
**Visualization of the Disposable Income Calculation**



Source: Statistics Canada.

### Tenure Type Adjustment (TTA)

The Tenure Type Adjustment (TTA) that was done in the 2018 methodology for the provinces and the other two territories is repeated in Nunavut. A small change is required due to sample size. The TTA is only possible for two regions, those living in Iqaluit and those living outside of Iqaluit, unlike the other MBMs where each region had its own TTA. As it is done with the other MBMs, the TTA would add the difference between the cost of the shelter component found in the Nunavut MBM-N basket and the typical shelter costs for the other tenure types to the disposable income of families with the corresponding tenure type.

### Medical expense imputation amounts

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

18. The “all-items” index is based on prices in Iqaluit, the territorial capital, only.

## Nunavut MBM-N thresholds and poverty rates

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

The thresholds presented in Table 1 are developed for the five-person reference family (two adults<sup>19</sup> and three children<sup>20</sup>) and include a component cost unique to Nunavut, the inuusiqtattarniq component. These two modifications need to be considered when comparing the thresholds to the other MBM-N thresholds. The reference family approach is different to the one used in the MBM for the provinces and in the MBM-N for Yukon and the Northwest Territories. In order to compare the Nunavut MBM-N thresholds to the provincial MBM thresholds and other territorial MBM-N thresholds, the inuusiqtattarniq component must be removed and they must be adjusted to a four-person family size using the square root equivalence scale methodology [i.e., multiplying the thresholds by  $(\sqrt{4}/\sqrt{5})$ ]. The equivalence scale method is commonly used to adjust low-income thresholds (e.g., Low Income Measure) to different family sizes and is recommended for use in poverty measurement.<sup>21</sup>

Table 1 shows the preliminary Nunavut MBM-N thresholds for a five-person family for each of the MBM-N Nunavut regions under the proposed methodology for the 2018 to 2022 reference years. While the thresholds presented in Table 1 include the inuusiqtattarniq component cost, they were only applied to Indigenous families when determining their poverty status.<sup>22</sup> For non-Indigenous families, the thresholds applied to determine the poverty status of a family excluded the inuusiqtattarniq component. In general, even after considering the larger family size, the MBM-N thresholds for Nunavut are the highest in the country. For example, currently the highest threshold outside of Nunavut is in the Sahtu region of the Northwest Territories at \$72,526 in 2018 current dollars, which is \$26,657 less expensive compared to the most expensive Iqaluit threshold, after adjusting the Nunavut MBM-N's five-person threshold to a family size of four using the equivalency scale for comparison purposes (\$99,183). For a comparison of selected MBM and MBM-N thresholds please see Table H in the Appendix.

The higher thresholds in Nunavut are mainly due to higher costs in the shelter and food components. The more expensive food and clothing components also consequently increased the costs for the other necessities components, which is derived through a multiplier applied to both food and clothing costs. Finally, additional costs associated with maintaining and promoting Inuit culture, captured through the proposed inuusiqtattarniq component, contribute to increase total threshold costs by about \$7,000.

**Table 1**  
**Nunavut MBM-N thresholds in current dollars, by MBM-N region, five person family, 2018 to 2022**

	2018	2019	2020	2021	2022
<b>MBM-N Geography Region</b>	current dollars				
Baffin, excluding Iqaluit	105,953	107,757	107,757	109,233	113,498
Kivalliq	92,981	94,564	94,564	95,859	99,601
Kitikmeot	98,864	100,548	100,548	101,925	105,904
Iqaluit	110,890	112,778	112,778	114,323	118,786

**Note:** MBM-N thresholds are preliminary.

**Source:** Statistics Canada. Custom tabulation.

In 2018, the communities located in the Kivalliq Region (\$92,981) and Kitikmeot Region (\$98,864) had the lowest Nunavut MBM-N thresholds based on a five-person reference family. Nunavut's capital, Iqaluit, had the highest threshold at \$110,890, while those communities in the Baffin Region excluding Iqaluit had the second highest at \$105,953.

19. One male and one female, aged between 25 and 49 years old.

20. Two girls aged 4 and 9, and a boy aged 13.

21. For more information on how to use the square root equivalence scale to adjust the MBM-N thresholds, please see the *Proposed methodology for the Nunavut MBM-N reference family* section in this discussion paper.

22. See footnote 7 for more information.



Table 2 shows the poverty rates for 2018 to 2021 as measured using the CIS and the proposed Nunavut MBM-N thresholds, for Nunavut, and by selected age groups and family types.<sup>23</sup> According to the Nunavut MBM-N, the preliminary poverty rate went down from 43.2% in 2018 to 39.7% in 2021 in Nunavut. For the preliminary estimates on the number of persons in poverty, please see *Appendix B*. Estimates for small domains should be used with caution (For more information see text box – *Survey error within territorial estimates*).

**Table 2**  
**Estimates and confidence intervals<sup>1</sup> for the percentage of persons in poverty, MBM-N, Nunavut and selected demographic groups, 2018 to 2021**

	Percentage of persons in poverty											
	2018			2019			2020			2021		
	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound
<b>Geography</b>	percent											
Nunavut	37.9	<b>43.2</b>	48.4	32.2	<b>38.7</b>	45.3	27.8	<b>37.5</b>	47.1	31.8	<b>39.7</b>	47.6
<b>Age group</b>												
Persons under 18 years	45.5	<b>53.9</b>	62.3	35.9	<b>45.0</b>	54.2	32.5	<b>47.9</b>	63.4	33.4	<b>46.5</b>	59.6
Persons 18 to 64 years	31.7	<b>36.2</b>	40.7	29.5	<b>35.5</b>	41.6	24.1	<b>32.0</b>	39.8	27.2	<b>36.1</b>	44.9
Persons 65 years and over	29.6	<b>43.1</b>	56.6	11.2	<b>26.8</b>	42.5	F	<b>F</b>	F	F	<b>F</b>	F
<b>Family Type</b>												
Persons in economic families	38.0	<b>44.2</b>	50.4	30.7	<b>37.9</b>	45.2	26.3	<b>36.8</b>	47.3	29.6	<b>39.0</b>	48.3
Persons not in an economic family	16.8	<b>32.2</b>	47.6	36.4	<b>47.3</b>	58.2	25.1	<b>44.4</b>	63.8	20.4	<b>46.6</b>	72.9

F too unreliable to be published

<sup>1</sup> Upper and lower bounds are based on a 95% level of confidence.

**Note:** Estimates are based on the preliminary MBM-N thresholds. None of the changes are statistically significant.

**Source:** Canadian Income Survey, Statistics Canada. Custom tabulation.

### Survey error within territorial estimates

Similar to the poverty estimates for Yukon and the Northwest Territories, the poverty estimates for Nunavut should be used in combination with their respective quality indicators. As these estimates are derived from a survey, they are subject to survey error.

In this paper the quality indicator chosen was to provide the upper and lower bounds of the 95% confidence interval.

For more information on measuring survey error and the importance of considering an estimate's quality indicator, please see the *Measuring survey error* and *Survey error within territorial estimates* sections of [Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories](#).

On average, from 2018 to 2021, children<sup>24</sup> experienced a larger decrease in their poverty rate compared to non-senior adults<sup>25</sup>. Over the same period, the poverty rate of persons living in economic families has decreased, while the poverty rate of unattached individuals (i.e., persons not in an economic family) has increased. None of the changes in Table 2 were statistically significant.

The poverty rates presented in Table G.1 of the Appendix show the impact of not including the inuusiqtattiariniq component. The corresponding number of persons in poverty can also be found in the Appendix (Table G.2). These estimates are presented to evaluate the impact that this unique component would have on the poverty rates.

23. The poverty rates presented in Table 1 and in Appendix B include the impact of including the inuusiqtattiariniq component. Also, although it is possible to calculate the reference year 2022 MBM-N thresholds for Nunavut, it is not possible to calculate the 2022 poverty rates since income data from the CIS are currently unavailable.

24. Persons under 18 years old.

25. Persons aged 18 to 64 years.

## A Nunavut MBM-N forward-looking research agenda

Several research topics were identified during the creation of the proposed Nunavut MBM-N methodology. Given their complexity and uncertain feasibility in implementation, these specific topics will require further study before the next MBM-N rebasing exercise.<sup>26</sup>

**Community level sharing:** While the MBM-N for Nunavut accounts for other sources of food (i.e., country food), it does not account for community sharing of country food nor shared resources like country freezers. Statistics Canada will research possible approaches to account for community level sharing of country food resources.

**Second-hand clothing:** The MBM methodology assumes purchases of all new clothing, because second-hand clothing items typically do not guarantee adequacy, availability or quality of clothing. Given the large second-hand market in Nunavut, Statistics Canada will research the feasibility of including pricing to reflect the presence of second-hand markets for a future Nunavut MBM-N.<sup>27</sup>

**In-kind benefits:** While a certain level of in-kind income (e.g., home production of food) has been incorporated in the Nunavut MBM-N, Statistics Canada will research if it is possible to include other non-cash or in-kind benefits (e.g., goods and services produced for barter).

