# **Income Research Paper Series**

Market Basket Measure Research Paper: Options for updating the other necessities component and the creation of a communication services component

by Nancy Devin, Burton Gustajtis, Mackin Liu, José Mendoza Rodríguez, William MacMinn and Myron Wasylko

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# Market Basket Measure Research Paper: Options for updating the other necessities component and the creation of a communication services component

By Nancy Devin, Burton Gustajtis, Mackin Liu, José Mendoza Rodríguez, William MacMinn and Myron Wasylko

On August 21, 2018, the Government of Canada released <u>Opportunity for All: Canada's First Poverty Reduction Strategy</u> (the Strategy), which outlined long-term commitments to guide current and future government actions and investments to reduce poverty. The <u>Poverty Reduction Act</u> legislates key commitments made in the Strategy and mandates that Statistics Canada review the content of Canada's official measure of poverty, the Market Basket Measure (MBM), on a regular basis.

During consultations for the MBM's second comprehensive review, as well as during the analysis leading to the creation of the 2018-base MBM, several MBM research items were identified as requiring further study (e.g., MBM thresholds for remote regions, different family sizes and a poverty index). These research topics and their related methodological underpinnings form the basis for the MBM's forward-looking research agenda and are being explored in detail through MBM research papers. The MBM research papers will be published in preparation for the third comprehensive review of the MBM, launched in June 2023.



This discussion paper addresses options and considerations related to two research agenda items: updating the other necessities basket component and potentially creating a communication services component in the MBM methodology. It also provides an opportunity for the public and stakeholders to provide feedback and comments on the considerations presented in this paper.

#### Introduction

The MBM establishes poverty thresholds based on the cost of a basket of food, clothing, shelter, transportation and other necessities for a family of four that reflects a modest, basic standard of living. A family with a disposable income below the appropriate MBM threshold for the size of the family and the region of residence is considered to be living in poverty.<sup>3</sup>

Due to the complexities caused by the changes in the collection methodology of the Survey of Household Spending (SHS), the data source used for deriving costs associated with the MBM's other necessities component, the possibility of updating the other necessities component with more recent SHS data was added as a forward looking research topic following the second comprehensive review of the MBM.<sup>4</sup> Furthermore, given the interconnectedness between updating the other necessities component and creating a communication services component, the two research topics are discussed in unison in this discussion paper.

This paper begins by explaining how costs associated with other necessities and, more specifically, information and communications technology (ICT) are currently accounted for in the 2018-base MBM methodology. It then offers considerations for the update to the other necessities component and how to define a potential communication services component. Readers are encouraged to provide feedback and comments.

<sup>.</sup> A complete list of research topics can be found in Appendix A.

<sup>2.</sup> For more information on the third comprehensive review of the MBM, please see Launch of the Third Comprehensive Review of the Market Basket Measure.

<sup>3.</sup> For more information on the MBM's methodology, please see Report on the second comprehensive review of the Market Basket Measure.

For more information on the SHS, please see <u>Survey of Household Spending (SHS)</u>.

## A brief overview of the other necessities component in the Market Basket Measure methodology

The other necessities component is an estimate of the costs for goods and services that are not captured under the shelter, clothing, food and transportation components (e.g., household items, personal care and educational activities).<sup>5</sup> The methodology for costing these other goods and services does not rely on prices of specific items as is the case for other components of the basket. Doing so would be extremely complex given the number of items that would potentially need to be priced and the likelihood that many of those items could be considered necessities for some families but not for others. Consequently, the other necessities component is meant to approximate average expenditures on a wide range of other necessary goods and services; currently, for the 2018-base MBM, it includes expenditures for cellphones and associated cellular services.

The derivation of the other necessities component uses data from Statistics Canada's SHS. Starting in 2010, the SHS underwent a redesign that made changes to the questionnaire and introduced a two-week diary.6 These changes made it easier for respondents to recall their expenditures more accurately, resulting in expenditure data being collected with respect to a reference period (e.g., last week, last month or last year). In addition, expenditure categories in the redesigned SHS were also updated to a new custom product classification. These changes to the concepts, recall periods and mode of collection raised questions regarding the suitability of using the 2008-base inclusion rule with the redesigned SHS data for use in the 2018-base MBM methodology.

As a result, during the second comprehensive review of the MBM (2018 base), the fixed percentage (or multiplier) used for costing the other necessities component was held constant at 75.4%. The value of this multiplier was established during the first comprehensive review and was based on 2008 and 2009 SHS data on the historical spending patterns of a set of selected expenditure categories deemed necessary for a modest, basic standard of living. Since the 2018-base MBM used a multiplier based on the 2008 and 2009 reference years of the SHS, a period when expenditures on cellphones were relatively low compared with today, an additional amount for cellphone services (ranging from about \$800 to \$1,400 per year, depending on the province) was added to the 2018-base MBM's other necessities component. 7,8,9

## Accounting for communication costs in the Market Basket Measure

During the second comprehensive review of the MBM, as well as during the analysis leading to the 2018-base discussion paper series, additional questions regarding the other necessities component were raised. These questions centred on the critical importance of communication services and technology and how these were no longer an 'other necessity' but a key expenditure category that should be accounted for in a distinct component within the MBM methodology. For example, the 2018-base consultation process highlighted the universality of communication service needs and the fact that people in low-income households rely on cellphone services and pay for basic Internet services. Moreover, students and parents of school-age children agreed that Internet access and a computer at home were deemed essential.

