

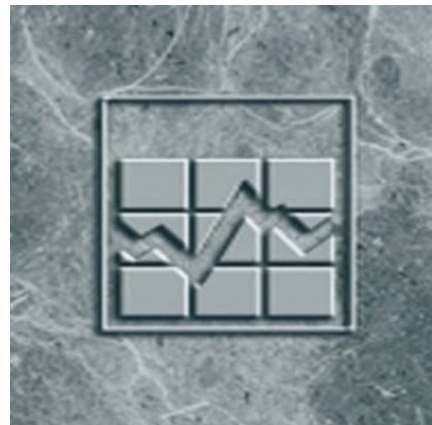
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Market Basket Measure research paper: Examining shelter and transportation costs within census metropolitan area Market Basket Measure regions

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Market Basket Measure research paper: Examining shelter and transportation costs within census metropolitan area Market Basket Measure regions

By Nancy Devin and Madeleine Steinmetz-Wood

The Market Basket Measure (MBM) establishes poverty thresholds based on the cost of a basket of food, clothing, shelter, transportation and other items for a family of four that reflects a modest, basic standard of living. According to the MBM, a family¹ with a disposable income below the appropriate MBM threshold for its size and region of residence is living in poverty.²

During the second comprehensive review of the MBM, stakeholder feedback emphasized the need to study whether transportation and shelter costs vary within a census metropolitan area (CMA) and whether there is a rationale for the MBM methodology to better account for these variations in costs.

According to the current MBM methodology, the transportation and shelter component costs for CMA³ MBM regions (e.g., Toronto, Vancouver) are the same regardless of where a person lives within that region. For example, those living in the downtown core of a CMA would have the same shelter and transportation costs assigned to them as those living in a suburban area of the same CMA.



Exploring basket component costs within MBM regions can improve our understanding of potential issues and inconsistencies in cost measurement. In turn, this can lead to potential new refinements to the MBM methodology that could help estimate poverty rates more accurately over time. To examine shelter and transportation costs within CMAs, this discussion paper begins by describing a proposed methodology for delineating urban and suburban subregions within a CMA MBM region.⁴ It then recalculates the shelter and transportation costs based on the new delineations and assesses the extent to which differences in costs between urban and suburban subregions are evident. The analysis concludes by examining how the new delineations would impact the estimation of poverty rates had they been implemented. This paper also provides an opportunity for the public and stakeholders to provide feedback and comments.

Poverty rates

The poverty rates included in this paper were created using 2016 Census data. Therefore, they might differ from the official published poverty rates calculated using the Canadian Income Survey (CIS), the official source for poverty statistics. For example, the poverty rate in Toronto in 2015 using the CIS was 19.2%, whereas based on 2016 Census data and the 2018-base methodology, the poverty rate was estimated to be 18.9%.

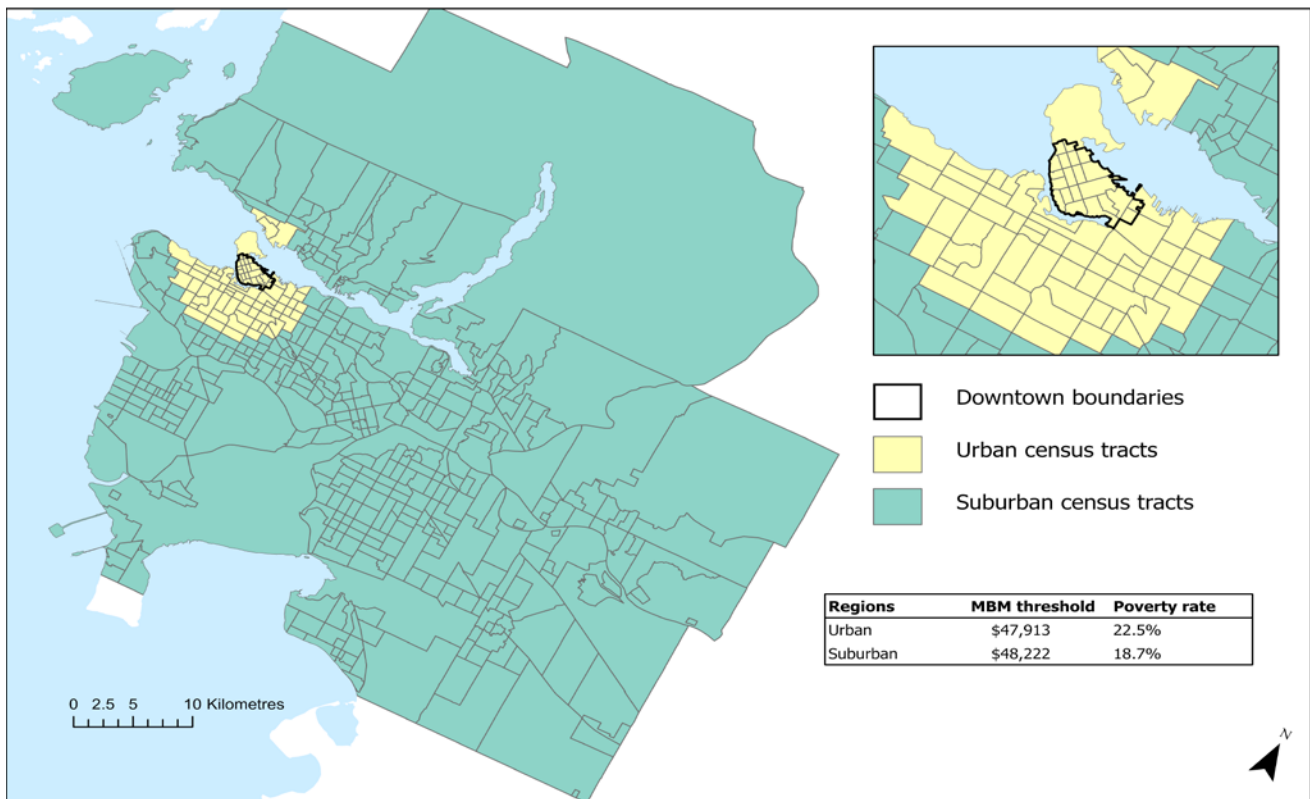
Delineating urban versus suburban subregions

