

## ***Low Income ('Poverty') Lines***

Low income lines are the most commonly used tool for defining and measuring poverty. They provide thresholds below which a household is considered to be living on low income.

Low income lines can be constructed in different ways. There are currently three low-income lines calculated by the federal government: the Low Income Cut-Off (LICO), the Low Income Measure (LIM) and the Market Basket Measure (MBM). Each offers a somewhat different perspective on low income in Canada. (Note: Statistics Canada points out that these are not official 'poverty lines' but measures of low income; LICO, for instance, indicates the point at which households are living in 'straitened circumstances.')

The following overview is derived (and partially excerpted) from *Low Income Measurement in Canada*, an overview of the three measures prepared by Statistics Canada, and *Understanding the 2000 Low Income Statistics Based on the Market Basket Measure*, a background document prepared by Human Resources Development Canada.

### ***Similarities and Differences***

The most basic difference between the measures is that LICO and LIM represent relative approaches to poverty and the MBM represents an absolute approach. LICO and LIM measure disparity of income, while the MBM measures ability to meet a set list of needs.

In terms of methodology, the three lines have some basic similarities and also an important area of difference.

All three measures use the 'economic family' as the entity in which economic resources are shared. The economic family is defined as the group of persons living in the same household who are related by blood, marriage, common-law or adoption. So three-generation families are considered one economic family, but three unrelated persons sharing a dwelling as roommates would be considered to be three economic families.

All three measures use income as the basis for defining the low-income population. While income is frequently used in this way, primarily due to data availability, alternative approaches to measurement of low income could use such other characteristics as expenditures, assets, stage of life (full-time student, parent with young children, retired) or a combination of these to assess whether a particular person or family is in low income.

So the basic approach to defining low income is the same for each of the measures; i.e., a cutoff is determined and is compared to the income of an economic

family (derived as the sum of the income of each individual in the family). A family with income less than the cutoff is defined as being in low income; otherwise not. All persons within an economic family are assigned the low income characteristic of the family in which they live.

The major area of difference lies with the way the lines define income. For the LICO and LIM, two different income measures are used: before-tax income and after-tax income. Before-tax income is the sum of income from employment (both paid and self employment), investment income, retirement income and income from government transfer programs. After-tax income is before-tax income with income taxes paid deducted.

Statistics Canada highlights the use of after-tax income for low income measurement. There are several reasons for this. First, both income taxes and transfers are methods of income redistribution. The before-tax rates only partly reflect the entire redistributive impact of Canada's tax/transfer system, by including the effect of transfers but not the effect of income taxes. Second, since the purchase of necessities is made with after-tax dollars, it is logical to use people's after-tax income to draw conclusions about their overall economic wellbeing.

The MBM takes this concept a step further by moving closer to a measure of disposable income. The MBM income measure is after-tax income with additional non-discretionary expenditures deducted. (These additional deductions are: the personal portion of payroll taxes; other mandatory payroll deductions such as contributions to employer-sponsored pension plans, supplementary health plans and union dues; child support and alimony payments made to another household; out-of-pocket spending on child care; and noninsured but medically-prescribed health-related expenses such as dental and vision care, prescription drugs and aids for persons with disabilities.)

### ***Low Income Cut-Off (LICO)***

In the mid 1960s, research at Statistics Canada led to the development of the Low Income Cut-Offs (LICOs). These lines were developed to indicate an income threshold below which a family is likely to spend significantly more of its income on food, shelter and clothing than the average family. For instance, in 1992, the average family spent 44% of its total post-income tax income on food, clothing and footwear and shelter. Thus, the after-tax LICOs were set at the point in the income distribution where a family would spend 64% or more of its post-income tax income on these three categories of expenditure.

The LICO thresholds therefore vary both by family size and by community size in recognition of the fact that shelter tends to cost more as the size of the community increases. However, geographical variations in the cost of transportation and other items do not enter into the calculation of these thresholds. Moreover, all communities of the

same size have the same low-income thresholds. (See chart below for the variation of lines according to family size and size of locality for 2000. Note: 2005 is the most recent year for which the LICOs have been calculated.)

The LICOs thus answer the question: How many Canadians live in families spending a share of their total post-tax income on food, clothing and shelter twenty percentage points higher than average families of the same size living in communities of comparable size?