As previously mentioned, costs associated with these communication services are currently accounted for through the other necessities component. However, stakeholder feedback during the second comprehensive review of the MBM indicated that including communication costs in the other necessities component minimized the importance of these services and made it difficult to track their associated costs over time. In addition, recent reporting indicates that, on average, Canadians spend more on cellphone services compared with residents of other countries, further emphasizing the importance of monitoring these costs.<sup>10</sup>

For more information on the components of the MBM, please see Towards an update of the Market Basket.

For more information on the redesign of the SHS and comparability over time, please see Survey of Household Spending Modelled Annual Statistics, 2010 to 2017.

For more information on the underlying methodology of the other necessities component, please see Market Basket Measure Technical Paper: The other necessities component.

Although the reference years for SHS data were 2008 and 2009, an analysis of the size of the other component during the second comprehensive review indicated that the value of the other necessities component multiplier in 2018 still adequately reflected average expenditures on other necessities. However, given the growth of telecommunication technology services and equipment during the 2010s, cellphone services expenditures were found to be undervalued using the more historical SHS data.

Specifically, pooled data from the SHS for the 2015-to-2017 period were used to create a benchmark estimate of annual spending on cellphone services for families in the second income decile. On average, the inclusion of cellphone expenses added around \$1,000 to the total cost of the component.

<sup>10.</sup> Why are Canadians' cellphone bills higher than other countries?

To address these concerns, Statistics Canada and Employment and Social Development Canada committed to investigating how a separate communication services component could be accounted for in the MBM methodology. Given the connection between updating the other necessities component and the potential creation of a communication services component for the MBM, the remainder of this discussion paper presents a possible approach and related considerations to addressing both items simultaneously. The aim of this exercise is to garner feedback from the public to help shape the direction of the MBM methodology.

#### Updating the other necessities component and possible additional refinements

The following section provides a short explanation of the other necessities multiplier. It also details an approach for updating the other necessities multiplier with more recent SHS data and creating a communication services component consisting of communication services considered necessary for achieving a modest, basic standard of living.

#### Updating the other necessities component

The data inputs used for calculating the other necessities multiplier come from SHS expenditure data on various goods and services among reference family<sup>11</sup> households with before-tax income in the second decile of that population. The multiplier is then calculated as the ratio of the average spending on other goods and services to the average spending on food and clothing:

$$\begin{pmatrix} x_{on} / \\ x_{fc} \end{pmatrix}$$
,

where

 $\mathcal{X}_{on}$ : average expenditures on other goods and services

 $\chi_{c_{lpha}}$  : average expenditures on food and clothing.

To help reduce the annual variability in costs attributable to the small sample size (reference families in the second decile), the current multiplier was calculated as the weighted average of the 2008 (with a weight of one-third) and 2009 (with a weight of two-thirds) expenditure values. This multiplier was then applied to the total cost of the food and clothing basket components to estimate the cost of other necessary expenses. For examples of how other countries estimate their other component costs for existing basket-based, low-income measures, please see the "What do other countries do?" text box below.

During the first comprehensive review of the MBM (2008 base), an inclusion rule was developed to determine which expenditure categories to include in the numerator of the multiplier. The inclusion rule stated that an item would be included if more than 70% of reference families in 7 out of 10 provinces and 70% of reference families in Canada reported expenditures on that item. However, not all items meeting that threshold were included, because the items also needed to abide by the MBM's modest and basic standard of living definition.<sup>12</sup>

<sup>11.</sup> The MBM reference family is defined as two adults in the 25-to-49 age group with two children aged 9 and 13 years.

<sup>12.</sup> For more information on the decision rule for inclusion, please see First Comprehensive Review of the Market Basket Measure of Low Income.

The analysis conducted during the second comprehensive review (2018 base) showed that following the previously developed inclusion rule with the latest SHS redesigned data resulted in unusable (i.e., extremely large) estimates for the multiplier.<sup>13</sup> For example, the change in differing recall periods (e.g., last month, last 3 months and last 12 months) resulted in more detailed expenditure categories (e.g., household linens) not meeting the inclusion rule and less detailed expenditure categories meeting it (e.g., household furnishings and equipment). Not being able to identify lower-level expenditure categories resulted in an inflated numerator, yielding an impractically high multiplier value. In addition, seasonal effects caused by the shorter recall periods could impact the expenditures for certain categories, too. Therefore,

#### What do other countries do?

Canada is not the only country that uses an absolute measure of poverty with a non-defined expenditures component. For example, in the United States, the Bureau of Labor Statistics' Supplemental Poverty Measure has a "plus a little more" component that uses a simplified multiplier (1.2) against the costs of its defined components (e.g., food, shelter, clothing and utilities). Similarly, the absolute poverty measure used by Italy, starting in 2005, has a residual component that uses a linear regression model to estimate its costs in relation to its food component.

following the historical inclusion rule was deemed inappropriate when using redesigned SHS data.

#### One potential approach for updating the other necessities component

A possible approach for updating the other necessities component could be to recalculate the multiplier with more recent SHS data on the historical household expenditure categories considered for the 2008-base multiplier, while possibly adjusting for expenditure categories that were not historically prevalent but are relevant today. This approach assumes that while total expenditures may change over time, the expenditure categories that families typically spend money on are fairly static (e.g., personal care products, children's toys and movie theatre admissions). However, a few expenditure categories could be added or removed given changes in what a family could consider as essential.