The first step in examining variations in shelter and transportation costs within CMA MBM regions (MBM regions that correspond to a CMA) is to identify nuanced **urban** and **suburban** subregions. To do this, it is proposed to delineate such subregions among selected CMAs using census boundaries based on 2016 Census data, since the 2016 Census was used to construct the current 2018-base MBM methodology.

1. The MBM methodology uses the economic family concept. An economic family is defined as a group of two or more people who live in the same dwelling and are related to each other by blood, marriage, a common-law relationship, adoption or a foster relationship. A person not in an economic family is a person living either alone or with others to whom they are unrelated, such as roommates or a lodger.
2. For more information on the MBM methodology, please see [Report on the second comprehensive review of the Market Basket Measure](#).
3. A census metropolitan area (CMA) or a census agglomeration (CA) is formed by one or more adjacent municipalities centred on a population centre (known as the core). A CMA must have a total population of at least 100,000 based on data from the selected Census of Population Program, of which 50,000 or more must live in the core based on adjusted data from the previous Census of Population Program. For more information, see "[Census metropolitan area \(CMA\) and census agglomeration \(CA\)](#)" in the *Dictionary, Census of Population, 2021*.
4. There are 53 MBM regions, and 15 of these regions represent CMAs. The 15 CMAs that correspond to an MBM region are the following: St. John's, Newfoundland and Labrador; Halifax, Nova Scotia; Saint John, New Brunswick; Moncton, New Brunswick; Québec, Quebec; Montréal, Quebec; Ottawa-Gatineau, Ontario part, Ontario/Quebec; Hamilton, Ontario; Toronto, Ontario; Winnipeg, Manitoba; Saskatoon, Saskatchewan; Regina, Saskatchewan; Edmonton, Alberta; Calgary, Alberta; and Vancouver, British Columbia.

When determining an appropriate delineation rule, it is necessary to balance the need for every new subregion to have enough population to properly estimate costs with the need to ensure that urban subregions encompass neighbourhoods within an “easy” commuting distance to the downtown core. To accomplish this, it is proposed that the “urban” subregion would consist of the downtown⁵ and the urban fringe⁶ of a CMA, which corresponds to every census tract (CT)⁷ that is accessible by a short car drive from the downtown (i.e., less than a 10-minute drive). Map 1, Map 2 and Map 3 provide a visual representation of the downtowns, as well as the urban and suburban subregions, for the CMAs of Vancouver, Montréal and Toronto.

Map 1
Urban and suburban census tracts in the Vancouver census metropolitan area



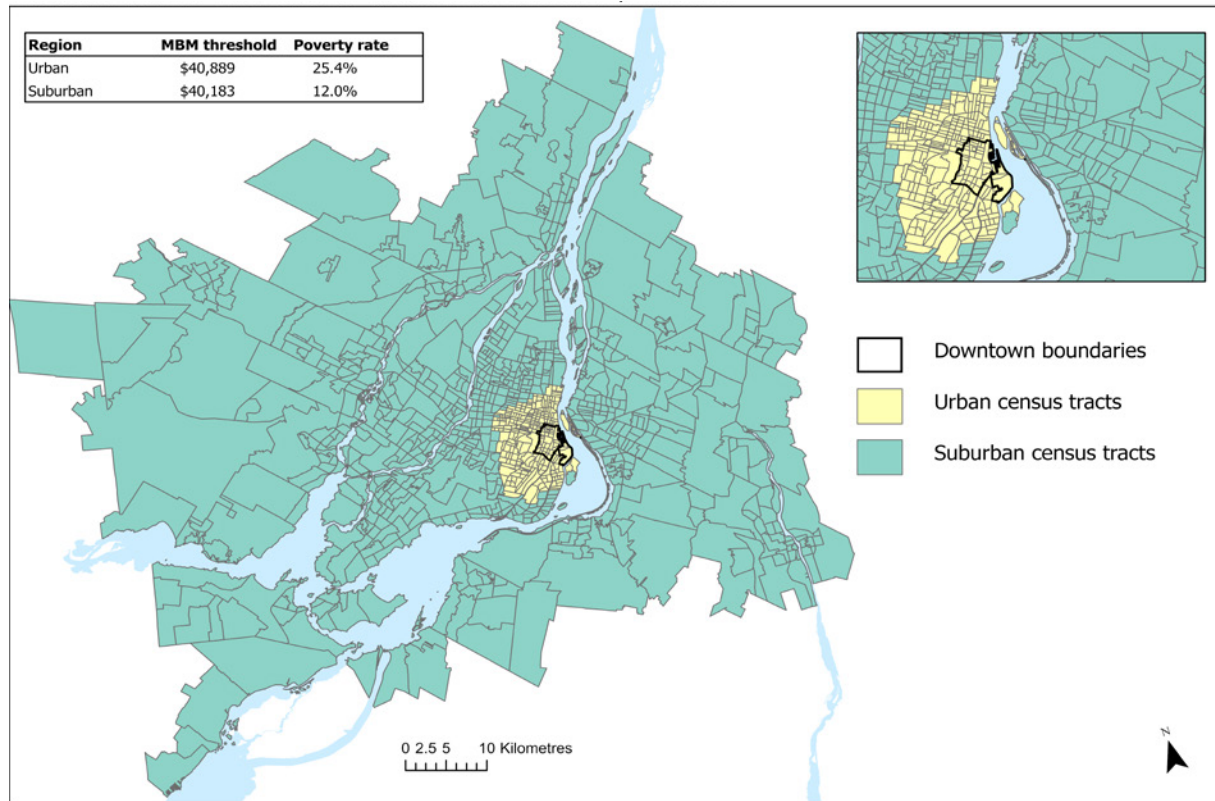
Note: Market Basket Measure (MBM) thresholds are in 2018 constant dollars.
Source: Census of Population, 2016.