## Conclusion

This discussion paper describes the proposed MBM-N methodology for Nunavut. It provides and compares provisional Nunavut MBM-N thresholds and poverty rates, which were the result of collaboration between Statistics Canada, ESDC, and representatives for the GN and NTI.

The paper has also proposed three topics in a forward-looking research agenda for the Nunavut MBM-N that Statistics Canada and ESDC intend to study in preparation for 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 on the proposed methodology. Therefore, following the release of this paper, there will be a review period during which 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 fall of 2023. 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](mailto: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

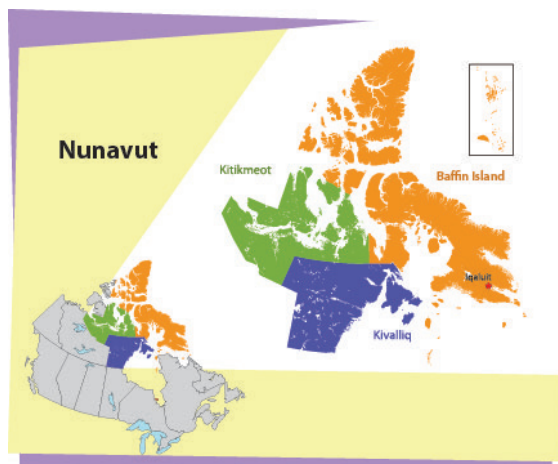
26. The Nunavut MBM-N forward-looking research agenda topics are in addition to those previously identified during the 2018-base MBM review and identified during the construction of the MBM-N methodologies for Yukon and the Northwest Territories.

27. Health standards do not support the practice of purchasing items such as second-hand undergarments or shoes.

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

### Proposed methodology for the Nunavut MBM-N regions

Under guidance from the representatives from the GN, the Nunavut MBM-N regions were based, where appropriate, on the census division boundaries, while also taking into consideration other 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 price measurement within a reasonable level of quality. It is proposed that the MBM-N provides poverty thresholds for four regions across Nunavut.

Specifically, it is proposed that the Nunavut MBM-N thresholds be defined for Iqaluit, Baffin region excluding Iqaluit, the Kivalliq region, and the Kitikmeot region.<sup>28</sup>

There are several issues that make measuring poverty in Nunavut particularly challenging, especially for geographies outside of the capital. These challenges can impact both the expenditure and income sides of the Nunavut MBM-N methodology. For example, the logistical challenges of isolated communities with limited infrastructure can impact the availability of food and clothing price collection when estimating the Nunavut MBM-N basket costs. Similar logistical challenges, along with the need to protect the confidentiality of survey

respondents, 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<sup>29</sup>, it is important to note because the excluded areas are composed primarily of Inuit people.<sup>30</sup>

### Proposed methodology for the Nunavut MBM-N reference family

The methodology for the MBM requires defining a reference family before defining a basket of goods and services. In the current MBM for the provinces and the other two territories, the reference family is defined as one male and one female adult aged 25-49 with two children (a girl aged 9 and a boy aged 13). Given that families in Nunavut are on average larger and younger, it is proposed that the typical MBM reference family be increased by adding a 4-year-old girl.

To arrive at thresholds for different family sizes, the MBM-N methodology for Nunavut will continue to use a square root equivalence scale, which is used in the other MBMs. This equivalence approach is a widely accepted method to adjust incomes for family size differences and is recommended for use in poverty measures (UNECE, 2011).<sup>31</sup> To compute thresholds for different family sizes, values from Table A.1 can be used.

**Table A.1**  
Square-root equivalence scale, based on the MBM-N Nunavut 5-person reference family

Family size	Square root scale	Multiply the threshold value by
1	1.0	0.4
2	1.4	0.6
3	1.7	0.8
4	2.0	0.9
5	2.2	1.0
6	2.4	1.1
$x$	$\sqrt{x}$	$\sqrt{x}/\sqrt{5}$

**Note:**  $\sqrt{5}$  corresponds to the square-root of the reference family size

**Source:** Statistics Canada. Custom tabulation.

28. Please see Appendix C for more details on the Nunavut MBM-N regions.

29. CIS's coverage of the population is about 93% for Nunavut.

30. Incomes are not available from the CIS for these regions, precluding the derivation of annual estimates, hence they are not included in the estimation of Nunavut MBM-N poverty rates.

31. An internal analysis was undertaken to assess the difference between costing for the typical MBM reference family (i.e., four-person) and this one with an additional child. It found no substantial differences between thresholds calculated using a four-person family versus a five-person family once the square root equalization was applied.

This method of equalizing thresholds for different family sizes should only be applied to the total threshold value and should not be applied to threshold's individual components.<sup>32</sup>

## Proposed methodology for the Nunavut MBM-N basket

The MBM-N basket for Nunavut consists of the five typical components (e.g., clothing, food, shelter, transportation and other necessities), plus an additional inuusiqtattarniq component used to capture costs associated with preserving Indigenous knowledge, culture and traditions, community wellbeing and way of life. In general, the five typical components found in the MBM, and the MBM-N for Yukon and the Northwest Territories would be adapted to reflect life in Nunavut, while the additional inuusiqtattarniq component is unique to the MBM-N for Nunavut.<sup>33</sup>

### Clothing and footwear component

The Nunavut 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 Nunavut and for the inclusion of traditional clothing. The ALL clothing and footwear list was adapted for use in the Nunavut MBM-N by specifying the quantity, quality, and replacement schedule for each of the items required by the Nunavut MBM-N reference family (i.e., two adults and three children). In general, it provides clothing and footwear for most common work, school and social occasions.

Depending on the MBM-N region and taking into account purchasing practices, prices were collected from stores in Yellowknife (for Kitikmeot), Winnipeg (for Kivalliq) or a combination of Iqaluit and Ottawa (for Baffin excluding Iqaluit and Iqaluit) for the 2018 base year. The arithmetic average of the three lowest price observations for the year was calculated for each item in the basket. In addition, a three-year average of each item's annual price was taken to ensure that price volatility was minimized. These prices, combined with specified quantities and replacement schedules, derived the cost of the clothing component. In general, the pricing methods for the Nunavut MBM-N are similar to the other MBMs.<sup>34</sup>



**Table A.2**  
Nunavut MBM-N clothing and footwear thresholds in current dollars, by MBM-N region, five person family, 2018 to 2022

	2018	2019	2020	2021	2022
<b>MBM-N Geography</b>	current dollars				
<b>Region</b>					
Baffin, excluding Iqaluit	7,300	7,424	7,424	7,526	7,820
Kivalliq	6,017	6,120	6,120	6,204	6,446
Kitikmeot	6,027	6,129	6,129	6,213	6,456
Iqaluit	6,034	6,137	6,137	6,221	6,464

**Note:** MBM-N thresholds are preliminary.

**Source:** Statistics Canada. Custom tabulation.

schedule (i.e., the lifespan of clothing items) for certain items be adjusted. Following the MBM-N methodology for Yukon and the Northwest Territories, an adjustment would be made to the replacement schedule, to account for the higher use of winter clothes in the territory.

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

Also, it is proposed that the replacement

32. Please see [Equivalence Scales: An Empirical Validation](#) for more information.

33. For an overview of the differences between the MBM, MBM-N for Yukon and the Northwest Territories and the MBM-N for Nunavut, please see Appendix E.

34. A slightly different pricing methodology was used for traditional clothing items, since historical price data for these items were not possible and they were deemed to be more expensive.

Using Environment and Climate Change Canada temperature data from Winnipeg, the city where the 2012 ALL basket is based, and comparing it to Iqaluit temperature data, an adjustment ratio was created.<sup>35</sup> 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 (see text box - *Perceived subjectivity in the MBM*).

Both of these adjustments reflect the need for warmer clothes in the territory, particularly during the winter months, as well as the more frequent use of certain items due to the cold climate.<sup>36</sup>

### Perceived subjectivity in the MBM

The itemized list of clothing or food items are sometimes met with criticism, since there is a perceived subjectivity in its creation. For example, the changes made to the clothing item list might seem subjective and restrictive, but 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, they are meant to represent the clothing and footwear components that are reasonable for the reference family.

A similar consideration should be taken into account when examining the food component.

Unique to the MBM-N for Nunavut, it is proposed that the clothing component also include costs associated with traditional clothing, since traditional clothing, items are culturally important to Nunavut inhabitants and are typically warmer than non-traditional clothing. In addition, it is proposed that all winter outerwear be replaced by traditional clothing items.<sup>37</sup> The proposed methodology for traditional clothing would be to assume the material (e.g., furs, thread, etc.) and labour costs would be represented by the selling price of the traditional clothing items and, therefore, would be included in the clothing and footwear component. While the costs associated with the equipment needed to make traditional clothing items (e.g., sewing machines, scissors, patterns, etc.) would be accounted for in the inuusiqattiariniq component. This change allows for more comparability with the other MBMs' clothing components outside of Nunavut.<sup>38</sup>

Prices were collected for traditional clothing items using available sources (e.g., Facebook Marketplace, iValu, etc.), but it was not possible to gather a robust sample of prices using this collection method. Therefore, the prices for non-traditional clothing items that were deemed acceptable for the Nunavut climate were used as proxy prices for the traditional clothing items. For example, instead of pricing sealskin boots, the proposed methodology would price Baffin boots, as they are often worn in Nunavut and there are more observable prices.