In addition, the SHS population for whom expenditure categories would be analyzed could also be updated. Updated SHS population specifications would better reflect the MBM reference family and take into account regional differences in income-levels. For example, instead of using expenditure data from reference family households with two adults and two children and taking the second income before-tax decile of that population at the *national level*, families with two adults aged 25 to 64 years and two children aged 6 to 16 years could be used, taking the second income before-tax decile at the *provincial level*. This approach would allow for a larger sample on which to recalculate the multiplier and make the calculation more sensitive to regional variation in expenditures. Using the historical other necessities expenditure categories while updating the expenditure values with more recent SHS data from a refined target population would help keep consistency between MBM bases and maintain the underlying structure of the MBM.

Appendix B details the calculation of the other necessities multiplier using the historical expenditure categories, more recent SHS data (2021, 2019 and 2017) and the updated SHS population sample suggested previously. For this exercise, the annual multiplier values for 2021, 2019 and 2017 would be estimated at 0.788, 0.746 and 0.806, respectively, for an overall average value of 0.780.<sup>14,15</sup> It should be noted that the other necessities component in the 2018-base MBM has an additional amount for cellphone services, <sup>16</sup> which would no longer be required since updating the multiplier with more recent SHS data would reflect more contemporary and accurate expenditures on cellphone services.

<sup>13.</sup> Using the 2016, 2015 and 2014 reference years for the SHS data.

<sup>14.</sup> Because of changes in the historical expenditure categories over time, a perfect concordance for historical expenditure categories was not always possible. Therefore, for some historical expenditure categories, the closest expenditure category available for a given SHS reference year was used.

<sup>15.</sup> Reference year 2021 SHS data was preliminary at the time of publication.

<sup>16.</sup> The amount for cellular services added to the other necessities component in the 2018-base was based on pooled data from the SHS for the 2015 to 2017 period that was used to create a benchmark estimate of annual spending on cellular services for families in the second income decile. Market Basket Measure Technical Paper: The other necessities component (statcan.oc.ca)

#### Revision of household expenditure categories

As mentioned, the historical expenditure categories considered for the other necessities multiplier could be restricted or expanded depending on what is considered essential. There is a degree of subjectivity with respect to what categories could be considered essential today versus 15 years ago (when the current multiplier categories were first conceived). The list of expenditure categories that could be dropped or added are provided in Appendix B. The expenditure categories to be used in the numerator of the other necessities multiplier will be determined by Employment and Social Development Canada (ESDC) based on input from experts and existing research.

As mentioned, the numerator of the current other necessities multiplier includes expenditure categories for communication services and equipment.<sup>17</sup> During the second comprehensive review of the MBM (2018 base), the numerator was recognized as undervaluing the expenses typically spent on cellphone equipment and services, so an additional amount was included.

In addition to updating the expenditure values to the more recent SHS data and potentially revising the list of expenditure categories, communication services could be removed from the numerator of the multiplier to construct a separate communication services component. Certain guidelines related to access to communication services have been adopted in recent years, which could help provide a rationale for including communication

services in the MBM as a separate component and not as part of the other necessities component as is currently done.

The following section will describe one possible approach for moving communication services costs from the other necessities component to a new communication services component. It will also explain why communication equipment should remain in the other necessities component.

#### **Digital poverty**

Digital poverty can be understood and defined in different ways. For example, it can mean not having enough income to purchase ICT, lacking the knowledge and skills to use the technology, or having barriers to accessing services. Since the MBM is an income-based measure, only the income-related dimension is considered here.

#### Creating a communication services component

In recent years, ICT has become key to the public, private and professional lives of Canadians, enabling essential social and economic activities and supporting social inclusion, employment, use of government services, access to information, procurement of goods, etc.

Given the critical importance of ICT, one of the suggested improvements proposed during the second comprehensive review of the MBM was to create a new, separate ICT-related component in the MBM basket. The potential items to include in this component are described below.

#### Items for a potential communication services component

A new ICT-related component would be challenging to create for communication equipment, since there is no standard regarding the type and specifications of devices considered essential for communications purposes (e.g., smartphones, tablets and laptops). Given the variability of options, it is proposed that the costing method for communication equipment continues to be done in the other necessities component. Therefore, it is proposed that an ICT-related component includes only communication services costs that are considered essential by existing guidelines and that could be priced with available data. This component would thus help better capture costs associated with such services going forward, moving away from the current practice of adding an additional amount for cellphone services to the other necessities component.

In 2015, the Canadian Radio-television and Telecommunications Commission (CRTC)<sup>18</sup> launched a proceeding to examine the telecommunication services Canadians required to participate in the digital economy and the commission's role in ensuring the availability of basic telecommunication services to Canadians. In late 2016,

<sup>17.</sup> These include, for example, landline telephone services, cellphone and pager services, telephones and other equipment, Internet access services, computer hardware, and computer software.