5. The downtown is an area of the city that usually has a high population density and tends to contain a high concentration of commercial, cultural and historic buildings compared with other parts of the city. For more information on the delineation of the downtown used in this paper, please see [Defining Canada's Downtown Neighbourhoods: 2016 Boundaries](#).

6. The delineation of the urban fringe provided by the Centre for Demography at Statistics Canada was used. The urban fringe should encompass neighbourhoods of single-family homes or townhomes with a yard, low-rise condos, and apartments, occasionally interspersed by commercial or industrial zones. For more information on the urban fringe delineation used in this paper, please see the *Daily* article "[Canada's large urban centres continue to grow and spread](#)."

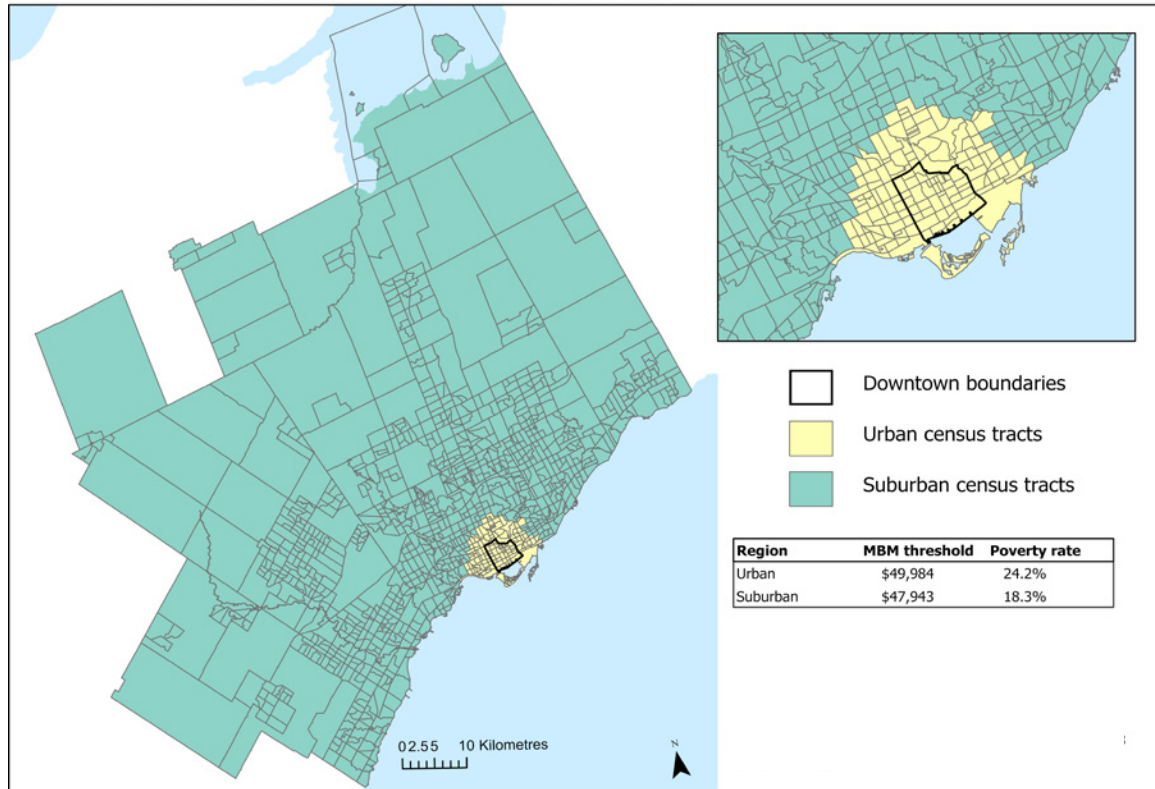
7. CTs are small, relatively stable geographic areas that usually have a population of fewer than 7,500 people, based on data from the previous Census of Population Program. They are located in CMAs and CAs that had a core population of 50,000 or more in the previous census.

Map 2 Urban and suburban census tracts in the Montréal census metropolitan area



Note: Market Basket Measure (MBM) thresholds are in 2018 constant dollars.
Source: Census of Population, 2016.

Map 3 Urban and suburban census tracts in the Toronto census metropolitan area



Note: Market Basket Measure (MBM) thresholds are in 2018 constant dollars.
Source: Census of Population, 2016.