Given the higher quality and inherent ability to be repairable, the replacement schedule for the traditional clothing items was adjusted to reflect a longer lifespan and a repair cost (e.g., replacing the liner in a parka, etc.) was included.<sup>39</sup>

For estimating costs in areas outside of the capital, a weighted average method is being proposed, which incorporates the costs associated with travel to the designated regional centre(s) for clothing purchases and the cost of ordering online. The price of the trip to a regional centre would include food at restaurants, hotel and plane tickets.<sup>40</sup> The shipping cost associated with online purchases would be estimated on an annual basis, under the assumption of monthly bulk orders. The relative weights of purchasing methods would have a rural and urban delineation and would be based on the percentage of people in Nunavut with internet access, either at home or on a mobile device, and who have purchased physical goods or services online<sup>41</sup> using the 2021 Northern Canada Internet Use Survey (NCIUS). Table A.2 shows the preliminary clothing and footwear component estimates for the Nunavut MBM-N regions.

35. Adjustment ratio = (number of days below a temperature of 5°C in the territorial capital / number of days below a temperature of 5°C in Winnipeg).

36. The Nunavut MBM-N clothing and footwear cold climate adjustment factors for winter clothing items was 1.53 and for summer clothing items it was 0.34.

37. Winter jackets, mittens, snow pants, winter boots and toque.

38. The same constant is done in the food component, but with hunting tools.

39. 5% was added to the traditional clothing items' total cost to approximate the repair costs.

40. Airfare prices were collected in second half of 2021 and first half of 2022. The national air transportation CPI was used to adjust these prices to the base year. On November 1, 2019, there was a merger between Canadian North and First Air which resulted in a substantial price level shift downwards, which were not possible to estimate.

41. Using either social networking websites or apps (e.g., online bulletin boards, such as Kijiji, Facebook Marketplace or Craigslist), or online retail websites.



## Food component

The proposed food component MBM-N methodology for Nunavut differs slightly from the methodology used in the other provincial and territorial MBMs. It is being proposed to use a modified version of the 2019 National Nutritious Food Basket (NNFB) developed by Health Canada<sup>42</sup> to calculate the cost of the food component. The foods in the NNFB are consistent with the 2019 Canada's Food Guide and are foods that Canadians reported consuming in the 2015 Canadian Community Health Survey-Nutrition (CCHS-Nutrition), the most recently available survey of food consumption (see text box - *Perceived subjectivity in the MBM*).



The 2019 NNFB includes fresh, frozen and canned food formats to balance considerations of cost, access and availability (see text box - *Food insecurity in Nunavut*). Additionally, 5% is added to the total cost of the basket for miscellaneous foods and beverages such as coffee, tea, herbs, spices and condiments.

Two modifications to the food component are being proposed to better reflect life in the territory. First, the food component would include additional quantities for the proposed fifth reference family member. Second, the items and quantities would be adjusted to include and account for the nutritional value provided by country food.

The first proposed modification would increase the quantities found in the NNFB so it would reflect the additional nutritional requirements needed for the proposed fifth reference family member (i.e., a girl aged 4).

Given the importance of maintaining Inuit culture and traditions and for practical requirements, the second proposed modification to the NNFB would be to include some hunted and harvested country foods. Health Canada worked in conjunction with GN nutritionists for the proposed inclusion of costs associated with hunting and harvesting for country food which is a unique addition to the MBM-N for Nunavut. Table A.3 shows the preliminary food component estimates for the Nunavut MBM-N regions.

It has been found that the intake of traditional foods amongst Indigenous peoples, even in small amounts, improves diet quality. Therefore, a selection of commonly consumed country foods, using various reviewed resources and discussions with Inuit partners, has been integrated in the proposed MBM-N. Examples of resources used to inform this process include the 2007 Inuit Health Survey and some findings of the Food Book study.<sup>43</sup> It is proposed that the following country food items be included:

- Wild blueberries
- Beluga, muktuk
- Arctic char
- Ringed seal meat
- Caribou (Reindeer) meat

**Table A.3**  
Nunavut MBM-N food thresholds in current dollars, by MBM-N region, five person family, 2018 to 2022

MBM-N Geography	2018	2019	2020	2021	2022
	current dollars				
<b>Region</b>					
Baffin, excluding Iqaluit	27,717	28,189	28,189	28,576	29,691
Kivalliq	23,704	24,107	24,107	24,438	25,392
Kitikmeot	26,717	27,172	27,172	27,544	28,620
Iqaluit	26,367	26,816	26,816	27,184	28,245

**Note:** MBM-N thresholds are preliminary.

**Source:** Statistics Canada. Custom tabulation.

42. Research on incorporating Nutrition North Canada's Revised Northern Food Basket into a future MBM-N is ongoing.

43. For more information please see [Country food consumption](#).



To incorporate country foods in the food component of the Nunavut MBM-N, the costs of nutritionally comparable market foods are used. When developing the methodology, the nutrient content of these comparable market foods was established using the values found in the 2015 Canadian Nutrient File. The protein and energy content of each country food were compared to the list of foods reported in the 2015 CCHS-Nutrition.<sup>44,45</sup>

The differences between the protein and energy content of each country food and each food listed in the shortened 2015 CCHS-Nutrition list were calculated. The market food items that had the smallest sum of absolute differences were considered the most nutritionally comparable to the country foods.<sup>46</sup>

These nutritionally comparable market foods were used for the costing calculation.

To determine the quantity of each food item included in the NNFB, the nutrient profiles of foods in the formats in which they are typically consumed were used (e.g., cooked meats, raw fruits, and cooked grains). However, when costing the basket, the amounts of foods were adjusted to convert their quantities from 'as consumed' to 'as purchased' (or 'as hunted/foraged'). This accounts for changes in yield when people prepare foods at home. To support costing activities, a list of conversion factors was established for each country food item added to the 2019 NNFB, and for their comparable market food item.

When developing the methodology, the conversion factors found in the United States Department of Agriculture's Food Intakes Converted to Retail Commodities Databases<sup>47</sup> were used as the starting point. Most country foods did not have conversion factors available in the database. Therefore, estimates were calculated using foods from the database that were considered comparable. These estimates were developed by calculating the averages of the conversion factors of foods in the database. Assumptions were made on the cuts of meat, method of cooking, and most comparable market food for the various country foods added to the 2019 NNFB.

It is proposed that the store-bought price for the nutrient equivalents identified by Health Canada would then be used as a proxy price for the country food. A conceptual break is caused by this methodology, since income does not include consumption from own production (such as product from hunting, farming, or fishing) but it is included as a cost. In addition, by putting a market value on a traditional Inuit activity, this methodology applies a market-economy lens that does not align with Inuit traditional views. While both of these are valid criticisms of the methodology, there are undeniable costs (e.g., opportunity costs) associated with country food that should be considered.

Similar to what is being proposed in the clothing component, the additional equipment costs related to hunting and harvesting for country food (e.g., hunting attire, rifles, ammunition, additional gasoline, etc.) will be factored in the inuusiqtattarniq component.

Food prices were collected in 2018 by Statistics Canada in Iqaluit, the territorial capital. Monthly prices were collected from selected stores and then the geometric mean of each item was calculated in order to determine the annual price for Iqaluit. 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 (see text box - *Perceived subjectivity in the MBM*).

The proposed methodology for estimating the food component costs outside of the capital would be to use an adjustment factor based on Statistic Canada's Living Cost Differential (LCD) data and Nunavut Food Price Survey (NFPS) data. The spatial indexes would be derived by combining the LCD data and NFPS data, to create community level spatial indexes.<sup>48</sup> These indexes would then be applied to the capital's costs for the four main food categories 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 the 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 the Nunavut MBM-N regions.

44. The 2015 CCHS-Nutrition list was shortened by selecting only foods from the meat, fish and shellfish, poultry and wild bird food categories. In addition, only foods encouraged by the CFG, and containing little to no added sodium and saturated fat, and little to no free sugars were selected.

45. An exception was made for wild blueberries, because they were deemed nutritionally comparable to fresh store-bought blueberries and, therefore, no calculation was made.

46. Please see footnote 44.

47. For more information please see [Food Intakes Converted to Retail Commodities Databases 2003-2008: Methodology and User Guide](#).

48. For more information on the spatial indexes, please see Appendix D.

### Food insecurity in Nunavut

Food insecurity is a serious and long-standing issue in Nunavut. For example, based on the most recently available estimates from the 2021 Canadian Income Survey (CIS), 42.7% of people in Nunavut lived in moderately or severely food-insecure households. This is the highest rate of moderate or severe food insecurity among the provinces and territories.

There are also barriers to food access in the territory that go beyond the ability to buy store-bought food items. Due in large part to climate change and its effect on shortening hunting and harvesting seasons, as well as on reduced animal and crop yields, country food has become increasingly inaccessible, leading to adverse quality of life impacts among Nunavut residents.

While these are recognized and serious problems, the proposed MBM-N methodology for Nunavut is intended to measure monetary costs associated with a modest, basic standard of living. In this sense, the complex and interconnected factors that give rise to food insecurity and decreased access to food among Indigenous peoples cannot be fully reflected by this methodology.