<sup>18.</sup> The CRTC is an administrative tribunal within the Government of Canada responsible for regulating and supervising Canada's communication system in the public interest.

the CRTC issued a decision outlining key determinations regarding communication services, which included the recognition that broadband Internet access services are vital to Canada's economic, social, democratic and cultural fabric and that the following services are basic telecommunications services within the meaning of subsection 46.5(1) of the *Telecommunications Act*: fixed and mobile wireless broadband Internet access services, and fixed and mobile wireless voice services.<sup>19</sup>

From this perspective, creating and costing a separate communication services component would be in line with other MBM components (e.g., food, clothing and shelter), which rely on guidelines or standards developed by experts or set by policy. It is therefore presented for consideration that the following three subcomponents be used to form a potential communication services basket component: landline services, cellphone services and Internet access services. The total cost for the communication services component would be based on a yet-to-be determined methodology, and could involve, for instance, a weighted average of the costs of each service based on existing data regarding service usage. The creation of this component would imply, however, the removal of communication services expenditures from the numerator of the other necessities multiplier.<sup>20</sup>

#### Landline services

While landline usage has been declining in recent years, a significant number of households in Canada in the lower end of the income distribution still report having expenditures on landline services and equipment. For example, according to SHS data, in 2019, around 51% of lower-income households in Canada reported having expenditures on landline services and equipment. Landline use was most prevalent among lower-income households in the Atlantic provinces, Newfoundland and Labrador (70%) and New Brunswick (69%) topping the list. In addition, expenditures on landlines and equipment were most prevalent among lower-income households where a senior was present (77%).<sup>21,22</sup>

The costs for landline services could be based on the annual price for basic landline services in each province, including a one-time installation fee. The costs of these service plans could be sourced from the lowest reported prices for basic landline telephone services in rural and urban areas of each province in 2018, using the CRTC's 2019 Communications Monitoring Report. By contrast, installation fees could be based on an average cost collected from a variety of service providers and be amortized over five years<sup>23</sup> and adjusted for other years using the provincial all-items Consumer Price Index. Provincial costs for landline services could be calculated by taking the population weighted aggregate of the rural and urban costs.

#### Cellphone services

Given the composition of the MBM reference family (two adults in the 25-to-49 age group and two children aged 9 and 13 years), the communication services component could cost out service plans for each adult family member and consider the possibility of a service plan for the oldest child.<sup>24</sup> Total costs for cellphone services would include the annual price for cellphone plan subscriptions, including subscriber identity module (SIM) cards and their activation fees. The cost of the SIM card and activation fee for cellphone services could be calculated using the fees listed on selected cellphone service provider websites<sup>25</sup> and amortized over five years.

The standard established by the CRTC for a bring your own device plan could be used for the cellphone plan subscription cost. The CRTC mandated that, as of July 14, 2021, all major cellphone service providers must provide a minimum plan that costs \$35 per month<sup>26</sup> and should include three gigabytes of monthly data, unlimited Canada-wide incoming and outgoing calls, and unlimited text messages.<sup>27</sup>

<sup>19.</sup> For more information on the CRTC's role in ensuring the availability of basic telecommunication services, please see CRTC Submission to the Government of Canada's Innovation Agenda.

<sup>20.</sup> Appendix B (bottom) shows the potential impact of removing communication services expenditures from the other necessities multiplier.

<sup>21.</sup> Only households with a total income below the fifth decile were included in the analysis.

<sup>22.</sup> Senior households are households where at least one person was aged 65 years or older.

<sup>23.</sup> This amortization period was determined by looking at the average churn rate, which is a measure of subscriber turnover. The most recent data from the CRTC indicate that mobile services churn rates have been steadily decreasing over the past four years, going from 1.5% in 2015 to 1.3% in 2019. Similarly, residential Internet subscription churn has been fairly consistent over the same period, at 1.8%. For more information, please see Communications Monitoring Report - Highlights of the Telecommunications Sector.

<sup>24.</sup> Research conducted on the topic of the appropriate age for cellphone ownership has shown that the majority of parents agree that younger children (i.e., younger than 12 years) should not have a cellphone. For example, a 2014 study by MediaSmarts, Young Canadians in a Wired World, Phase III: Trends and Recommendations, showed that a minority (24%) of children aged 9 own a cellphone or smartphone.

<sup>25.</sup> Lucky Mobile, Public Mobile and Chatr.

 $<sup>26. \ \,</sup>$  In December 2022, it was verified that the major carriers all offered this plan.

<sup>27.</sup> In addition, users should be able to send and receive photos, videos and other media files (e.g., multimedia messaging service) with this plan.

#### Internet access services

The total cost for Internet access services could include an amortized one-time installation fee, and plan costs could be estimated using the lowest reported prices for residential broadband Internet access services for each province.<sup>28</sup> The one-time internet installation fee could be estimated by taking the average posted installation fee from major Internet service providers<sup>29</sup> and amortized over five years.<sup>30</sup>

# Decision-making elements: Updating the other necessities component and potentially creating a communication services component

As described above, updating the other necessities component multiplier and creating a new communication services component for the MBM would require several decisions. Expert feedback is therefore sought on the following decision-making elements:

- 1. Updating the other necessities component multiplier
  - A decision must be made on whether to retain the existing multiplier or to update it using more recent
    data from the SHS. Furthermore, if a revision to the expenditures categories were to take place, ESDC
    would need to make the final decision, with guidance from experts and existing research, to determine
    which expenditure categories could be subject to inclusion, exclusion or substitution from the existing
    list of expenditure categories found in Appendix B. Lastly, consideration must be given to whether the
    SHS population sample over which the multiplier is calculated should be updated and aligned with
    provincial-level income deciles.
- 2. Creating a new communication services component
  - A decision will be required on whether the existing additional amount for cellphone services that is currently added to the other necessities component should simply be revised or be entirely extracted from such component to create a new component that captures the costs associated with communication services more generally. Additionally, decisions on what specific services to cost under a new communications services component would be needed: inclusion of landline services and associated installation fees, residential home internet services and associated installation fees, the type and number of cell phone plans per reference family, etc. Lastly, consideration will need to be given to the precise methodology required for costing this communication services component, such as the potential of applying a weighted average to the cost of different services based on current usage trends.