The process of dividing CMAs into urban and suburban subregions was done for all MBM regions that represent a CMA, while the remaining MBM regions were left unchanged. Therefore, the CMAs that were subdivided were St. John’s, Halifax, Saint John, Moncton, Québec, Montréal, Ottawa–Gatineau, Hamilton, Toronto, Winnipeg, Saskatoon, Regina, Edmonton, Calgary and Vancouver.

Recalculating new shelter and transportation costs

Since this analysis focuses on shelter and transportation costs in select CMAs, only the costs of these two components were recalculated for those previously mentioned CMAs. The costs for the remaining MBM components (i.e., food, clothing and other necessities) and the calculation of disposable income remained unchanged.⁸ Tenure type adjustments (TTAs) were recalculated using the urban and suburban subregion delineation for the select CMAs included in the analysis.

Shelter component

The MBM thresholds are defined for a reference family of two adults and two children (a girl aged 9 years and a boy aged 13 years). The standard used for costing the housing component is the Canada Mortgage and Housing Corporation’s (CMHC) National Occupancy Standard (NOS). Therefore, based on the sex and age of the children in the MBM reference family, a three-bedroom rental is costed.⁹ The recalculation of shelter costs for urban and suburban subregions used a combination of either a quantile regression model or an empirical median to estimate the shelter cost, depending on the number of observations available for each subregion. To derive new TTAs, shelter costs were estimated independently for each tenure type within an MBM region (e.g., non-subsidized and subsidized renters, homeowners with or without a mortgage).

Table 1 presents the annual shelter costs for each new subregion with their confidence intervals, as well as cost differences between subregions. The results from Table 1 indicate that there is a statistically significant difference in shelter costs between urban and suburban subregions for most CMA MBM regions. Urban subregions had statistically significant higher shelter costs in St. John’s, Montréal and Toronto. Urban subregions had statistically significant lower shelter costs in Moncton, Ottawa–Gatineau, Hamilton/Burlington, Winnipeg, Saskatoon, Regina, Edmonton and Calgary.

Table 1
Non-subsidized shelter costs for urban and suburban subregions, 2018

CMA	Shelter as a percentage of the 2018-base MBM threshold	2018-base MBM shelter costs	2018 dollars		Difference (urban-suburban)	LCI of the difference	UCI of the difference
	percentage	Urban	Suburban				
St. John’s, Newfoundland and Labrador	31.3	14,041	14,116	13,579	537*	425	649
Halifax, Nova Scotia	33.9	15,312	15,084	15,859	-775	-1,674	123
Saint John, New Brunswick	26.7	11,151	11,251	11,201	50	-54	154
Moncton, New Brunswick	29.4	12,368	12,393	12,719	-326*	-491	-162
Québec, Quebec	27.4	10,864	10,778	10,901	-123	-473	227
Montréal, Quebec	28.2	11,333	12,503	11,148	1,356*	1,130	1,582
Ottawa–Gatineau, Ontario part	37.7	17,822	17,398	18,459	-1,062*	-1,553	-570
Hamilton/Burlington, Ontario	34.4	14,950	14,637	16,086	-1,449*	-2,013	-885
Toronto, Ontario	40.0	19,259	21,357	19,009	2,348*	562	4,134
Winnipeg, Manitoba	34.4	15,147	14,147	15,598	-1,451*	-2,182	-719
Saskatoon, Saskatchewan	36.1	16,473	15,849	17,084	-1,236*	-2,045	-426
Regina, Saskatchewan	35.2	15,774	15,799	17,359	-1,560*	-1,982	-1,138
Edmonton, Alberta	39.8	19,055	18,081	19,629	-1,547*	-2,230	-865
Calgary, Alberta	40.1	19,367	18,955	19,953	-998*	-1,667	-330
Vancouver, British Columbia	39.3	19,125	18,924	18,496	428	-145	1,001

* significantly different (p < 0.05)

Note: CMA = census metropolitan area; MBM = Market Basket Measure; LCI = lower confidence interval; UCI = upper confidence interval.

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

8. The calculation of costs for other MBM components and disposable income follows the 2018-base methodology.

9. Following the 2018-base MBM methodology, shelter costs are estimated using people in the second income decile who live in three-bedroom rental units that are not in need of major repairs.

Table A.1 in the appendix shows the difference between published shelter costs and recalculated shelter costs after urban versus suburban delineations were implemented.¹⁰ The difference in costs ranged from no change to an increase of \$168, with an average increase of \$40.

The results reported in this paper are specific to three-bedroom rentals in the second income decile without a need for major repairs. Compositional effects can lead to challenges when comparing shelter costs between urban and suburban regions. Dwelling types, the number of rooms, larger properties and amenities such as a pool or parking spaces included in rentals in suburban neighbourhoods could also increase the value of or demand for certain suburban properties, contributing to higher shelter costs in certain CMAs. For example, accounting for dwelling type in the shelter model led to statistically significant higher shelter costs in urban areas for the CMAs of Halifax, Saint John, Québec and Vancouver, in addition to the CMAs that were reported as having statistically significant higher shelter costs in urban areas in this analysis.

Transportation component

In the 2018-base MBM methodology, the transportation component in urban MBM regions with a comprehensive transit system is costed using a weighted average of public transportation costs and private transportation costs. The transportation costs are derived from direct pricing, while the weights are derived from the 2016 Census. Specifically, for each MBM region, the weights represent the proportion of families where at least one person in the family is commuting by car. The new calculation of transportation costs would involve holding the costs derived from direct pricing constant, while new weights would be calculated for each of the new urban and suburban subregions.