### Shelter component

It is proposed that the Nunavut MBM-N derives shelter costs for non-subsidized rental units using the 2016 Census, and that shelter costs include both rent and utilities (e.g., heat, water and electricity) as is being done with the other MBMs. The Census was chosen as the data source, because of its large sample size which allows for precise estimation of rental costs and covers all types of rental units, including those outside of the capital. The

decision to cost non-subsidized rental units for the shelter component, even though the large majority of the population lives in subsidized rental units<sup>49</sup>, was made because it better reflects the free rental market economy, without government intervention<sup>50</sup> (i.e., which is available under no conditions).

As was done for the other MBMs, adjustments based on tenure type (subsidized rents and homeownership) would be used to ensure comparability between the basket costs and disposable income (see the *Tenure Type Adjustment* Section in Appendix A for more information).

It is proposed that the Nunavut MBM-N adopts the National Occupancy Standard for the Nunavut reference family of one adult couple with three children (two girls aged 4 and 9 and a boy aged 13). Therefore, it would be based on the cost of a three-bedroom rental unit not in need of major repairs. Finally, collective dwellings and rent-free units are excluded (see text box - *Housing in Nunavut*).

To determine the cost for the shelter component, it is proposed to use the average of the non-zero rental prices and utilities for non-subsidized renters of a three-bedroom rental unit with a household income in the first seven income deciles. The decision to use the first seven income deciles was made after careful analysis of the income distribution to ensure the quality of the estimates. In addition, an amount for tenant's insurance is also proposed to be included. In consultation with representatives from the GN, it was determined that most of the rental units in the territory included appliances as part of the rent. Therefore, the Nunavut MBM-N shelter component would not include a separate category of expenses related to the purchase of appliances. Table A.4 shows the preliminary shelter component estimates for the Nunavut MBM-N regions.

49. About 85% of the rental market in Nunavut is subsidized rental units. [Canada Mortgage and Housing Corporation \(CMHC\), Northern Housing Report, 2021.](#)

50. The shelter cost estimates are obtained using rented dwellings only. They do not reflect the market availability in each MBM-N region.

Had subsidized rental units been represented on the basket side for the shelter component, the component costs would have been around 80% lower for Baffin, excluding Iqaluit, Kivalliq and Kitikmeot than those presented in Table A.4 and around 50% lower for Iqaluit. Note that in the MBM methodology, the estimated subsidy value

is included in disposable income through the Tenure Type Adjustment (TTA).

The proposed methodology for estimating the shelter component costs inside and outside of the capital would be similar. Although, given the data limitations, it would only be possible to calculate one shelter cost for the three regions outside the capital, as opposed to separate shelter estimates for each region.

**Table A.4**  
**Nunavut MBM-N shelter thresholds in current dollars, by MBM-N region, five person family, 2018 to 2022**

MBM-N Geography	2018	2019	2020	2021	2022
	current dollars				
<b>Region</b>					
Baffin, excluding Iqaluit	25,363	25,794	25,794	26,148	27,169
Kivalliq	25,363	25,794	25,794	26,148	27,169
Kitikmeot	25,363	25,794	25,794	26,148	27,169
Iqaluit	38,542	39,199	39,199	39,736	41,287

**Note:** MBM-N thresholds are preliminary.

**Source:** Statistics Canada. Custom tabulation.

### Housing in Nunavut

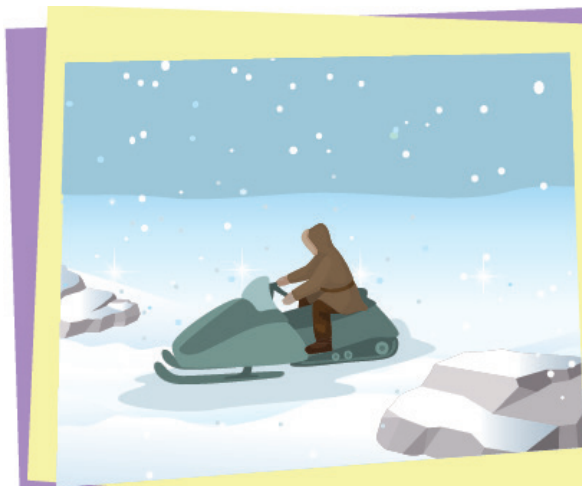
It is widely recognized that there are a number of shelter challenges faced by people living in Nunavut (e.g., housing shortages, affordability, poor quality housing, high cost of home construction and repair and homelessness). And while there have been positive efforts in trying to mitigate these challenges (e.g., expanding federal and territorial funding for housing construction in Inuit communities and developing and implementing multi-year initiatives for expanding social housing), there is still a lot to be done.

The MBM-N shelter cost estimates are based on the National Occupancy Standard (NOS) standard set out by CMHC. They take into account the suitability of the dwelling when determining the number of bedrooms for the reference family. The MBM shelter's estimates are based on dwellings that are habitable, by removing those that do not meet CMHC's standard for the condition of the dwelling when calculating the shelter costs.

The shelter component's estimates are based on the costs for observed dwelling units according to a standard, but it does not reflect the ongoing housing challenges in Nunavut. Although there are several indicators available to track the housing situation in Nunavut (e.g., according to the Census, the core housing need indicator for Nunavut was the highest in Canada but decreased from 36.5% in 2016 to 32.9% in 2021), the MBM shelter estimates are based on the observed rental costs on 2016 Census Day and assumes availability in the stock of dwellings.

## Transportation component

The transportation component for the MBM-N Nunavut would follow a similar methodology to that of the fly-in communities in the Northwest Territories, while adjusting for conditions and costs unique to Nunavut. Specifically, the transportation component costs would be based on the costs associated with purchasing, operating and maintaining a new mid-quality range All-Terrain Vehicle (ATV) and a snowmobile. Due to a combination of limited



road infrastructure, geographically isolated communities and weather conditions in Nunavut, residents tend to rely on a mixture of ATVs and snowmobiles. This represents a modest, basic standard of living among Nunavummiut.

The costs for the snowmobile and ATV were estimated using procurement costs from the GN's [2017/2018 Procurement Activity Report](#) and [online contract reporting database](#) for several communities throughout the territory. Population weights were then applied to each community's reported ATV or snowmobile cost, to arrive at a weighted average cost of both a snowmobile and an ATV for each of the Nunavut MBM-N regions. Finally, these averages were then amortized to zero over an eight-year period, to provide annual cost estimates for the vehicle, for each region.

Operating costs for the vehicles would include one driver's license for each of the adults based on data provided by

Statistics Canada's Consumer Prices Division (CPD). Through consultation with territorial partners, snowmobiles are typically not registered, so the transportation component for Nunavut would only include costs for the registration of the ATV using GN registration fee data. Insurance costs were estimated for ATVs by using an online insurance tool. While the quotes were collected in 2021, the "all-items" consumer price index for Iqaluit was used to adjust quotes to 2018 dollars. Finally, gasoline costs were estimated using the data from the GN Petroleum Products Division's retail price list for 2018. The proposed methodology would cost 600 litres of gasoline, which assumes a fuel efficiency of the vehicles at about 17.5 L per 100 km and would allow for approximately 3,400 km of driving per annum.

Costs associated with maintaining the two vehicles would include the cost for one tune-up and one oil change for each vehicle type based on Iqaluit prices while the costs for the MBM-N Nunavut regions outside the capital would be adjusted in a similar fashion to what was done in the Northwest Territories. Specifically, the Iqaluit-based costs would be adjusted upward by 25%, to account for the higher maintenance costs found outside the capital. Finally, additional costs for tires, batteries, and parts for the two vehicle types were also collected in Iqaluit and were similarly adjusted upward by 25% for the three regions outside the capital. Table A.5 shows the preliminary transportation component estimates for the Nunavut MBM-N regions.

**Table A.5**  
Nunavut MBM-N transportation thresholds in current dollars, by MBM-N region, five person family, 2018 to 2022

MBM-N Geography	2018	2019	2020	2021	2022
	current dollars				
<b>Region</b>					
Baffin, excluding Iqaluit	10,497	10,676	10,676	10,822	11,245
Kivalliq	7,811	7,944	7,944	8,053	8,367
Kitikmeot	7,823	7,956	7,956	8,065	8,380
Iqaluit	7,332	7,457	7,457	7,559	7,855

**Note:** MBM-N thresholds are preliminary.

**Source:** Statistics Canada. Custom tabulation.

## Other necessities component

The Nunavut MBM-N has a component that recognises the needs for other necessary goods and services that are not captured under the defined components. The methodology for pricing other goods and services does not utilize the pricing of items as other parts of the Nunavut MBM-N. Doing so would be difficult, as there is 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 necessities component is meant to approximate

**Table A.6**  
**Nunavut MBM-N other necessities thresholds in current dollars, by MBM-N region, five person family, 2018 to 2022**

MBM-N Geography	2018	2019	2020	2021	2022
	current dollars				
<b>Region</b>					
Baffin, excluding Iqaluit	28,061	28,539	28,539	28,930	30,059
Kivalliq	24,069	24,479	24,479	24,814	25,783
Kitikmeot	26,348	26,796	26,796	27,163	28,224
Iqaluit	26,091	26,535	26,535	26,899	27,949

**Note:** MBM-N thresholds are preliminary.

**Source:** Statistics Canada. Custom tabulation.

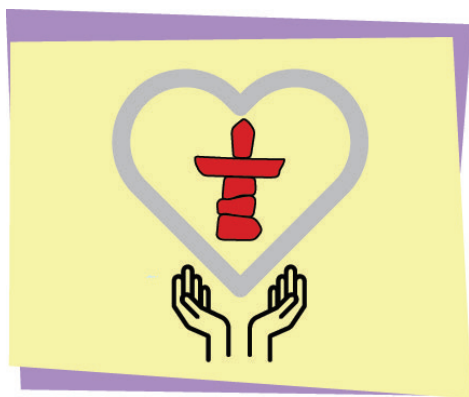
average expenditures on a wide range of other goods and services, using a fixed ratio sourced from Statistics Canada’s Survey of Household Spending (SHS). Applying a fixed ratio has multiple advantages, such as: (1) It avoids undue focus on the usefulness of each individual expenditure item; (2) Reduces assumptions on how people spend their money, and (3) Offers more flexibility to meet the various needs of different family types.