#### Conclusion

This paper describes a potential approach for updating the other necessities component and for creating a communication services component for the MBM. Since the previously used inclusion-rule method for deriving the other necessities multiplier is no longer possible, an approach to update the multiplier value using more recent SHS data from an enhanced population sample and relying on previously used household expenditure categories is presented. In addition, a communication services component, based on the CRTC's guidelines for communication services access, is also discussed. If created, this component would serve to capture communication services that are now considered essential for a modest, basic standard of living, thus removing these services from the other necessities component of the current MBM methodology (2018-base).

As with the other products in this series, this paper aims to foster engagement and debate with the public and stakeholders to explore research topics that could help inform discussions for the next comprehensive review of the MBM, improve the understanding of the MBM methodology, and potentially expand analytical tools that involve or rely on the MBM. Users are welcome to ask questions, provide feedback and make suggestions for future work on any topics relevant to the MBM.

Those who are interested in contacting us are encouraged to do so by emailing <u>statcan.market.basket.measure-mesure.du.panier.de.consommation.statcan@statcan.gc.ca.</u>

<sup>28.</sup> The costs can be sourced from the CRTC's 2019 Communications Monitoring Report.

<sup>29.</sup> Prices were collected from the following service providers: Rogers, Bell, SaskTel, Fido, Virgin Plus, Altima Telecom, TELUS and Shaw.

<sup>30.</sup> Please see footnote 20.

# Appendix A

# Table A List of forward-looking research agenda items

Research topic	Short description
Child care expenses	Currently, child care costs are represented in the Market Basket Measure (MBM) as a direct deduction from disposable income. This way, a family's needs are compared with an income measure that reflects their available resources. Experts have asked Statistics Canada whether this is the best way to deal with child care expenses in the MBM. Could child care costs instead be treated as a separate basket item?
Remoteness: Delineating remote regions for the Market Basket Measure Remoteness: Market Basket Measure thresholds for remote regions	Statistics Canada will research whether adjustments should be made to the MBM to account for higher costs faced by families living in remote regions and communities to derive (for example) better estimates for the northern region of each province.
Different family types	Currently, Statistics Canada estimates MBM thresholds for a family of four, then uses the square root equivalization scale to derive thresholds for families of different sizes. Does this method lead to the best possible thresholds for smaller families and unattached individuals?
Equivalization analysis	Additional study could be conducted on whether it may be appropriate to construct separate basket values for families of the same size but with different compositions (e.g., a one-parent family with three children versus a couple with two children) or other characteristics (e.g., age of family members).
Communications technology	Statistics Canada will look at how a separate communication component could best be added to the MBM. Presently, this need for communication goods and services is reflected in the "other" component.
The other component	The "other necessities" component is meant to represent the costs of goods and services other than food, shelter, transportation and clothing. The list of items that could potentially be included in the other component is large and could vary depending on the structure, age, location or other circumstances of a family. Ongoing research on the methodology underpinning the other component could verify whether the current method for setting the value of the other component is adequate or must be improved.
Poverty index	Anchoring the MBM to specific base years while updating it regularly to reflect changes in the standards of living to ensure it remains relevant is an underlying strength of the MBM. However, periodically rebasing the MBM leads to the creation of various poverty lines, which can make it difficult to track poverty trends over longer periods. To improve transparency and help track poverty trends over longer periods, the implementation of a poverty reduction index will be considered.
Inverse correlation of shelter and transportation costs	Often, people in areas where shelter costs are relatively higher have transportation costs that are relatively lower and vice versa. For instance, people in rural areas typically pay lower rents or mortgages but must spend more on fuel and seldom access public transportation. We propose exploring whether the MBM could be improved by more precisely considering these differences in costs.
Using the MBM with administrative data	As it currently exists, the MBM poverty rates can only be accurately calculated using a combination of survey and administrative data. We propose exploring the feasibility of applying MBM thresholds to only administrative data.
Additional MBM income inequality indicators	The majority of the current MBM-based analytical products do not describe the full income distribution. Since they typically compare the MBM threshold with disposable income, they do not fully describe income inequality. Proposed additional inequality indicators will be presented, which will allow better identification of income disparities among Canadians.

# **Appendix B**

Table B.1.1
Survey of Household Spending expenditure categories<sup>1</sup> and values used in the numerator and denominator, Canada, 2017, 2019 and 2021