Following this approach, Table 2 shows the new transportation component costs for each of the subdivided CMAs. The differences in annual costs between the urban and suburban regions would vary between a slight difference of \$22 in Regina to a larger difference of \$737 in Vancouver. Transportation costs were higher in suburban subregions for all CMAs. With the exception of Regina, the results were statistically significant for all CMAs.

Table 2
Transportation costs for urban and suburban subregions for selected census metropolitan areas, 2018

CMA	Transportation as a percentage of the 2018-base threshold	2018-base MBM transportation	2018 dollars		Difference (urban-suburban)	LCI of the difference	UCI of the difference
			Urban	Suburban			
St. John's, Newfoundland and Labrador	9.5	4,248	3,993	4,708	-716*	-794	-638
Halifax, Nova Scotia	8.5	3,852	3,589	4,159	-569*	-606	-533
Saint John, New Brunswick	9.6	4,004	3,825	4,290	-465*	-518	-412
Moncton, New Brunswick	9.2	3,887	3,732	4,265	-533*	-589	-477
Québec, Quebec	9.8	3,875	3,721	4,060	-340*	-360	-320
Montréal, Quebec	9.4	3,787	3,346	3,995	-650*	-659	-640
Ottawa-Gatineau, Ontario part	9.6	4,538	4,434	4,638	-204*	-214	-194
Hamilton/Burlington, Ontario	11.2	4,854	4,667	5,100	-432*	-467	-398
Toronto, Ontario	11.6	5,602	5,345	5,652	-307*	-312	-303
Winnipeg, Manitoba	9.9	4,359	4,268	4,549	-281*	-304	-257
Saskatoon, Saskatchewan	9.4	4,272	4,219	4,501	-282*	-337	-226
Regina, Saskatchewan	9.7	4,333	4,330	4,352	-22	-112	68
Edmonton, Alberta	8.8	4,236	4,110	4,323	-213*	-227	-198
Calgary, Alberta	8.7	4,228	4,106	4,293	-187*	-199	-175
Vancouver, British Columbia	9.2	4,476	3,913	4,650	-737*	-759	-714

* significantly different (p < 0.05)

Note: CMA = census metropolitan area; MBM = Market Basket Measure; LCI = lower confidence interval; UCI = upper confidence interval.

Source: Statistics Canada, custom tabulation.

10. Given the increase in the number of regions for which MBM costs needed to be calculated, new independent variables based on these additional regions were added to the regression model. Therefore, a new regression model was generated. This impacted the shelter costs for all MBM regions, including those that were not subdivided.

Potential impact on poverty rate estimates (unofficial)

This section focuses on examining the sensitivity of poverty rate estimates to the introduction of urban and suburban subregions in selected CMAs. Table 3 compares the official poverty rates at the CMA level with estimates produced using urban versus suburban subregions for the 2015 income year (2016 Census data). For each CMA, the poverty rate estimates of the urban subregions are higher than the suburban subregion rates, suggesting a higher incidence of poverty within the urban fringe of CMAs. Furthermore, there was a statistically significant difference between the 2018-base methodology poverty rate estimate and the CMA subregion methodology estimate for 11 out of 15 CMAs. Statistically significant differences ranged from -0.18 percentage points in the Saskatoon CMA to +0.22 percentage points in Montréal. As seen in Table A.3 in the appendix, there is no statistically significant difference in provincial-level estimates and the Canada-level estimate produced with the two methods. To see the number of people in poverty using the two methods, see Table A.4 in the appendix.

Table 3
Unofficial poverty rates by census metropolitan area sub-region, 2015

CMA	Poverty rates				Differences (CMA level)		
	Urban	Suburban	2018-base	CMA subregion	Difference	LCI of the difference	UCI of the difference
			methodology	methodology			
			percent		percentage points		
St. John's, Newfoundland and Labrador	18.7	8.2	13.0	13.0	-0.03	-0.06	0.01
Halifax, Nova Scotia	26.6	12.9	17.5	17.6	0.07*	0.03	0.11
Saint John, New Brunswick	27.3	9.1	16.0	16.1	0.11*	0.05	0.16
Moncton, New Brunswick	18.2	9.8	14.8	14.8	0.00	-0.06	0.05
Québec, Quebec	16.4	6.0	9.0	9.1	0.04*	0.02	0.06
Montréal, Quebec	25.4	12.0	14.3	14.5	0.22*	0.21	0.23
Ottawa–Gatineau, Ontario part	22.6	10.1	13.7	13.9	0.15*	0.13	0.17
Hamilton/Burlington, Ontario	19.1	8.8	12.6	12.7	0.11*	0.07	0.14
Toronto, Ontario	24.2	18.3	18.9	19.0	0.03*	0.02	0.03
Winnipeg, Manitoba	19.4	10.7	15.1	14.9	-0.15*	-0.18	-0.12
Saskatoon, Saskatchewan	16.5	7.9	14.0	13.8	-0.18*	-0.22	-0.13
Regina, Saskatchewan	14.1	5.4	12.6	12.6	0.02	-0.01	0.05
Edmonton, Alberta	18.1	9.6	11.6	11.6	0.02	0.00	0.04
Calgary, Alberta	16.8	10.2	11.5	11.6	0.10*	0.09	0.12
Vancouver, British Columbia	22.5	18.7	19.5	19.4	-0.17*	-0.18	-0.15

* significantly different ($p < 0.05$)

Note: CMA = census metropolitan area; LCI = lower confidence interval; UCI = upper confidence interval. Because of different data processing environments, the Census estimates presented in this paper could be slightly different than their published estimates.