Table 1	Size of area of residence				
	Rural areas	Urban areas, population under 30,000	Urban areas, population 30,000 to 99,999	Urban areas, population 100,000 to 499,999	Urban areas, population 500,000 and over
Family size					
1 person	\$9,947	\$11,498	\$12,583	\$12,780	\$15,172
2 persons	\$12,138	\$14,030	\$15,353	\$15,594	\$18,513
3 persons	\$15,352	\$17,745	\$19,419	\$19,723	\$23,415
4 persons	\$19,120	\$22,101	\$24,186	\$24,565	\$29,163
5 persons	\$21,371	\$24,701	\$27,031	\$27,456	\$32,595
6 persons	\$23,622	\$27,301	\$29,877	\$30,346	\$36,027
7 persons or more	\$25,872	\$29,902	\$32,722	\$33,237	\$39,459

### ***Low Income Measure***

The other measure of low income generated by Statistics Canada, the Low Income Measures (LIMs) have been produced since 1991 (although the time series has been extended back). The LIM is a pure measure of relative low income. It is defined as half the median family income (adjusted for family size).

LIMs are the most frequently used measure internationally, particularly when making comparisons between countries. The primary reason for its popularity is its simplicity of calculation.

The after-tax LIM answers the question: How many Canadians have an after-tax income lower than 50% of the adjusted median income for all Canadian economic families in a given year?

Table 2	Number of children					
	0	1	2	3	4	5
Number of adults						
1	\$12,468	\$17,455	\$21,196	\$24,936	\$28,676	\$32,417
2	\$17,455	\$21,196	\$24,936	\$28,676	\$32,417	\$36,157
3	\$22,442	\$26,183	\$29,923	\$33,664	\$37,404	-
4	\$27,430	\$31,170	\$34,910	-	-	-
5	\$32,417	\$36,157	-	-	-	-
6	\$37,404	-	-	-	-	-

### ***Market Basket Measure***

The MBM was developed by Human Resources Development Canada in consultation with a Federal-Provincial-Territorial Working Group of officials on Social Development Research and Information. This work was initiated in 1997 when Federal, Provincial and Territorial Ministers responsible for Social Services raised concerns about the existing measures of low income and asked officials to explore whether a new tool could be developed to complement these measures in assessing low-income trends for families with children.

As its name implies, the Market Basket Measure is a ‘goods and services’ rather than a ‘relative’ indicator of low income. The MBM estimates the cost of a specific basket of goods and services for the year 2000 assuming that all items in the basket were entirely provided for out of the spending of the household.

The market basket on which the MBM is based includes specified quantities and qualities of goods and services related to food, clothing and footwear, shelter, and transportation. It also contains other goods and services such as personal and household needs, furniture, telephone service and modest levels of reading, recreation and entertainment (e.g., newspaper and magazine subscriptions, fees to participate in recreational activities or sports, video rentals, tickets to local sports events).

The MBM is thus a ‘goods and services’ indicator of low income whose cost is calculated for a number of specific urban communities and community sizes across Canada. As such, it can be used to answer a question not addressed by either the LICOs or the LIM: How many people in Canada live in families which lack the disposable income to purchase the goods and services in the ‘Market Basket’ within their community or community size?

A second feature of the MBM is that it is more sensitive than either the LICO or the LIM to differences in living costs among different communities and community sizes across Canada. This is because the MBM thresholds vary with the cost of the goods and services in the basket, not only between community sizes, but between communities of similar size in different provinces.

This sensitivity to geographical differences in living costs and the transparency of the goods and services in the MBM were the features sought in the development of this new tool to assess low income.

Finally, the basic concept of low income underlying the MBM is being unable to purchase the goods and services in the Market Basket. This implies that the income to be compared to the thresholds should not be gross income, but a measure of the disposable income actually available to purchase these goods and services. As a result, the following deductions are made from total family money income before comparing it to the cost of the basket:

- out of pocket spending on child care
- out of pocket spending on non-insured health care costs recommended by a health professional such as prescription drugs, health insurance premiums, aids for persons with disabilities and dental and vision care
- personal income taxes and the personal portion of all payroll taxes such as Canada/Quebec Pension Plan contributions and Employment Insurance premiums
- alimony and child support payments made to another family
- all *mandatory* payroll deductions for employer-sponsored pension plans, union dues and employer-sponsored supplementary health care plans.

All of these deductions represent income that is not available to purchase the goods and services in the basket. As can be seen, this is a much more stringent concept of disposable income than that used for either the LICOs (which make no deductions from total money income before comparing that income to the LICO thresholds) or the after-tax LIM (which deducts only income taxes paid before comparing adjusted post-income tax family income to the after- tax LIM thresholds).

The tables below compare the MBM lines calculated for 2000 with the LICO (after tax and before tax) lines and the LIM (after tax) lines for the same year.