	Historical expenditure		Expenditure value	
Expenditure category	category	2021	2019	2017
FD001 - Food expenditures				
FD003 - Food purchased from stores	denominator	11,366	9,324	8,978
FD990 - Food purchased from restaurants <sup>2</sup>	denominator	1,133	1,449	1,092
H0001 - Household operations				
CS030 - Communications				
CS003 - Telephone services and equipment				
CS004 - Landline telephone services <sup>3</sup>	numerator	203	242	343
CS005 - Cell phone and pager services <sup>3</sup>	numerator	2,070	2,115	1,836
CS021 - Telephones and other equipment	numerator	440	113	118
CS007 - Internet access services <sup>3</sup>	numerator	1,003	848	779
CS008 - Digital services				
CS020 - Postal, courier, delivery and other communication services	numerator	89	76	4
H0002 - Domestic and other custodial services (excluding child care)				
H0003 - Pet expenses	***		•••	
H0004 - Pet food	•••		•••	
H0005 - Purchase of pets and pet-related goods	•••		•••	
H0050 - Purchase of pets	•••		•••	
H0051 - Pet-related goods	•••		•••	
H0006 - Veterinarian and other services	•••			
H0010 - Household cleaning supplies and equipment		4.45		
H0011 - Detergent and other soaps	numerator	145	115	124
H0013 - Cleaning equipment (non-electric)				
H0012 - Other household cleaning supplies	numerator	78	86	75
H0014 - Paper, plastic and foil supplies		140	 70	010
H0015 - Stationery (excluding school supplies)	numerator	149	70	210
H0016 - Other paper supplies H0017 - Plastic and foil supplies	numerator	174	292	246
· ·	numerator	121	55	57
H0018 - Garden supplies and services	•••			
H0019 - Nursery and greenhouse stock, cut flowers, decorative plants and planting seeds H0020 - Fertilizers, herbicides, insecticides, pesticides, soil and soil conditioners				•••
H0021 - Groundskeeping services, snow and garbage removal				•••
H0021 - Groundskeeping services, show and garbage removal	numorator	140	108	253
CC001 - Child care	numerator			
CC021 - Child care outside the home				
CC022 - Child care in the home (regular and occasional) <sup>2</sup>	denominator	12	 169	139
HF001 - Household furnishings and equipment				
HF002 - Household furnishings	***		***	
HF003 - Furniture	numerator	1,050	 752	894
HF004 - Rugs, mats and underpadding	numerator	99	72	31
HF005_A - Works of art, carvings and other decorative ware				
HF006 - Linens	numerator	175	57	0
HF008 - Other household furnishings	Hamorator			
HF007 - Lamps and lampshades	numerator	0	0	0
HF008_D2 - Curtains and interior blinds	numerator	0	11	0
HF008_D3 - Glass mirrors, and mirror and picture frames				
HF008_D1 - All other household furnishings	numerator	90	0	0
HE001 - Household equipment				
HE002 - Household appliances				
HE050 - Refrigerators and freezers				
HE051 - Microwave ovens and cooking appliances	numerator	205	82	118
HE052 - Washers, dryers and dishwashers				
HE008 - Room air conditioners, portable humidifiers and dehumidifiers	numerator	51	18	13
HE009 - Other electric equipment and appliances				
HE009_D2 - Small electric food preparation appliances	numerator	135	46	0
HE009_D3 - Sewing machines, vacuum cleaners and other rug cleaning equipment	numerator	136	0	0
HE009_D4 - Attachments and parts for major appliances	numerator	0	0	0
HE009_D1 - All other electric equipment and appliances				
HE010 - Other household equipment				
HE010_D - Other household equipment - Diary				

Table B.1.1
Survey of Household Spending expenditure categories<sup>1</sup> and values used in the numerator and denominator, Canada, 2017, 2019 and 2021

	Historical expenditure	Expenditure value		
Expenditure category	category	2021	2019	2017
HE010_C - Other household equipment - Interview				
HE011 - Home and workshop tools and equipment				
HE031 - Power tools and equipment				
HE011_D3 - Hardware				
HE011_D2 - Other tools				
HE012 - Lawn, garden and snow-removal equipment and tools				
HE032 - Power lawn, garden and snow removal equipment				
HE012_D3 - Parts and accessories for garden tools				
HE012_D2 - Other lawn, garden and snow-removal tools and equipment attachments,				
accessories, parts				
HE013 - Non-electric kitchen and cooking equipment	numerator	313	100	156
HE013_D2 - Cutlery, flatware and silverware				
HE013_D1 - Other non-electric kitchen and cooking equipment				
HE015 - Other household equipment, parts and accessories	numerator	220	267	111
HE014 - Luggage				
HE015_D2 - Home security equipment				
HE015_D1 - All other household equipment, parts and accessories				
HE017 - Maintenance, rental, repairs and services related to household furnishings and equipment	numerator	148	73	2
HE020 - Services related to household furnishings and equipment	numerator	78	67	60
HE021 - Rental of heating equipment				
HE021_A - Rental of heating equipment for owned living quarters				
HE021_B - Rental of heating equipment for rented living quarters				
HE023 - Home security services				

<sup>...</sup> not applicable

Note: 2021 SHS data is preliminary.

Source: Statistics Canada, Survey of Household Spending. Custom tabulation.

<sup>1.</sup> Selected Survey of Household Spending expenditure categories were removed (e.g., shelter, and tobacco products, alcoholic beverages and cannabis for non-medical use) because they do not fit the methodology for possible inclusion in the numerator or denominator.

<sup>2.</sup> Only 50% of this expenditure category is used.

<sup>3.</sup> Expenditure categories removed when the communication component is considered part of the methodology.