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 the reference family with an income below the territorial median, based on SHS data.<sup>51</sup>

The proposed methodology for the other necessities component in and outside of the capital would be the same. The 2018-base MBM multiplier<sup>52</sup> would be applied to the food and clothing component thresholds for each of the MBM-N regions. Table A.6 shows the preliminary other necessities component estimates for the Nunavut MBM-N regions.

### Inuusiqattiarniq component

During the engagement process to inform the Nunavut MBM-N methodology, feedback from stakeholders pointed to the importance of strengthening and maintaining local knowledge, culture, traditions and way of life as necessary conditions to living a life without poverty. As such, goods and services supporting these objectives are considered in a separate basket component alongside the other five components of the MBM.



The items in the inuusiqattiarniq component would be based on the Nunavut MBM-N reference family and only include costs incurred by residents of Nunavut. Based on the 2019 Nunavut Roundtable for Poverty Reduction, further outreach resulted in a suggestion that the following pillars should aim to inform the expenditures captured by the inuusiqattiarniq component: (1) Culture and language; (2) Healthy personal relationships; (3) Trauma services, and (4) Addiction treatment. The majority of costs associated with programs and activities that support these pillars are covered by different levels of government or community organizations (see text box - *Program coverage*). Programs and activities that are covered by public funding models (e.g., government grants) are not to be included in the Nunavut MBM-N basket, because they have no direct cost to the reference family.

Due to the nature of many of the pillars’ costs being covered through grants or other territorial or federal funding, the majority of the costs of this component are in relation to the culture and language pillar. Despite the grants, it was acknowledged that families in Nunavut still had out-of-pocket expenses which allowed them to engage in these activities. For example, not all cultural and language expenses are covered by a funding model, so an additional amount should be added.

51. Using 2015 to 2017 pooled SHS data and excludes those reporting no expenditures.

52. The multiplier value would be the same as the one found in the 2018-base MBM and the MBM-N for Yukon and the Northwest Territories (i.e., 0.754).



Since enumerating and costing individual items deemed necessary to maintaining knowledge, language and cultural activities is highly impractical, general activities were identified instead. Through discussions with territorial representatives, out-of-pocket costs associated with the following activities are proposed to be included: (1) Equipment for the manufacturing of traditional clothing; (2) Equipment for hunting and preparing country food; (3) Children's programming and programs promoting Inuit culture; and (4) Community support and engagement activities.<sup>53</sup>

It is proposed that equipment costs associated with manufacturing traditional clothing (e.g., sewing machine, patterns, etc.) be included in the inuusiqattiarniq component. The costs associated with the pelts or the labour to produce the traditional clothing items are not included, since they are implicitly accounted for in the purchase price of the traditional clothing item (i.e., they are accounted for in the clothing component).

A similar proposal is planned for the costs associated with country food. The equipment costs related to hunting and harvesting for country food (e.g., hunting attire, rifles, ammunition, additional gasoline, etc.) will be included in the inuusiqattiarniq component. Labour costs associated with preparing the food or opportunity costs in going hunting would be implicitly included in the purchase price of the country food item (i.e., they are accounted for in the food component).

The inuusiqattiarniq component cost was only applied to Indigenous families when determining their poverty status.<sup>54</sup> For the determination of poverty status among non-Indigenous families, the inuusiqattiarniq component was removed.

Given the complexity of enumerating a list of items and the lack of sources for robust price or expenditure data for the territory, the inuusiqattiarniq component pricing methodology would be determined based on expert judgement. Informed by available data sources<sup>55</sup>, a fixed multiplier, serving to approximate the overall cost for possible items that could potentially support the abovementioned activities, would be applied to the cost of the other necessities component to estimate thresholds for the inuusiqattiarniq component.<sup>56</sup> Table A.7 shows the proposed inuusiqattiarniq component costs for the Nunavut MBM-N regions based on this approximation.

**Table A.7**  
**Nunavut MBM-N inuusiqattiarniq thresholds in current dollars, by MBM-N region, five person family, 2018 to 2022**

	2018	2019	2020	2021	2022
<b>MBM-N Geography</b>	current dollars				
<b>Region</b>					
Baffin, excluding Iqaluit	7,015	7,135	7,135	7,232	7,515
Kivalliq	6,017	6,120	6,120	6,204	6,446
Kitikmeot	6,587	6,699	6,699	6,791	7,056
Iqaluit	6,523	6,634	6,634	6,725	6,987

**Note:** MBM-N thresholds are preliminary.

**Source:** Statistics Canada. Custom tabulation.

53. Examples of items a family might buy are included in Table E found in Appendix E. The list is not meant to be prescriptive or exhaustive, it is merely meant to provide examples of goods and services that could be purchased.

54. See footnote 9 for more information.

55. SHS data from the provinces and territories, price data collected by Statistics Canada or provided by the Government of Nunavut, administrative data used as a proxy cost (e.g., charitable donations to estimate community engagement), etc.

56. The fixed multiplier for the Nunavut MBM-N would amount to 0.25.



### Program coverage

The need to provide support for mental health, trauma and addiction services, and to maintain the Inuit way of life is a recognized necessity for all levels of government. The Government of Nunavut, National Indigenous Organizations and the Government of Canada all recognize the importance of providing support through a variety of methods (e.g., Income support programs, alcohol and drug counselling programs, mental health counselling, etc.) to assist in improving the lives of residents in the territory.

Maintaining the funding for the income support and quality of life programs is a key component in continuing to support poverty reduction efforts by all levels of governments. While there are substantial costs associated with these programs, any remaining direct costs incurred by the Nunavut MBM-N reference family will be accounted for by the inuusiqattiarniq component.

In addition to these government programs, there are numerous community level programs (e.g., “on the land” educational programs offered by schools, traditional clothing programs, hunting programs, etc.), but they are also mostly covered by different funding models. Any remaining costs for which the Nunavut MBM-N reference family is directly responsible would be accounted for by the inuusiqattiarniq component.

While there are no significant direct costs to the Nunavut MBM-N reference family, there are known problems with accessibility to services, both physically (i.e., specific health services not available within the region) and monetarily (i.e., services outside the region that may not be affordable, such as psychological/mental health services that are often not covered by insurance). The importance of these programs cannot be understated.

Also, if funding to these programs is cut or altered in the future, so that the reference family would now be responsible to pay all or a portion of the costs, the next rebasing for the Nunavut MBM-N would need to account for that change.

Finally, there could be a general lack of awareness of services and programming that meet all the needs of Inuit. There is some evidence that there are cultural norms that discourage direct verbal expression of complaint or even reduced expectations of what it means to be healthy, which is grounded in a variety of factors including longstanding barriers to adequate health care (Tungasuvvingat Inuit, 2017).

### Proposed methodology for the Nunavut MBM-N disposable income

For a family to be in poverty, their disposable income must be less than the basket threshold amount for their family size and region.

Disposable income is defined as total income (including government transfers) after deducting income tax, Canada Pension Plan and Quebec Pension Plan contributions, Employment Insurance and Registered Pension Plan contributions, union dues, childcare expenses, spousal support payments paid, etc.<sup>57</sup>

It is proposed that the disposable income concept for Nunavut follows the 2018-base MBM methodology. Specifically, it will make adjustments, where possible, to account for other tenure types (i.e., owners with and without a mortgage and subsidized renters) and account for the implications associated with capital gains taxes.

### Defining poverty with a low-income line

As stated in *Opportunity for All*, the Government of Canada 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 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](#).

57. Income and income sources are mostly derived from tax data, which do not include in-kind transfers. For more information on in-kind transfers, please see the forward looking agenda section of this paper.

## Tenure Type Adjustment

As was done in the 2018-base MBM and for the MBM-N in Yukon and the Northwest Territories, it is proposed



that the Nunavut 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 subsidized dwellings. This would serve to place families in all tenure types on a more equal footing to those families in non-subsidized rental units, when determining their poverty status. Although, given the limited amount of data needed to make estimates, the Tenure Type Adjustments (TTAs) would be defined only for the capital and the regions outside the capital altogether, as opposed to for each Nunavut MBM-N region like is done for the other MBMs.