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

Conclusion

This paper describes a method for delineating urban and suburban subregions within CMA MBM regions to explore variations in the cost of the shelter and transportation components of the MBM basket. The exploratory analysis demonstrated that there are differences in transportation and shelter costs between urban and suburban subregions of a CMA. It also demonstrated that the method of delineating CMA subregions would yield poverty rate estimates that are statistically different from 2018-base estimates in 11 of the 15 CMA MBM regions, with differences ranging from -0.18 percentage points to +0.22 percentage points. Overall, these results suggest that the additional delineation of CMA regions does not address a systematic miscalculation of MBM thresholds and poverty rates. Furthermore, important considerations regarding increased methodological complexity, as well as the limited granularity of the household survey data used to calculate annual MBM indicators, all point to questionable merit in further delineating CMA regions.

The fundamental purpose of this research paper series is to engage with the public and with stakeholders. We encourage users to ask questions, provide feedback and make suggestions for future work. Those who are interested in contacting us are encouraged to do so by sending an email to statcan.market.basket.measure-mesure.du.panier.de.consommation.statcan@statcan.gc.ca.

Appendix A

Table A.1
Comparison of published shelter costs versus recalculated shelter costs after urban and suburban delineation for selected census metropolitan areas, 2016 Census

	Subregion methodology	2018-base methodology	Difference
	2018 dollars		
Newfoundland and Labrador, rural	10,345	10,282	62
Newfoundland and Labrador, population under 30,000	10,669	10,669	0
Newfoundland and Labrador, population 30,000 to 99,999	12,543	12,480	62
St. John's, Newfoundland and Labrador, CMA	...	14,041	...
St. John's, Newfoundland and Labrador, urban	14,116	...	...
St. John's, Newfoundland and Labrador, suburban	13,579	...	...
Prince Edward Island, rural	10,473	10,436	38
Prince Edward Island, population under 30,000	11,274	11,199	75
Charlottetown, Prince Edward Island	12,774	12,687	88
Nova Scotia, rural	9,919	9,842	77
Nova Scotia, population under 30,000	10,832	10,747	85
Nova Scotia, population 30,000 to 99,999	11,645	11,516	129
Halifax, Nova Scotia, CMA	...	15,312	...
Halifax, Nova Scotia, urban	15,084	...	...
Halifax, Nova Scotia, suburban	15,859	...	...
Cape Breton, Nova Scotia	11,933	11,764	168
New Brunswick, rural	9,019	9,019	0
New Brunswick, population under 30,000	10,612	10,537	75
New Brunswick, population 30,000 to 99,999	10,386	10,311	75
Fredericton, New Brunswick	12,907	12,845	63
Saint John, New Brunswick, CMA	...	11,151	...
Saint John, New Brunswick, urban	11,251	...	...
Saint John, New Brunswick, suburban	11,201	...	...
Moncton, New Brunswick, CMA	...	12,368	...
Moncton, New Brunswick, urban	12,393	...	...
Moncton, New Brunswick, suburban	12,719	...	...
Quebec, rural	8,843	8,843	0
Quebec, population under 30,000	8,436	8,436	0
Quebec, population 30,000 to 99,999	8,991	8,991	0
Quebec, population 100,000 to 499,999	9,385	9,385	0
Québec, Quebec, CMA	...	10,864	...
Québec, Quebec, urban	10,778	...	...
Québec, Quebec, suburban	10,901	...	...
Montréal, Quebec, CMA	...	11,333	...
Montréal, Quebec, urban	12,503	...	...
Montréal, Quebec, suburban	11,148	...	...
Ontario, rural	12,139	12,139	0
Ontario, population under 30,000	12,814	12,814	0
Ontario, population 30,000 to 99,999	13,176	13,176	0
Ontario, population 100,000 to 499,999	14,263	14,263	0
Ontario, population 500,000 and over	16,099	16,099	0
Ottawa–Gatineau, Ontario part, CMA	...	17,822	...
Ottawa–Gatineau, Ontario part, urban	17,398	...	...
Ottawa–Gatineau, Ontario part, suburban	18,459	...	...
Hamilton/Burlington, Ontario, CMA	...	14,950	...
Hamilton/Burlington, Ontario, urban	14,637	...	...
Hamilton/Burlington, Ontario, suburban	16,086	...	...
Toronto, Ontario, CMA	...	19,259	...
Toronto, Ontario, urban	21,357	...	...
Toronto, Ontario, suburban	19,009	...	...
Manitoba, rural	10,321	10,271	50
Manitoba, population under 30,000	12,159	12,096	62
Manitoba, population 30,000 to 99,999	12,196	12,159	37
Brandon, Manitoba	12,434	12,396	37
Winnipeg, Manitoba, CMA	...	15,147	...
Winnipeg, Manitoba, urban	14,147	...	...
Winnipeg, Manitoba, suburban	15,598	...	...