Table B.1.2 Survey of Household Spending expenditure categories<sup>1</sup> and values used in the numerator and denominator, Canada, 2017, 2019 and 2021

	Historical expenditure	Ex	penditure va	lue
Expenditure category	category	2021	2019	2017
CL030 - Clothing and accessories				
CL029 - Women's and girls' wear (14 years and over)				
CL027 - Clothing (women and girls)	denominator	689	1,197	697
CL028 - Footwear (women and girls)	denominator	352	338	130
CL026 - Men's and boys' wear (14 years and over)				
CL024 - Clothing (men and boys)	denominator	472	730	457
CL025 - Footwear (men and boys)	denominator	311	307	115
CL023 - Children's wear (under 14 years of age)				
CL021 - Clothing and cloth diapers (children)	denominator	709	893	1,28
CL022 - Footwear (children)	denominator	368	247	213
CL020 - Athletic footwear	denominator	349	386	450
CL019 - Accessories	denominator	204	214	18
CL018 - Watches and jewellery				
CL017 - Clothing material, yarn, thread and other notions				
CL016 - Clothing services				
CL014 - Laundromats, dry-cleaning and laundry services	denominator	69	78	6
CL015 - Services for clothing, footwear and jewellery	denominator	158	34	
HC001 - Health care				
HC002 - Direct health care costs to household				
HC064 - Prescribed medicines, pharmaceutical products and cannabis for medical use				
HC003 - Prescribed medicines and pharmaceutical products				
HC063 - Cannabis for medical use				
HC004 - Non-prescribed medicines, pharmaceutical products, health care supplies and equipment				
HC004 D1 - Non-prescribed medicines and pharmaceutical products	numerator	271	146	21
HCO44 - Health care supplies and equipment				
HCO40 - Health care supplies				
HCO41 - Health care equipment				
HC052 - Major health care equipment				
HC053 - Other health care equipment				
HC005 - Health care services				
HC006 - Health care practitioners (excluding general practitioners and specialists)				
HC006_A - Health care practitioners in the home				
HCOO6 B - Other health care practitioners				
HC007 - Health care by general practitioners and specialists				
HC008 - Weight control programs, quit-smoking programs and other medical services				
HC009 - Hospital care, nursing homes and other residential care facilities				
HC010 - Eye-care goods and services				
HC012 - Prescription eye wear				
HCO27 - Non-prescription eye wear and other eye-care goods				
HC026 - Non-prescription eye wear (including sunglasses)				
HC013 - Other eye-care goods				
HC014 - Eye-care services				
HC015 - Dental services				
HCO22 - Private health insurance plan premiums	***			
HC061 - Private health and dental plan premiums				
HCO25 - Accident or disability insurance premiums	•••			
110020 - Accident of disability insulative premiums				

<sup>...</sup> not applicable
1. Selected Survey of Household Spending expenditure categories were removed (e.g., shelter, and tobacco products, alcoholic beverages and cannabis for non-medical use) because they do not fit the methodology for possible inclusion in the numerator or denominator.

Note: 2021 SHS data is preliminary.

Source: Statistics Canada, Survey of Household Spending. Custom tabulation.

Table B.1.3
Survey of Household Spending expenditure categories¹ and values used in the numerator and denominator, Canada, 2017, 2019 and 2021

Expenditure category	Historical expenditure category	Expenditure value			
		2021	2019	2017	
PC001 - Personal care	numerator	1,357	1,359	1,167	
PC002 - Personal care products					
PC003 - Hair care products					
PC004 - Makeup, skin care, manicure and fragrance products					
PC004_D1 - Makeup, skin care and manicure products					
PC004_D2 - Fragrance products					
PC005 - Personal deodorants					
PC006 - Body soaps					
PC007 - Oral hygiene products					
PC008 - Disposable diapers					
PC030 - Other personal care supplies and equipment					
PC009 - Electric hair-styling and personal care appliances					
PC011 - Feminine hygiene products					
PC012 - All other personal care supplies and equipment					
PC020 - Personal care services					
PC021 - Hair grooming services					
PC023 - Other personal care services					
RE001 - Recreation					
RE002 - Recreation equipment and related services					
RE124 - Sports, athletic and recreational equipment and related services					
RE003 - Sports, athletic and recreation equipment	numerator	59	56	0	
RE127 - Rental, maintenance and repairs of sports, athletic and recreational equipment					
RE004 - Outdoor play equipment and accessories					
RE005 - Children's toys	numerator	26	137	677	
RE006 - Video game systems and accessories	numerator	246	134	26	
RE007 - Art and craft materials					
RE010 - Computer equipment and supplies	numerator	724	316	285	
RE011 - Computer hardware					
RE012 - Computer software and video game systems					
RE013 - Computer software					
RE014 - Video game systems and parts for personal computers					
RE111 - App downloads	•••				
RE112 - Game downloads	•••				
RE015 - Computer supplies and other equipment	•••			•••	
RE110 - Tablet computers	•••				
RE114 - E-Book readers	•••				
RE119 - Wearable electronic devices		154		107	
RE016 - Photographic goods and services	numerator	154	209	167	
RE120 - Camcorders, cameras, parts, accessories and related equipment					
RE020 - Photographic services					
RE022 - Collectors' items					
RE032 - Other recreational equipment				•••	
RE021 - Musical instruments, parts and accessories					
RE023 - Camping, picnic equipment and accessories					
RE024 - Supplies and parts for recreational equipment		227	200	104	
RE040 - Home entertainment equipment and services	numerator	337	309	134	
RE041 - Home entertainment equipment RE080 - Audio equipment (portable and non-portable) and home theatre systems					
RE045 - Video equipment					
RE082 - DVD players, Blu-Ray players and other video equipment and accessories					
RE116 - Televisions					
RE076 - Pre-recorded media, music downloads and blank audio and video media					
RE050 - Pre-recorded and video and video cassette tapes, compact discs and DVDs			•••	•••	
RE059 - iTunes and other music downloads					
RE051 - Blank audio and video tapes, CDs, DVDs				•••	
RE113 - Movie downloads RE052 - Home entertainment services				•••	
RE056 - Rental of videotapes, DVDs and video games		•••		•••	
RE055 - Rental, maintenance, repair and services related to computers, phones, audio, video and other electronic equipment					
RE060 - Recreation services		•••			
HEODO HODIOGUUH SELVICES					