### Summary of the process

The tenure type adjustment would be obtained by subtracting the typical shelter costs of a specific tenure type from the shelter cost for non-subsidized renters derived during the construction of the basket. Using the

2016 Census, these TTA values are calculated for a three-bedroom unit for a five-person family with an income below the first seven income deciles for two Nunavut MBM-N regions, one for the capital and the three Nunavut MBM-N regions outside the capital grouped together.

TTAs are based on National Occupancy Standard set out by CMHC for a family of five, and then equivalent values for other family sizes are computed using the square root method. Using the 2016 Census, 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. Given the data limitations, the first seven income deciles were considered when calculating the shelter cost averages, which represents a change compared to the 2018-base MBM and the MBM-N for Yukon and the Northwest Territories, where a model to estimate shelter costs for families in the second income decile was used.

The Nunavut MBM-N does not directly consider the housing availability in the territory, but indirectly addresses it using 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 Nunavut MBM-N region.

### 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 the capital and outside the capital.

**Table A.8**  
Tenure Type Adjustment in 2018 current dollars, by MBM-N region, five person family, 2018

MBM-N Geography	Homeowners with a mortgage	Homeowners without a mortgage	Subsidized Renters
	current dollars		
<b>Region</b>			
Baffin, excluding Iqaluit	12,492	15,684	19,889
Kivalliq	12,492	15,684	19,889
Kitikmeot	12,492	15,684	19,889
Iqaluit	23,284	26,615	19,864

**Note:** Tenure Type Adjustments are preliminary. Negative Tenure Type Adjustments were set to zero.

**Source:** Statistics Canada. Custom tabulation.

## Homeowners with mortgages

For the Nunavut 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. Only homeowners in the first seven income deciles were considered when estimating the shelter cost averages.

The key difference, relative to homeowners without a mortgage, is the interest cost component (which is zero for homeowners without a mortgage).<sup>58</sup> 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.

## Subsidized renters

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

In Nunavut, most rental dwellings are subsidized to alleviate high housing costs, which would also help to attract and to retain employees. In addition, the source of the subsidy can vary (e.g., public, governmental or private). Due to the various sources for a subsidy, many people residing in Nunavut may not be aware that their rent is subsidized. After multiple consultations with our partners in the GN, CMHC and the Nunavut Housing Corporation, it was decided that a slight modification be made to the subsidy indicator found on the Census database. Specifically, every non-subsidized rental dwelling that had a monthly rent below \$1,500 was deemed to be a subsidized rental dwelling.

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.

## 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 and the MBM-N do not include the values for capital gains/losses in the definition of disposable income, yet deducts the income taxes, an adjustment to the disposable income is made to consider the tax implications of capital gains/losses.<sup>59</sup>

## 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 Nunavut MBM-N. These medical expenses include out-of-pocket expenses for prescription medicines, eyewear, 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<sup>60</sup> is not linked to tax data or if their medical claim for tax purposes is zero,<sup>61</sup> it is proposed that a territorial-level imputation value be used.<sup>62</sup>

58. As was done for Yukon and the Northwest Territories, the interest rate that would be used to calculate the interest paid on outstanding mortgages would be based on CPD's MICI methodology, which includes different term lengths for mortgages and both fixed and variable rate options. For more information, please see [Technical paper for the Northern Market Basket Measure of poverty for Yukon and the Northwest Territories](#).

59. For more information on the capital gains taxes methodology, please see: [Report on the second comprehensive review of the Market Basket Measure](#).

60. Persons 16 years of age or older.

61. 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.

62. The proposed imputed amount for medical expenses in Nunavut would be \$386 for 2018. The "all-item" CPI available for the territory would then be used to adjust this amount for subsequent years.

## Appendix B: Number of persons in poverty

**Table B**

**Estimates and confidence intervals<sup>1</sup> for the number of persons in poverty, MBM-N, Nunavut and selected demographic groups, 2018 to 2021**

	Persons in poverty											
	2018			2019			2020			2021		
	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound
	number											
<b>Geography</b>												
Nunavut	13,400	<b>15,300</b>	17,100	11,500	<b>13,900</b>	16,200	10,100	<b>13,600</b>	17,200	11,700	<b>14,600</b>	17,600
<b>Age group</b>												
Persons under 18 years	6,000	<b>7,200</b>	8,400	4,800	<b>6,000</b>	7,200	4,300	<b>6,300</b>	8,300	4,300	<b>6,200</b>	8,000
Persons 18 to 64 years	6,600	<b>7,500</b>	8,300	6,200	<b>7,500</b>	8,800	5,200	<b>7,000</b>	8,800	5,900	<b>8,000</b>	10,100
Persons 65 years and over	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F
<b>Family Type</b>												
Persons in economic families	12,300	<b>14,300</b>	16,300	10,000	<b>12,400</b>	14,700	8,700	<b>12,200</b>	15,600	9,900	<b>13,000</b>	16,200
Persons not in an economic family	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F

F too unreliable to be published

<sup>1</sup> Upper and lower bounds are based on a 95% level of confidence.

**Note:** Estimates are based on the preliminary MBM-N thresholds. None of the changes are statistically significant.

**Source:** Canadian Income Survey, Statistics Canada. Custom tabulation.

## Appendix C: Nunavut MBM-N regions

**Map C.1**  
**Nunavut MBM-N regions**



**Notes:** Baffin Region, excluding Iqaluit corresponds to Baffin, Nunavut (6204) excluding Iqaluit, Nunavut (6204003). Kivalliq Region corresponds to Keewatin, Nunavut (6205). Kitikmeot Region corresponds to Kitikmeot, Nunavut (6208). Iqaluit corresponds to Iqaluit, Nunavut (6204003).  
**Source:** Statistics Canada, Census of Population, 2016. The geographical regions of Nunavut are based on the Standard Geographical Classification (SGC 2016).

**Table C.2: Nunavut MBM-N regions, by Census subdivision, 2016 Census boundaries****Table C.2****Nunavut MBM-N regions, by Census subdivision, 2016 Census boundaries**

<b>MBM-N Geography Region</b>	<b>Census subdivision</b>
<b>Baffin, excluding Iqaluit</b>	Arctic Bay (6204018)
	Baffin, Unorganized (6204030)
	Cape Dorset (6204007)
	Clyde River (6204015)
	Grise Fiord (6204025)
	Hall Beach (6204011)
	Igloolik (6204012)
	Kimmirut (6204005)
	Nanisivik (6204019)
	Pangnirtung (6204009)
	Pond Inlet (6204020)
	Qikiqtarjuaq (6204010)
	Resolute (6204022)
Sanikiluaq (6204001)	
<b>Kivalliq</b>	Arviat (6205015)
	Baker Lake (6205023)
	Chesterfield Inlet (6205019)
	Coral Harbour (6205014)
	Keewatin, Unorganized (6205033)
	Nauyasat (6205027)
	Rankin Inlet (6205017)
	Whale Cove (6205016)
<b>Kitikmeot</b>	Bathurst Inlet (6208065)
	Cambridge Bay (6208073)
	Gjoa Haven (6208081)
	Kitikmeot, Unorganized (6208098)
	Kugaaruk (6208047)
	Kugluktuk (6208059)
	Taloyoak (6208087)
Umingmaktok (6208068)	
<b>Iqaluit</b>	Iqaluit (6204003)

Source: Statistics Canada, Census of Population, 2016. Custom tabulation.



## Appendix D: MBM-N spatial index adjustment factors

**Table D.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
<b>Region</b>				
Baffin, excluding Iqaluit	1.06	1.04	1.07	1.07
Kivalliq	0.90	0.87	0.92	0.97
Kitikmeot	0.92	1.02	1.00	1.03
Iqaluit	1.00	1.00	1.00	1.00

Source: Statistics Canada. Custom tabulation.