Table A.1

Comparison of published shelter costs versus recalculated shelter costs after urban and suburban delineation for selected census metropolitan areas, 2016 Census

	Subregion methodology	2018-base methodology	Difference
2018 dollars			
Saskatchewan, rural	10,969	10,906	62
Saskatchewan, population under 30,000	12,741	12,629	112
Saskatchewan, population 30,000 to 99,999	13,590	13,502	87
Saskatoon, Saskatchewan, CMA	...	16,473	...
Saskatoon, Saskatchewan, urban	15,849	...	...
Saskatoon, Saskatchewan, suburban	17,084	...	...
Regina, Saskatchewan, CMA	...	15,774	...
Regina, Saskatchewan, urban	15,799	...	...
Regina, Saskatchewan, suburban	17,359	...	...
Alberta, rural	14,587	14,587	0
Alberta, population under 30,000	15,698	15,698	0
Alberta, population 30,000 to 99,999	15,223	15,111	112
Alberta, population 100,000 to 499,999	15,498	15,498	0
Edmonton, Alberta, CMA	...	19,055	...
Edmonton, Alberta, urban	18,081	...	...
Edmonton, Alberta, suburban	19,629	...	...
Calgary, Alberta, CMA	...	19,367	...
Calgary, Alberta, urban	18,955	...	...
Calgary, Alberta, suburban	19,953	...	...
British Columbia, rural	11,836	11,837	0
British Columbia, population under 30,000	12,982	12,982	0
British Columbia, population 30,000 to 99,999	13,913	13,914	0
British Columbia, population 100,000 to 499,999	16,922	16,922	0
Vancouver, British Columbia, CMA	...	19,125	...
Vancouver, British Columbia, urban	18,924	...	...
Vancouver, British Columbia, suburban	18,496	...	...

... not applicable

Note: CMA = census metropolitan area.

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

Table A.2

Comparison of published Market Basket Measure thresholds versus recalculated thresholds after urban and suburban delineation for selected census metropolitan areas, 2016 Census

	Subregion methodology	2018-base methodology	Difference
2018 dollars			
Newfoundland and Labrador, rural	42,601	42,539	62
Newfoundland and Labrador, population under 30,000	42,926	42,926	0
Newfoundland and Labrador, population 30,000 to 99,999	44,229	44,167	62
St. John's, Newfoundland and Labrador, CMA	...	44,808	...
St. John's, Newfoundland and Labrador, urban	44,627	...	...
St. John's, Newfoundland and Labrador, suburban	44,806	...	...
Prince Edward Island, rural	41,558	41,520	37
Prince Edward Island, population under 30,000	42,358	42,283	75
Charlottetown, Prince Edward Island	43,293	43,205	88
Nova Scotia, rural	41,666	41,588	77
Nova Scotia, population under 30,000	42,579	42,494	85
Nova Scotia, population 30,000 to 99,999	42,929	42,800	129
Halifax, Nova Scotia, CMA	...	45,197	...
Halifax, Nova Scotia, urban	44,706	...	...
Halifax, Nova Scotia, suburban	46,050	...	...
Cape Breton, Nova Scotia	41,701	41,533	168
New Brunswick, rural	40,766	40,766	0
New Brunswick, population under 30,000	42,359	42,284	75
New Brunswick, population 30,000 to 99,999	42,133	42,058	75
Fredericton, New Brunswick	43,969	43,906	63
Saint John, New Brunswick, CMA	...	41,700	...
Saint John, New Brunswick, urban	41,621	...	...
Saint John, New Brunswick, suburban	42,036	...	...
Moncton, New Brunswick, CMA	...	42,026	...

Table A.2
Comparison of published Market Basket Measure thresholds versus recalculated thresholds after urban and suburban delineation for selected census metropolitan areas, 2016 Census

	Subregion methodology	2018-base methodology	Difference
	2018 dollars		
Moncton, New Brunswick, urban	41,896	...	...
Moncton, New Brunswick, suburban	42,755	...	...
Quebec, rural	37,803	37,804	0
Quebec, population under 30,000	37,397	37,397	0
Quebec, population 30,000 to 99,999	37,441	37,442	0
Quebec, population 100,000 to 499,999	37,940	37,940	0
Québec, Quebec, CMA	...	39,601	...
Québec, Quebec, urban	39,359	...	...
Québec, Quebec, suburban	39,822	...	...
Montréal, Quebec, CMA	...	40,160	...
Montréal, Quebec, urban	40,889	...	...
Montréal, Quebec, suburban	40,183	...	...
Ontario, rural	40,576	40,576	0
Ontario, population under 30,000	41,250	41,250	0
Ontario, population 30,000 to 99,999	40,769	40,769	0
Ontario, population 100,000 to 499,999	42,933	42,933	0
Ontario, population 500,000 and over	44,851	44,851	0
Ottawa–Gatineau, Ontario part, CMA	...	47,233	...
Ottawa–Gatineau, Ontario part, urban	46,705	...	...
Ottawa–Gatineau, Ontario part, suburban	47,970	...	...
Hamilton/Burlington, Ontario, CMA	...	43,517	...
Hamilton/Burlington, Ontario, urban	43,018	...	...
Hamilton/Burlington, Ontario, suburban	44,899	...	...
Toronto, Ontario, CMA	...	48,142	...
Toronto, Ontario, urban	49,984	...	...
Toronto, Ontario, suburban	47,943	...	...
Manitoba, rural	39,004	38,954	50
Manitoba, population under 30,000	40,842	40,780	62
Manitoba, population 30,000 to 99,999	40,880	40,842	37
Brandon, Manitoba	40,442	40,404	37
Winnipeg, Manitoba, CMA	...	44,030	...
Winnipeg, Manitoba, urban	42,940	...	...
Winnipeg, Manitoba, suburban	44,671	...	...
Saskatchewan, rural	40,343	40,280	62
Saskatchewan, population under 30,000	42,115	42,003	112
Saskatchewan, population 30,000 to 99,999	42,296	42,208	87
Saskatoon, Saskatchewan, CMA	...	45,652	...
Saskatoon, Saskatchewan, urban	44,976	...	...
Saskatoon, Saskatchewan, suburban	46,493	...	...
Regina, Saskatchewan, CMA	...	44,833	...
Regina, Saskatchewan, urban	44,855	...	...
Regina, Saskatchewan, suburban	46,437	...	...
Alberta, rural	45,047	45,047	0
Alberta, population under 30,000	46,158	46,158	0
Alberta, population 30,000 to 99,999	44,987	44,874	112
Alberta, population 100,000 to 499,999	45,468	45,468	0
Edmonton, Alberta, CMA	...	47,869	...
Edmonton, Alberta, urban	46,770	...	...
Edmonton, Alberta, suburban	48,530	...	...
Calgary, Alberta, CMA	...	48,349	...
Calgary, Alberta, urban	47,815	...	...
Calgary, Alberta, suburban	49,000	...	...
British Columbia, rural	41,463	41,463	0
British Columbia, population under 30,000	42,608	42,608	0
British Columbia, population 30,000 to 99,999	42,829	42,829	0
British Columbia, population 100,000 to 499,999	47,111	47,111	0
Vancouver, British Columbia, CMA	...	48,677	...
Vancouver, British Columbia, urban	47,913	...	...
Vancouver, British Columbia, suburban	48,222	...	...