Table B.1.3 Survey of Household Spending expenditure categories<sup>1</sup> and values used in the numerator and denominator, Canada, 2017, 2019 and 2021

Expenditure category	Historical expenditure category	Expenditure value		
		2021	2019	201
RE061 - Entertainment				
RE062 - Movie theatres	numerator	0	113	10
RE063 - Live sporting and performing arts events				
RE064 - Live sporting events	numerator	0	0	50
RE065 - Live performing arts events	numerator	0	0	21
RE066 - Admission fees to museums, zoos and other sites	numerator	68	118	11
RE067 - Television and satellite radio services	numerator	443	578	57
RE090 - Use of recreational facilities and fees for other recreational activities				
RE145 - Dues and fees for sports and recreation facilities	numerator	296	840	57
RE141 - Water parks and amusement parks				
RE073 - Children's camps	numerator	135	233	15
RE074 - Package trips				
RE140 - Other recreational services				
RV001 - Recreational vehicles and associated services				
RV020 - Purchase of recreational vehicles				
RV003 - Purchase of motorcycles and snowmobiles				
RV004 - Purchase of all-terrain vehicles				
RV007 - Purchase of bicycles	numerator	146	81	
RV005 - Purchase of other recreational vehicles				
RV010 - Operation of recreational vehicles				
RV011 - Insurance premiums for recreational vehicles				
RV012 - Registration fees and licences for recreational vehicles				
RV015 - Maintenance and repairs for recreational vehicles				
RV015_D1 - Bicycle maintenance and repairs	numerator	126	54	
RV016 - Parking, hangar and airport fees; mooring and boat storage and harbour dues				
RV081 - Other expenses for recreational vehicles				
RV013 - Rented and leased recreational vehicles				
RV021 - Supplies and parts for recreational vehicles				
RV022 - Maintenance and repairs for recreational vehicles				

Note: 2021 SHS data is preliminary.

Source: Statistics Canada, Survey of Household Spending. Custom tabulation.

<sup>...</sup> not applicable

1. Selected Survey of Household Spending expenditure categories were removed (e.g., shelter, and tobacco products, alcoholic beverages and cannabis for non-medical use) because they do not fit the methodology for possible inclusion in the numerator or denominator.

Table B.1.4 Survey of Household Spending expenditure categories1 and values used in the numerator, Canada, 2017, 2019 and 2021

Hist Expenditure category	Historical expenditure	Expenditure value		
	category	2021	2019	2017
ED002 - Education				
ED003 - Tuition fees				
ED004 - Tuition fees for kindergarten, elementary and secondary schools				
ED005 - Tuition fees for university				
ED006 - Tuition fees for other postsecondary education				
ED007 - Other educational services				
ED008 - Other courses and lessons				
ED030 - Textbooks and school supplies				
ED025 - School supplies	numerator	163	146	5
ED024 - Textbooks	numerator	68	100	63
R0001 - Reading materials and other printed matter	numerator	163	176	67
R0002 - Newspapers				
R0003 - Magazines and periodicals				
R0004 - Books and E-Books				
R0005 - Maps, sheet music and other printed matter				
R0010 - Services related to reading materials				
ME001 - Miscellaneous expenditures			•••	
ME039 - Financial services				
ME030 - Service charges for banks and other financial institutions	 numerator	214	337	326
ME038 - Administration fees for brokers and stock and bond commissions				
ME006 - Other financial services				
ME040 - Other miscellaneous goods and services				
ME036 - Fines				
ME012 - Legal services not related to dwellings				
· · · · · · · · · · · · · · · · · · ·				
MEO45 - Dues to unions and professional associations				
ME014 - Contributions and dues for social clubs and other social organizations				
ME037 - Funeral services				
ME016 - Government services				
ME017 - Wholesale/retail memberships				
MG001 - Gifts of money, support payments and charitable contributions				
MG002 - Gifts of money and support payments	•••			
MG003 - Gifts of money to persons living in Canada	•••		•••	
MG004 - Gifts of money to persons living outside Canada	•••			
MG010 - Alimony and child support				
MG009 - Charitable contributions	numerator	455	356	250
Numerator total, with communication services		12,765	11,462	11,138
Numerator total, without communication services		9,489	8,257	8,180
Denominator total		16,192	15,367	13,811
Annual ratio, with communication services		0.788	0.746	0.806
Annual ratio, without communication services		0.586	0.537	0.592
Multiplier, with communication services				0.780
Multiplier, without communication services			•••	0.572

<sup>...</sup> not applicable
1. Selected Survey of Household Spending expenditure categories were removed (e.g., shelter, and tobacco products, alcoholic beverages and cannabis for non-medical use) because they do not fit the methodology for possible inclusion in the numerator or denominator.

Note: 2021 SHS data is preliminary.

Source: Statistics Canada, Survey of Household Spending. Custom tabulation.

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