### Formula D.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,  $I_c^{LCD,FG_i}$ , and data supplied by the territorial focal point,  $I_c^{T,FG_i}$ , to create community level spatial indexes. A weighted sum would then be applied to the community indexes to obtain Nunavut MBM-N region indexes,  $I_n^{FG_i}$ .

$$I_n^{FG_i} = \sum_{c \in n} \left[ \left( \frac{I_c^{T,FG_i} + I_c^{LCD,FG_i}}{2} \right) \times w_c \right]; i = 1, \dots, 4 \text{ and } n = \text{Baffin excluding Iqaluit, Kivalliq and Kitikmeot}$$

where:

$I_c^{LCD,FG_i}$  = Living Cost Differential based spatial index for a given food grouping  $I$  for community  $c$

$I_c^{T,FG_i}$  = Territorial provided spatial index for a given food grouping  $I$  for 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 Nunavut MBM-N region,  $FC_n$ .

$$FC_n = \sum_{i=1}^4 \left( I_n^{FG_i} \times FC_{CAP}^{FG_i} \right) \times 1.05; i = 1, \dots, 4 \text{ and } n = \text{Baffin excluding Iqaluit, Kivalliq and Kitikmeot}$$

where:

$I_n^{FG_i}$  = the food group multiplier for the MBM-N region  $n$

$FC_{CAP}^{FG_i}$  = the food costs for the capital for food group  $i$

## Appendix E: A non-prescriptive list of possible family expenditures in the Inuusiqattiarniq Component

Table E

### A non-prescriptive list of possible family expenditures in the Inuusiqattiarniq Component

Activity	Possible Item	Priced Item	Cost and Unit
<b>Equipment for the manufacturing of traditional clothing</b>	Sewing Machine	Brother XM2701 Lightweight, Full-Featured Sewing Machine	\$220
	Rifle	Tikka T3x Lite Stainless Bolt-Action Rifle	\$1,300
<b>Equipment for hunting and preparing country food</b>	Ammunition	Winchester Deer Season XP Rifle Ammunition Calibre: .243 Winchester, Bullet weight: 95 grain	\$105 per 20 round box
	Licence for Hunting	Government of Nunavut	\$16
	Gasoline Costs for Hunting Trips Annual	Government of Nunavut	\$330 - \$347 estimated as 300L
	Tag Costs	Government of Nunavut	\$15 - \$35 per animal
<b>Children's programming and promoting Inuit culture</b>	Inuktitut Children's Books	Prices from Indigo and Amazon	\$10-\$20 per book
<b>Supportive physical and/or mental health services</b>	Out of pocket counseling and therapy	Psychotherapy sessions	Varies by type and duration
	Community engagement costs	Proxy - CRA Charitable Tax Credit Information for a family of 5	\$650
<b>Community engagement activities</b>	Travel to attend key community events	Flights to funerals in remote communities using Canadian North	\$2,000-\$4,000 per person, not including compassionate care discount
	Mailing services for exchanging goods across different communities	Canada Post Canada Wide Delivery	\$18-\$30 per parcel

Source: Statistics Canada. Custom tabulation.

## Appendix F: Methodological comparison between the MBM (2018-base), MBM-N for Yukon and Northwest Territories, and MBM-N for Nunavut

**Table F**  
**Methodological comparison between the MBM (2018-base), MBM-N for Yukon and Northwest Territories, and MBM-N for Nunavut**

Component	MBM	MBM-N for Yukon and Northwest Territories	MBM-N for Nunavut
<b>Shelter</b>	<ul style="list-style-type: none"> <li>Canadian Mortgage and Housing Corporation's National Occupancy Standards for reference family</li> <li>Uses 2016 Census</li> <li>Median rent for 3-bedroom rental unit</li> <li>Non-subsidized rental units</li> <li>Supplement for appliance costs</li> <li>Amount for tenant's insurance included</li> <li>Annual adjustments use the provincial all-items indexes</li> </ul>	<ul style="list-style-type: none"> <li>Canadian Mortgage and Housing Corporation's National Occupancy Standards for reference family</li> <li>Uses 2016 Census</li> <li>Median rent for 3-bedroom rental unit</li> <li>Non-subsidized rental units</li> <li>No supplement for appliance costs</li> <li>Amount for tenant's insurance included</li> <li>Annual adjustments use the territorial all-items indexes</li> </ul>	<ul style="list-style-type: none"> <li>Canadian Mortgage and Housing Corporation's National Occupancy Standards for reference family</li> <li>Uses 2016 Census</li> <li>Median rent for 3-bedroom rental unit</li> <li>Non-subsidized rental units</li> <li>Data limitations, only one shelter cost estimate for all the regions outside of the capital is possible</li> <li>No supplement for appliance costs</li> <li>Amount for tenant's insurance included</li> <li>Annual adjustments use the territorial all-items index</li> </ul>
<b>Transportation</b>	<ul style="list-style-type: none"> <li>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)</li> <li>Weighted basket of five used compact cars and associated costs</li> <li>Eight-year-old vehicles, amortized over five years with a 36-month financing term</li> <li>1,200 litres of gas per year</li> <li>Cost of monthly public transit passes for two adults and one child and an additional amount sufficient for 12 round trip taxi rides</li> <li>Not applicable (no difference for fly-in communities)</li> <li>Annual adjustments use the provincial private or private transportation indexes</li> </ul>	<ul style="list-style-type: none"> <li>Uses only private transportation costs</li> <li>Weighted basket of one used compact car and one used sport utility vehicle</li> <li>Eight-year-old vehicles, amortized over five years with a 36-month financing term</li> <li>1,200 litres of gas per year in the capitals, a little more outside the capitals</li> <li>Not applicable (no public transportation costs)</li> <li>For the fly-in communities of the NWT, costs are 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</li> <li>Annual adjustments use the territorial private transportation indexes</li> </ul>	<ul style="list-style-type: none"> <li>Uses only private transportation costs</li> <li>No compact car or sport utility vehicle</li> <li>Not applicable (no public transportation costs)</li> <li>For all communities, costs are 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</li> <li>Annual adjustments use the territorial all-items index</li> </ul>
<b>Food</b>	<ul style="list-style-type: none"> <li>Health Canada's 2019 National Nutritious Food Basket (NNFB)</li> <li>5% is added to the total cost of the 2019 NNFB basket for miscellaneous foods and beverages</li> <li>Prices collected in 38 cities across the provinces</li> <li>Annual adjustments use the provincial food purchased from stores indexes</li> </ul>	<ul style="list-style-type: none"> <li>Health Canada's 2019 National Nutritious Food Basket (NNFB)</li> <li>5% is added to the total cost of the 2019 NNFB basket for miscellaneous foods and beverages</li> <li>Prices collected in the territorial capitals, adjusted using spatial indexes for outside the capitals</li> <li>Annual adjustments use the territorial food purchased from stores indexes</li> </ul>	<ul style="list-style-type: none"> <li>An modified version of Health Canada's 2019 National Nutritious Food Basket (NNFB) to account for country food</li> <li>5% is added to the total cost of the 2019 NNFB basket for miscellaneous foods and beverages</li> <li>Prices collected in the territorial capital, adjusted using spatial index for outside the capital</li> <li>Annual adjustments use the territorial all-items index</li> </ul>

**Table F**  
**Methodological comparison between the MBM (2018-base), MBM-N for Yukon and Northwest Territories, and MBM-N for Nunavut, continued**

Component	MBM	MBM-N for Yukon and Northwest Territories	MBM-N for Nunavut
<b>Clothing and footwear</b>	<ul style="list-style-type: none"> <li>• 2012 Social Planning Council of Winnipeg and Winnipeg Harvest Acceptable Living Level (ALL) Basket</li> <li>• Prices collected in 11 cities across the provinces</li> <li>• Not applicable (no adjustments are made to the ALL basket)</li> <li>• Annual adjustments use the provincial clothing and footwear indexes</li> </ul>	<ul style="list-style-type: none"> <li>• 2012 Social Planning Council of Winnipeg and Winnipeg Harvest Acceptable Living Level (ALL) Basket</li> <li>• 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.</li> <li>• Adjustments were made to the ALL replacement schedule and clothing list due to the colder climate.</li> <li>• Annual adjustments use the territorial clothing and footwear indexes</li> </ul>	<ul style="list-style-type: none"> <li>• An modified version of 2012 Social Planning Council of Winnipeg and Winnipeg Harvest Acceptable Living Level (ALL) Basket to include traditional clothing (plus 5% repair cost)</li> <li>• Prices collected in the territorial capitals. For outside the capitals, a weighted average of the costs associated one trip to the closest community and the cost of ordering online.</li> <li>• Adjustments were made to the ALL replacement schedule and clothing list due to the colder climate and to make adjustment for the inclusion of traditional clothing items</li> <li>• Annual adjustments use the territorial all-items index</li> </ul>
<b>Other necessities</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Additional provincial amount for cell phone services</li> <li>• Annual adjustments use the provincial all-items indexes</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Additional territorial amount for cell phone services</li> <li>• Annual adjustments use the territorial all-items indexes</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Additional territorial amount for cell phone services</li> <li>• Annual adjustments use the territorial all-items index</li> </ul>
<b>Inuusiqattarniq</b>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>	<ul style="list-style-type: none"> <li>• Uses a fixed ratio based on expert judgement, multiplied against the other necessities component costs.</li> </ul>
<b>Disposable Income</b>	<ul style="list-style-type: none"> <li>• Total income (including government transfers), less income tax and several non-discretionary expenses</li> <li>• Three Tenure Type Adjustments</li> <li>• Medical expenses imputation uses provincial data</li> </ul>	<ul style="list-style-type: none"> <li>• Total income (including government transfers), less income tax and several non-discretionary expenses</li> <li>• Three Tenure Type Adjustments</li> <li>• Medical expenses imputation uses territorial data</li> </ul>	<ul style="list-style-type: none"> <li>• Total income (including government transfers), less income tax and several non-discretionary expenses</li> <li>• Three Tenure Type Adjustments. Data limitations, only one tenure type adjustment for all the regions outside of the capital is possible</li> <li>• Medical expenses imputation uses territorial data</li> </ul>

## Appendix G: Impact on the poverty rates for Nunavut by excluding the inuusiqtattarniq component

**Table G.1**

**Estimates and confidence intervals<sup>1</sup> for the percentage of persons in poverty, MBM-N minus the inuusiqtattarniq component, Nunavut and selected demographic groups, 2018 to 2021**

	Persons in poverty											
	2018			2019			2020			2021		
	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound
<b>Geography</b>	percent											
Nunavut	34.2	<b>39.7</b>	45.3	28.5	<b>34.3</b>	40.0	22.9	<b>31.6</b>	40.3	26.3	<b>33.3</b>	40.3
<b>Age group</b>												
Persons under 18 years	42.0	<b>51.9</b>	61.7	30.6	<b>38.1</b>	45.7	27.0	<b>41.0</b>	55.1	25.4	<b>39.0</b>	52.6
Persons 18 to 64 years	28.8	<b>32.6</b>	36.4	26.9	<b>32.5</b>	38.2	19.7	<b>27.1</b>	34.6	23.9	<b>31.4</b>	38.9
Persons 65 years and over	15.5	<b>29.5</b>	43.4	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F
<b>Family Type</b>												
Persons in economic families	34.2	<b>40.9</b>	47.5	26.6	<b>33.0</b>	39.4	20.8	<b>30.3</b>	39.9	23.5	<b>31.9</b>	40.3
Persons not in an economic family	13.2	<b>27.8</b>	42.4	36.4	<b>47.3</b>	58.2	25.1	<b>44.4</b>	63.8	20.4	<b>46.6</b>	72.9

F too unreliable to be published

<sup>1</sup> Upper and lower bounds are based on a 95% level of confidence.