... not applicable

Note: CMA = census metropolitan area.

Source: Statistics Canada, custom tabulation.

Table A.3
Comparison of the national and provincial poverty rate estimates between the CMA sub-region methodology and the official 2018-base methodology, 2016 Census

Region	Poverty rates					
	CMA subregion methodology			2018-base methodology		
	Estimate	LCI	UCI	Estimate	LCI	UCI
	percent					
Canada	14.5	14.5	14.5	14.5	14.5	14.5
Newfoundland and Labrador	13.2	13.0	13.3	13.1	13.0	13.3
Prince Edward Island	16.7	16.4	17.0	16.5	16.2	16.8
Nova Scotia	17.6	17.5	17.8	17.6	17.5	17.7
New Brunswick	15.6	15.5	15.7	15.6	15.5	15.7
Québec	12.5	12.4	12.5	12.3	12.3	12.4
Ontario	15.6	15.5	15.6	15.5	15.5	15.6
Manitoba	14.2	14.1	14.3	14.3	14.2	14.4
Saskatchewan	12.8	12.7	12.9	12.9	12.8	13.0
Alberta	11.4	11.4	11.5	11.4	11.3	11.5
British Columbia	17.5	17.4	17.5	17.6	17.5	17.6

Note: CMA = census metropolitan area; LCI = lower confidence interval; UCI = upper confidence interval.

Source: Statistics Canada, 2016 Census of Population, custom tabulation

Table A.4
Comparison of the number of people in poverty between the census metropolitan area subregion methodology and the 2018-base methodology, 2016 Census

CMA	Urban	Suburban	2018-base methodology	CMA subregion methodology	Difference
	number of people in poverty				
St. John's, Newfoundland and Labrador	17,419	8,994	26,465	26,413	-52
Halifax, Nova Scotia	35,998	33,829	69,557	69,827	270
Saint John, New Brunswick	12,943	6,914	19,724	19,857	133
Moncton, New Brunswick	15,287	5,647	20,936	20,934	-2
Québec, Quebec	38,111	32,397	70,197	70,508	311
Montréal, Quebec	195,316	387,776	574,368	583,092	8,724
Ottawa–Gatineau, Ontario part	66,559	68,700	133,831	135,259	1,428
Hamilton/Burlington, Ontario	53,279	40,199	92,699	93,478	779
Toronto, Ontario	158,154	954,110	1,110,627	1,112,264	1,637
Winnipeg, Manitoba	71,300	42,314	114,755	113,614	-1,141
Saskatoon, Saskatchewan	32,940	6,961	40,406	39,901	-505
Regina, Saskatchewan	27,100	2,194	29,243	29,294	51
Edmonton, Alberta	54,962	95,002	149,723	149,964	241
Calgary, Alberta	48,291	110,339	157,218	158,630	1,412
Vancouver, British Columbia	94,241	374,255	472,515	468,496	-4,019

Note: CMA = census metropolitan area.

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

Appendix B

Table B
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	Statistics Canada will research whether adjustments should be made to the Market Basket Measure 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.
Remoteness - Market Basket Measure thresholds for remote regions	
Different family types	Currently, Statistics Canada estimates Market Basket Measure (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? 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).
Equivalization analysis	
Communications technology	Statistics Canada will look at how a separate communication component could best be added to the Market Basket Measure. 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 Market Basket Measure (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 Market Basket Measure could be improved by more precisely considering these differences in costs.
Using the Market Basket Measure with administrative data	As it currently exists, the Market Basket Measure (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 Market Basket Measure income inequality indicators	The majority of the current Market Basket Measure-based analytical products do not describe the full income distribution. Since they typically compare the Market Basket Measure 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.

References

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

Djidjel, 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.

Employment and Social Development Canada (2018), "[Opportunity for All – Canada’s First Poverty Reduction Strategy](#)". Catalogue no. SSD-212-08-18E.

Hatfield, Michael, Pyper Wendy, and Gustajtis Burton (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.

Sergerie, François, Chastko Karl, Saunders Dylan, Charbonneau Patrick (2021), "[Defining Canada’s Downtown Neighbourhoods: 2016 Boundaries](#)". Catalogue no. 91f0015m.

Statistics Canada (2022), "[Canada’s large urban centres continue to grow and spread](#)". Component of Statistics Canada catalogue no. 11-001-X