**Table 1**  
**Incidence of Low Income: Various Groups, Canada**  
**Market Basket Measure, Low Income Cut-Offs, and Low Income Measure\* – 2000**

	<b>MBM</b>	<b>LICO-IAT</b>	<b>LICO-IBT</b>	<b>LIM-IAT</b>
<b>All persons</b>	13.1	10.9	14.7	11.1
Under 18 years of age	16.9	12.6	16.6	13.5
18 to 64	13.2	11.0	13.7	11.3
65 and over	5.8	7.3	16.4	5.4
<b>Males</b>	12.4	9.9	13.0	10.3
Under 18 years of age	16.7	12.3	16.3	13.3
18 to 64	12.1	9.9	12.3	10.2
65 and over	4.8	4.4	9.8	4.2
<b>Females</b>	13.9	11.9	16.3	11.9
Under 18 years of age	17.1	12.9	16.9	13.6
18 to 64	14.3	12.1	15.0	12.4
65 and over	6.2	9.6	21.5	6.3
<b>All families</b>	15.5	14.6	19.5	14.0
<b>Economic families 2+</b>	10.7	7.9	11.0	8.7
Elderly families	4.5	2.9	7.0	4.1
Elderly married couples	2.4	1.2	4.5	1.8
Other elderly families	11.7	9.1	16.1	12.0
Non-elderly families	11.6	8.7	11.6	9.5
Married couples	8.2	5.8	8.0	6.9
Two-parent families with children	10.8	7.5	9.9	7.8
Married couples with other relatives	4.8	3.3	4.5	3.9
Lone-parent families	35.6	30.2	39.2	31.9
Male lone-parent families	16.9	11.8	14.9	13.8
Female lone-parent families	39.5	33.9	44.2	35.6
Other non-elderly families	11.8	9.4	12.7	10.8
<b>Unattached individuals</b>	25.6	28.6	37.3	24.9
Male	24.7	25.5	30.8	23.4
Female	26.5	31.6	43.5	26.3
All Elderly	11.7	19.9	43.0	12.2
Elderly Male	13.8	16.8	33.3	12.3
Elderly Female	11.0	21.0	46.4	12.2
All Non-Elderly	30.7	31.8	35.2	29.6
Non-Elderly Male	26.5	27.0	30.3	25.3
Non-Elderly Female	36.3	38.2	41.7	35.3
* MBM: Market Basket Measure LICO-IAT: post-income tax Low Income Cut-off LICO-IBT: pre-income tax Low Income Cut-off LIM-IAT: post-income tax Low Income Measure				

<b>Table 3</b> <b>Depth of Low Income: Various Groups, Canada</b> <b>Market Basket Measure, Low Income Cut-Offs, and Low Income Measure – 2000</b>				
	<b>MBM</b>	<b>LICO-IAT</b>	<b>LICO-IBT</b>	<b>LIM-IAT</b>
<b>All persons</b>	0.309	0.325	0.340	0.316
Under 18 years of age	0.256	0.265	0.313	0.261
18 to 64	0.343	0.368	0.389	0.353
65 and over	0.184	0.171	0.173	0.152
<b>Males</b>	0.313	0.337	0.353	0.321
Under 18 years of age	0.255	0.267	0.312	0.262
18 to 64	0.350	0.376	0.394	0.359
65 and over	0.200	0.222	0.182	0.178
<b>Females</b>	0.306	0.315	0.331	0.311
Under 18 years of age	0.257	0.264	0.307	0.260
18 to 64	0.338	0.361	0.375	0.348
65 and over	0.175	0.153	0.153	0.139
<b>All families</b>	0.349	0.357	0.380	0.349
<b>Economic families 2+</b>	0.292	0.307	0.337	0.302
Elderly families	0.230	0.253	0.163	0.209
Elderly married couples	0.243	0.357	0.114	0.277
Other elderly families	0.221	0.204	0.210	0.172
Non-elderly families	0.296	0.310	0.353	0.309
Married couples	0.361	0.404	0.413	0.392
Two-parent families with children	0.261	0.275	0.328	0.272
Married couples with other relatives	0.339	0.346	0.343	0.330
Lone-parent families	0.273	0.272	0.341	0.281
Male lone-parent families	0.290	0.291	0.354	0.286
Female lone-parent families	0.272	0.271	0.340	0.280
Other non-elderly families	0.349	0.371	0.380	0.346
<b>Unattached individuals</b>	0.399	0.385	0.407	0.384
Male	0.410	0.414	0.453	0.396
Female	0.389	0.363	0.376	0.373
All Elderly	0.154	0.151	0.194	0.117
Elderly Male	0.175	0.201	0.221	0.137
Elderly Female	0.145	0.137	0.187	0.110
All Non-Elderly	0.433	0.439	0.503	0.424
Non-Elderly Male	0.431	0.437	0.496	0.417
Non-Elderly Female	0.436	0.441	0.509	0.430

Reference:

Applied Research Branch. (2003). *Understanding the 2000 Low Income Statistics Based on the Market Basket Measure*. Ottawa: Human Resources Development Canada. April.

Giles, Philip. (2004). *Low Income Measurement in Canada*. Ottawa: Statistics Canada.