**Note:** Estimates are based on the preliminary MBM-N thresholds for which the inuusiqtattarniq component has been removed. None of the changes are statistically significant.

**Source:** Canadian Income Survey, Statistics Canada. Custom tabulation.

**Table G.2**

**Estimates and confidence intervals<sup>1</sup> for the number of persons in poverty, MBM-N minus the inuusiqtattarniq component, Nunavut and selected demographic groups, 2018 to 2021**

	Persons in poverty											
	2018			2019			2020			2021		
	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound	Lower bound	Estimate	Upper bound
<b>Geography</b>	number											
Nunavut	12,100	<b>14,100</b>	16,000	10,200	<b>12,300</b>	14,300	8,300	<b>11,500</b>	14,700	9,700	<b>12,200</b>	14,900
<b>Age group</b>												
Persons under 18 years	5,500	<b>6,900</b>	8,300	4,100	<b>5,100</b>	6,100	3,600	<b>5,400</b>	7,200	3,200	<b>5,200</b>	7,200
Persons 18 to 64 years	6,000	<b>6,700</b>	7,500	5,700	<b>6,900</b>	8,100	4,300	<b>5,900</b>	7,600	5,200	<b>7,000</b>	8,700
Persons 65 years and over	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F
<b>Family Type</b>												
Persons in economic families	11,100	<b>13,200</b>	15,400	8,700	<b>10,800</b>	12,900	6,900	<b>10,000</b>	13,200	7,900	<b>10,700</b>	13,500
Persons not in an economic family	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F	F	<b>F</b>	F

F too unreliable to be published

<sup>1</sup> Upper and lower bounds are based on a 95% level of confidence.

**Note:** Estimates are based on the preliminary MBM-N thresholds for which the inuusiqtattarniq component has been removed. None of the changes are statistically significant.

**Source:** Canadian Income Survey, Statistics Canada. Custom tabulation.

## Appendix H: Comparison of the MBM-N Nunavut thresholds with selected other MBM thresholds

**Table H:**  
**Market Basket Measure (MBM) thresholds and components for selected MBM regions and reference family sizes, 2018**

		Total threshold	Food component	Clothing and footwear component	Transportation component	Shelter component	Other necessities component	Inuusiqattarniq component
<b>MBM Geography</b>		<b>Four-person family</b>						
		current dollars						
<b>Province</b>	<b>Region</b>							
Ontario	Ottawa-Gatineau, Ontario part	47,233	11,399	2,157	4,538	17,822	11,317	...
	Toronto	48,142	10,803	1,846	5,602	19,259	10,633	...
Alberta	Calgary	48,349	11,510	1,858	4,228	19,367	11,386	...
	Edmonton	47,869	11,410	1,858	4,236	19,055	11,311	...
British Columbia	Vancouver	48,677	11,586	2,074	4,476	19,125	11,416	...
<b>Territory</b>	<b>Region</b>							
Yukon	Rural North	53,203	15,745	3,673	5,508	12,433	15,844	...
	Rural South	50,895	15,144	3,492	5,239	11,765	15,255	...
Northwest Territories	Whitehorse	52,215	12,416	3,246	4,884	18,657	13,012	...
	Beaufort Delta	71,611	20,220	4,227	5,859	21,214	20,090	...
	Sahtu	72,526	22,146	3,985	6,176	18,859	21,360	...
	Tijchq	58,962	16,321	3,592	5,313	17,065	16,671	...
	Dehcho	62,289	17,143	3,973	5,547	18,047	17,579	...
	South Slave	59,004	15,763	3,725	5,096	18,069	16,351	...
Nunavut <sup>1,2</sup>	Yellowknife	59,926	12,454	3,400	5,141	25,320	13,611	...
	Baffin, excluding Iqaluit	94,767	...	...	...	...	...	...
	Kivalliq	83,165	...	...	...	...	...	...
	Kitikmeot	88,427	...	...	...	...	...	...
	Iqaluit	99,183	...	...	...	...	...	...
		<b>Five-person family</b>						
		current dollar						
<b>Province</b>	<b>Region</b>							
Nunavut	Baffin, excluding Iqaluit	105,953	27,717	7,300	10,497	25,363	28,061	7,015
	Kivalliq	92,981	23,704	6,017	7,811	25,363	24,069	6,017
	Kitikmeot	98,864	26,717	6,027	7,823	25,363	26,348	6,587
	Iqaluit	110,890	26,367	6,034	7,332	38,542	26,091	6,523

... not applicable

1 The costed five-person family Nunavut thresholds have been equalized using the square root method to for a four-person family for comparison purposes.

2 The square root equalization methodology can not be applied to the individual component amounts, only to the total threshold amount.

**Source:** *Provincial thresholds* - Statistics Canada. Table 11-10-0066-01 Market Basket Measure (MBM) thresholds for the reference family by Market Basket Measure region, component and base year. *Yukon and Northwest Territory thresholds* - Market Basket Measure (MBM) thresholds for the reference family by Market Basket Measure region, component and base year, Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories, and custom tabulations



## References

- Bowman, S., Martin, C., Carlson, J., Clemens, J., Lin, B., Moshfegh, A. (2013). [Food Intakes Converted to Retail Commodities Databases 2003-2008: Methodology and User Guide](#). U.S. Department of Agriculture, Agricultural Research Services, Beltsville, MD, and U.S. Department of Agriculture, Economic Research Service, Washington, D.C.
- Canada Mortgage and Housing Corporation (2020). [Northern Housing Report](#). Catalogue no. NH12-321E-PDF
- Devin, Nancy, Eric Dugas, Burton Gustajtis, Sarah McDermott and José Mendoza Rodríguez (2023), "[Launch of the Third Comprehensive Review of the Market Basket Measure](#)". Catalogue no. 75F0002M2023007
- Devin, Nancy, Burton Gustajtis, Keith Lam and Sarah McDermott (2021), "[Construction of a Northern Market Basket Measure of poverty for Yukon and the Northwest Territories](#)". Catalogue no. 75F0002M2021007.
- Devin, Nancy, Burton Gustajtis and Sarah McDermott (2022), "[Technical paper for the Northern Market Basket Measure of poverty for Yukon and the Northwest Territories](#)". Catalogue no. 75F0002M2022004.
- 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.
- Fréchet, Guy, Pierre Lanctôt, Alexandre Morin and Frédéric Savard (2010), [EQUIVALENCE SCALES: AN EMPIRICAL VALIDATION](#). Catalogue no. 978-2-550-59521-2
- Government of Nunavut (2017). "[The Makimaniq Plan 2 A Shared Approach To Poverty Reduction 2017-2022](#)". Nunavut Roundtable for Poverty Reduction.
- Government of Nunavut (2019). *Nunavut Roundtable for Poverty Reduction - Notes*. Inuit Customary laws and Community Decision Making Processes. Cambridge Bay Community Hall. November 19 to 21, 2019. Unpublished document.
- 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.
- Impact Economics (2012). "[Understanding Poverty in Nunavut](#)". Report prepared for the Nunavut Roundtable for Poverty Reduction.
- Impact Economics (2022). *Cost of Living Index Development and Economic Analysis for Poverty Reduction in Inuit Nunangat*. Unpublished document (available by emailing [impacteconomics@gmail.com](mailto:impacteconomics@gmail.com)).
- Inuit Tapiriit Kanatami (2014). "[Social Determinants of Inuit Health in Canada](#)".

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.

Tungasuvvingat Inuit and Well Living House Action Research Centre for Indigenous Infant, Child and Family Health and Well being at the Centre for Urban Health Solutions, St. Michael's Hospital (2017). "[Our Health counts, Urban Indigenous Health Database project](#)".

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

Wartier, Duncan W., Manuelle Landry-Cuerrier, Murray M. Humphries (2021). "[Valuation of Country Food in Nunavut Based on Energy and Protein Replacement](#)". *Arctic*. Vol. 74, No. 3 (September 2021) p. 355–371.